Price list

# Ventilation system

Issue March 2016

ErP-CONFORM

Energiesparen und Klimaschutz serienmäßig

# Das Wolf ErP-Portal

## Für die simple Erstellung von Etiketten und Datenblättern

*Berechnung der Effizienz der Verbundanlage*

*Etikett und Datenblatt*

*Datenblatt*

*Etikett und Datenblatt*

## Das Wolf ErP-Portal im Überblick:

Mit dem Wolf ErP-Portal erstellen Sie selbst im Handumdrehen das richtige Verbundanlagen-Etikett für Ihren Wolf-Systemvorschlag. Einfacher und sicherer geht es nicht:

- Etiketten und Datenblätter für Verbundanlagen können gemäß der Verordnungen (EU) Nr. 811/2013 und 812/2013 erstellt werden
- Nach Auswahl des Hauptwärmeerzeugertyps (Öl-/Gaskessel, Kraft-Wärme-Kopplungsgerät oder Wärmepumpe) folgt ein jeweiliges Berechnungstool.
- Produkte und die zutreffenden Anlagefunktionen (z.B. Warmwasserbereitung) können gemäß dem Angbot eingegeben werden. Dabei sind nur diejenigen Produkte wählbar, welche unter die Verordnungen (EU) Nr. 811/2013 und 812/2013 fallen.

*Ihre Zugangsdaten erhalten Sie von Ihrem zuständigen Wolf-Verkaufsbüro. Weitere Informationen zur Ökodesign-Richtlinie ErP finden Sie auf unserer Homepage: www.wolf-heiztechnik.de*

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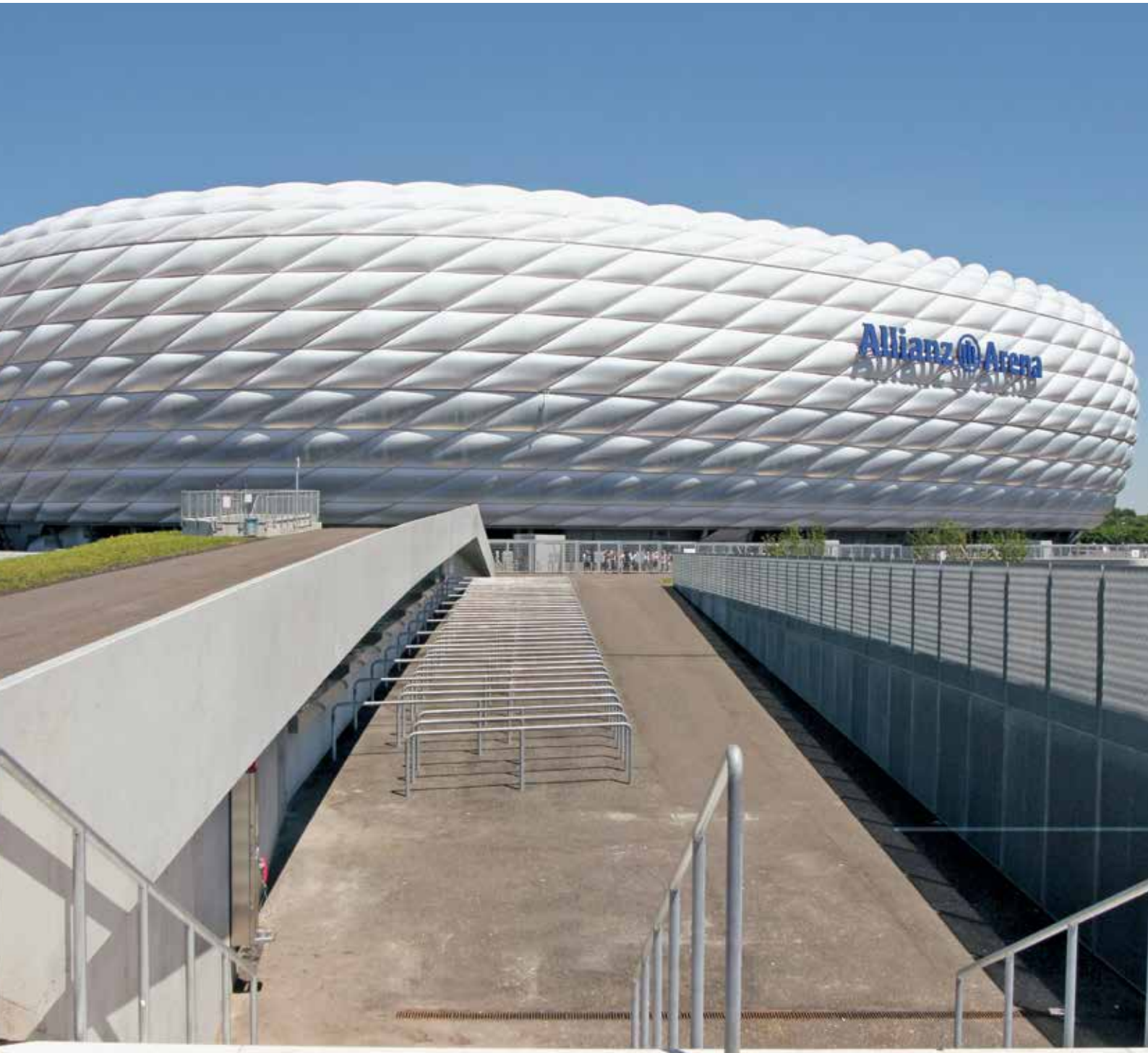
Energiesparen und Klimaschutz serienmäßig

# Allianz Arena, München

## 54 Wolf-Klimageräte mit Wärmerückgewinnung



# LH-EC / LH / LH-ATEX Unit heater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The prices mentioned are ex-works Mainburg, and do not include packaging or value-added tax.
They are based on our conditions of sale and delivery.
Subject to changes.

**Unit heater with discharge louvre for wall or ceiling mounting,**
**Outside air, mixed air or return air operation for heating or ventilation.**
**Casing: Galvanised sheet steel.**
**Discharge louvre: "Wolf silver"**
**Full motor protection by temperature monitoring**
**Energy saving EC-fans (1x230V)**

# LH-EC

## EC-motor 230V / 50Hz

| | LH-EC 25 | | LH-EC 40 | | LH-EC 63 | | LH-EC 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Heat exchanger: Copper-aluminium** | | | | | | | | |
| Type 1 | 65 23 823 | **1.055,-** | 65 23 833 | **1.440,-** | 65 23 843 | **1.995,-** | 65 23 902 | **2.540,-** |
| Type 2 | 65 23 824 | **1.105,-** | 65 23 834 | **1.480,-** | 65 23 844 | **2.045,-** | 65 23 903 | **2.735,-** |
| Type 3 | 65 23 825 | **1.160,-** | 65 23 835 | **1.615,-** | 65 23 845 | **2.240,-** | 65 23 904 | **3.005,-** |
| Type 4 | 65 23 826 | **1.235,-** | 65 23 836 | **1.685,-** | 65 23 846 | **2.370,-** | 65 23 905 | **3.095,-** |
| Type D * | 65 23 827 | **1.160,-** | 65 23 837 | **1.615,-** | 65 23 847 | **2.235,-** | 65 23 906 | **2.955,-** |
| **Heat exchanger: Galvanised steel** | | | | | | | | |
| Type 1 | 65 23 828 | **1.185,-** | 65 23 838 | **1.645,-** | 65 23 848 | **2.250,-** | 65 23 907 | **2.885,-** |
| Type 2 | 65 23 829 | **1.255,-** | 65 23 839 | **1.705,-** | 65 23 849 | **2.540,-** | 65 23 908 | **3.520,-** |
| Type 3 | 65 23 830 | **1.400,-** | 65 23 840 | **1.860,-** | 65 23 850 | **2.685,-** | 65 23 909 | **3.845,-** |
| Type D * (AF horizontal) | 65 23 831 | **1.340,-** | 65 23 841 | **1.785,-** | 65 23 851 | **2.540,-** | 65 23 910 | **3.380,-** |
| (AF vertical) | 65 23 832 | **1.340,-** | 65 23 842 | **1.785,-** | 65 23 852 | **2.540,-** | 65 23 911 | **3.380,-** |

* Note: With unit heater LH-EC in combination with electrical or steam coil, controller by request!

**Unit heater with discharge louvre for wall or ceiling mounting,**
**Outside air, mixed air or return air operation for heating or ventilation.**
**Casing: Galvanised sheet steel.**
**Discharge louvre: "Wolf silver"**
**Single phase AC motor 230V / 50Hz**
**Three-phase motor: 3 x 400V**

# LH

## Single phase AC motor 230V / 50Hz

| | | LH 25 | | LH 40 | | LH 63 | | LH 100 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Heat exchanger: Copper-aluminium** | | | | | | | | | |
| Type 1 | | 65 23 604 | **880,-** | 65 23 614 | **1.140,-** | 65 23 624 | **1.450,-** | - | **-** |
| Type 2 | | 65 23 605 | **930,-** | 65 23 615 | **1.180,-** | 65 23 625 | **1.500,-** | - | **-** |
| Type 3 | | 65 23 606 | **985,-** | 65 23 616 | **1.315,-** | 65 23 626 | **1.695,-** | - | **-** |
| Type 4 | | 65 23 607 | **1.060,-** | 65 23 617 | **1.390,-** | 65 23 627 | **1.825,-** | - | **-** |
| Type D * | | 65 23 608 | **985,-** | 65 23 618 | **1.315,-** | 65 23 628 | **1.690,-** | - | **-** |
| **Heat exchanger: Galvanised steel** | | | | | | | | | |
| Type 1 | | 65 23 609 | **1.015,-** | 65 23 619 | **1.345,-** | 65 23 629 | **1.705,-** | - | **-** |
| Type 2 | | 65 23 610 | **1.080,-** | 65 23 620 | **1.410,-** | 65 23 630 | **1.995,-** | - | **-** |
| Type 3 | | 65 23 611 | **1.225,-** | 65 23 621 | **1.565,-** | 65 23 631 | **2.140,-** | - | **-** |
| Type D * | (AF horizontal) | 65 23 612 | **1.165,-** | 65 23 622 | **1.485,-** | 65 23 632 | **1.995,-** | - | **-** |
| | (AF vertical) | 65 23 613 | **1.165,-** | 65 23 623 | **1.485,-** | 65 23 633 | **1.995,-** | - | **-** |

## Three-phase motor 3 x 400V

| | | LH 25 | | LH 40 | | LH 63 | | LH 100 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Heat exchanger: Copper-aluminium** | | | | | | | | | |
| Type 1 | | 65 23 554 | **745,-** | 65 23 564 | **1.005,-** | 65 23 574 | **1.305,-** | 65 23 584 | **1.715,-** |
| Type 2 | | 65 23 555 | **795,-** | 65 23 565 | **1.060,-** | 65 23 575 | **1.355,-** | 65 23 585 | **1.910,-** |
| Type 3 | | 65 23 556 | **865,-** | 65 23 566 | **1.180,-** | 65 23 576 | **1.550,-** | 65 23 586 | **2.185,-** |
| Type 4 | | 65 23 557 | **925,-** | 65 23 567 | **1.265,-** | 65 23 577 | **1.680,-** | 65 23 587 | **2.270,-** |
| Type D * | | 65 23 558 | **865,-** | 65 23 568 | **1.180,-** | 65 23 578 | **1.550,-** | 65 23 588 | **2.135,-** |
| **Heat exchanger: Galvanised steel** | | | | | | | | | |
| Type 1 | | 65 23 559 | **890,-** | 65 23 569 | **1.215,-** | 65 23 579 | **1.565,-** | 65 23 589 | **2.060,-** |
| Type 2 | | 65 23 560 | **945,-** | 65 23 570 | **1.280,-** | 65 23 580 | **1.850,-** | 65 23 590 | **2.700,-** |
| Type 3 | | 65 23 561 | **1.095,-** | 65 23 571 | **1.440,-** | 65 23 581 | **2.005,-** | 65 23 591 | **3.020,-** |
| Type D * | (AF horizontal) | 65 23 562 | **1.045,-** | 65 23 572 | **1.350,-** | 65 23 582 | **1.850,-** | 65 23 592 | **2.560,-** |
| | (AF vertical) | 65 23 563 | **1.045,-** | 65 23 573 | **1.350,-** | 65 23 583 | **1.850,-** | 65 23 593 | **2.560,-** |
| *** Heat exchanger: Electrical** (incl. safety limiter) | | | | | | | | | |
| 2 x 3kW = 6kW | (AF horizontal) | 65 23 594 | **1.600,-** | - | **-** | - | **-** | - | **-** |
| | (AF vertical) | 65 23 595 | **1.600,-** | - | **-** | - | **-** | - | **-** |
| 3 x 3kW = 9kW | (AF horizontal) | 65 23 596 | **1.750,-** | - | **-** | - | **-** | - | **-** |
| | (AF vertical) | 65 23 597 | **1.750,-** | - | **-** | - | **-** | - | **-** |
| 4 x 3kW = 12kW | (AF horizontal) | 65 23 598 | **2.010,-** | - | **-** | - | **-** | - | **-** |
| | (AF vertical) | 65 23 599 | **2.010,-** | - | **-** | - | **-** | - | **-** |
| **without heat exchangers** | | 65 23 600 | **575,-** | 65 23 601 | **730,-** | 65 23 602 | **915,-** | 65 23 603 | **1.260,-** |

* Note: With unit heater LH in combination with electrical or steam coil, controller by request!

# Accessories for unit heater LH-EC / LH

Changed art. no. are marked in red.

| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | LH-EC, LH | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | LH-EC, LH | 27 44 275 | **27,70** |
| | **Ventilation module LM1 (incl. room temperature sensor)**<br>• Ventilation module for controlling unit heaters with two-stage motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Demand-optimised room temperature control via the rotary speed of the unit heater<br>• Operation of the heating circuit pump<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on | LH | 27 44 603 | **390,–** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control<br>• 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Mixed air flap control<br>• Induction louvre control | LH-EC, LH | 27 44 604 | **390,–** |
| | **Outside, ceiling or room temperature sensor** | LH-EC, LH | 27 92 021 99 | **28,70** |

# Accessories for unit heater LH-EC / LH

| | WRS control systems | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Differential pressure switch**<br>for on-site control | **loose** | LH-EC, LH | 27 44 030 | **112,-** |
| | | **mounted** | LH-EC, LH | 65 23 043 | **204,-** |
| | **5-position switch**<br>Electronic five-stage speed controller, input 0-10V | | LH | | |
| | | (2A, 400V) | | 27 44 840 | **950,-** |
| | | (4A, 400V) | | 27 44 841 | **950,-** |
| | | (6A, 230V) | | 27 45 066 | **670,-** |
| | **Supply air sensor (NTC 5K)**<br>for measuring the supply air temperature | | LH-EC, LH | 88 52 829 | **53,-** |
| | **Sensor holder**<br>for supply air sensor | | LH-EC, LH | 27 92 029 | **24,50** |
| | **ISM 5 - LON-interface module**<br>to connect ventilation modules LM1 and LM2<br>to a building management system applying<br>LON-standard network variables | | LH-EC, LH | 27 45 029 | **1.600,-** |

**Unit heater in explosion proof design for Zone 2 explosion risk areas (II 3G c IIB T4 X).**
**Unit heater with discharge louvre for wall or ceiling mounting.**
**Outdoor air, mixed air or return air operation for heating or ventilation.**
**Casing: Galvanised sheet steel.**
**Discharge louvre: "Wolf silver"**
**Three-phase motor: 3 x 400V/50Hz, 2-stage Δ/Y**
**Full motor protection with built-in thermistors.**

# LH-ATEX

| | LH 25-ATEX | | LH 40-ATEX | | LH 63-ATEX | | LH 100-ATEX | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Heat exchanger Co/Al** | | | | | | | | |
| Type 1 | 65 23 013 | **1.000,-** | 65 23 020 | **1.260,-** | 65 23 027 | **1.575,-** | 65 23 034 | **1.995,-** |
| Type 2 | 65 23 014 | **1.055,-** | 65 23 021 | **1.310,-** | 65 23 028 | **1.650,-** | 65 23 035 | **2.195,-** |
| Type 3 | 65 23 015 | **1.115,-** | 65 23 022 | **1.450,-** | 65 23 029 | **1.835,-** | 65 23 036 | **2.465,-** |
| Type 4 | 65 23 016 | **1.175,-** | 65 23 023 | **1.520,-** | 65 23 030 | **1.960,-** | 65 23 037 | **2.555,-** |
| **Heat exchanger galvanized steel** | | | | | | | | |
| Type 1 | 65 23 017 | **1.305,-** | 65 23 024 | **1.705,-** | 65 23 031 | **2.165,-** | 65 23 038 | **2.850,-** |
| Type 2 | 65 23 018 | **1.355,-** | 65 23 025 | **1.760,-** | 65 23 032 | **2.440,-** | 65 23 039 | **3.505,-** |
| Type 3 | 65 23 019 | **1.515,-** | 65 23 026 | **1.915,-** | 65 23 033 | **2.600,-** | 65 23 040 | **3.825,-** |

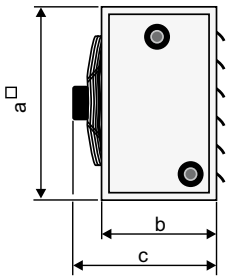
RAL and special colours by request.

# Accessories for unit heater LH-ATEX

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Explosion proof ATEX-terminal box**<br>fitted and wired | LH-ATEX | 65 23 042 | **386,-** |
| | **Thermistor triggering unit**<br>suitable for installation in wiring board on site<br><br>**Note:** Triggering unit to be fitted outside the Ex-zone only. | LH-ATEX | 22 10 060 | **171,-** |

# Dimensions, basic units LH-EC / LH / LH-ATEX

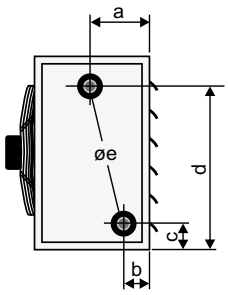
| Dimensions, basic units | for products | Art. no. | € |
|---|---|---|---|




**Dimensions, basic units**

LH-EC, LH, LH-ATEX

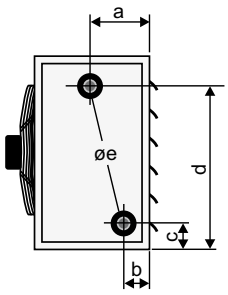
| LH | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 410 |
| 40 | 630 | 300 | 415 |
| 63 | 800 | 300 | 420 |
| 100 | 1000 | 340 | 485 |




**Connections LH 25 – 100, Type 1 – 4, Copper-aluminium**

LH-EC, LH, LH-ATEX

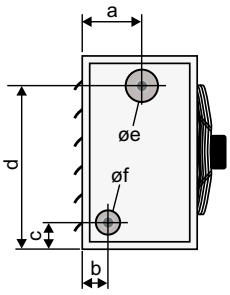
| LH | a | b | c | d | Øe |
|---|---|---|---|---|---|
| 25-1 | 98 | 68 | 72 | 425 | ¾" |
| 25-2/-3/-4 | 158 | 68 | 75 | 425 | 1" |
| 40-1 | 98 | 68 | 76 | 554 | ¾" |
| 40-2/-3/-4 | 143 | 83 | 80 | 550 | 1" |
| 63-1 | 103 | 63 | 75 | 726 | 1" |
| 63-2/-3/-4 | 143 | 83 | 78 | 722 | 1¼" |
| 100-1 | 124 | 84 | 95 | 906 | 1" |
| 100-2/-3/-4 | 179 | 89 | 89 | 912 | 1½" |




**Connections LH 25 – 100, Type 1 – 3, Galvanised steel**

LH-EC, LH, LH-ATEX

| LH | a | b | c | d | Øe |
|---|---|---|---|---|---|
| 25-1 | 100 | 66 | 86 | 409 | ¾" |
| 24-2/-3/-4 | 158 | 68 | 86 | 405 | 1" |
| 40-1 | 100 | 66 | 91 | 534 | ¾" |
| 40-2/-3/-4 | 158 | 68 | 91 | 530 | 1" |
| 63-1 | 98 | 68 | 86 | 705 | 1" |
| 63-2/-3/-4 | 153 | 73 | 86 | 695 | 1¼" |
| 100-1 | 118 | 88 | 86 | 885 | 1" |
| 100-2/-3/-4 | 168 | 98 | 86 | 865 | 1½" |




**Connections LH 25 – 100, Type steam, Copper-aluminium**

LH-EC, LH, LH-ATEX

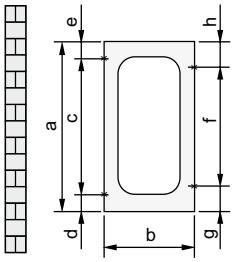
| LH | a | b | c | d | Øe | Øf |
|---|---|---|---|---|---|---|
| 25 | 160 | 90 | 61 | 421 | DN40 | DN20 |
| 40 | 158 | 99 | 60 | 561 | DN40 | DN20 |
| 63 | 152 | 84 | 63 | 725 | DN50 | DN25 |
| 100 | 165 | 100 | 85 | 894 | DN65 | DN32 |

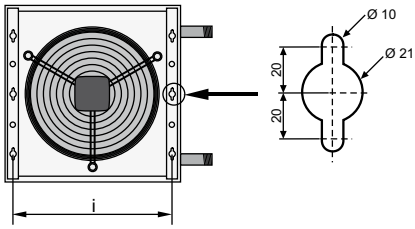
# Accessories for unit heater LH-EC / LH / LH-ATEX

| | Connecting accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Shut-off sets for heat exchanger for flow and return**<br>consisting of:<br>Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility ¾" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar. | | | |
| | Passage design | LH-EC/LH 25, LH25-ATEX Type 2/3/4<br>LH-EC/LH 40, LH40-ATEX Type 2/3/4<br>LH-EC/LH 63, LH63-ATEX Type 1<br>LH-EC/LH 100, LH100-ATEX Type 1 | 20 08 030 | **108,–** |
| | Corner design | LH-EC/LH 25, LH25-ATEX Type 2/3/4<br>LH-EC/LH 40, LH40-ATEX Type 2/3/4<br>LH-EC/LH 63, LH63-ATEX Type 1<br>LH-EC/LH 100, LH100-ATEX Type 1 | 20 08 040 | **115,–** |
| | **Hydraulic balancing valve** | LH-EC, LH, LH-ATEX | | |
| | DN 20 4 - 15 l/min | | 20 70 931 | **217,–** |
| | DN 20 8 - 30 l/min | | 20 70 932 | **217,–** |
| | DN 25 6 - 20 l/min | | 20 70 933 | **226,–** |
| | DN 25 10 - 40 l/min | | 20 70 934 | **226,–** |
| | DN 32 20 - 70 l/min | | 20 70 935 | **279,–** |
| | DN 40 30 - 120 l/min | | 20 70 936 | **368,–** |
| | **Flange set**<br>consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts | | | |
| | DN 20 R ¾" | LH-EC/LH 25, 40, Type 1<br>LH 25-ATEX Type 1 | 20 70 201 | **71,–** |
| | DN 25 R 1" | LH-EC/LH 25, 40, Type 2/3/4<br>LH 25/40-ATEX Type 2/3/4<br>LH-EC/LH 63,100, Type 1<br>LH 63/100-ATEX Type 1 | 20 70 202 | **75,–** |
| | DN 32 R 1¼" | LH-EC/LH 63, Type 2/3/4<br>LH 63-ATEX Type 2/3/4 | 20 70 203 | **105,–** |
| | DN 40 R 1½" | LH-EC/LH 100, Type 2/3/4<br>LH 100-ATEX Type 2/3/4 | 20 70 204 | **117,–** |

# Accessories for unit heater LH-EC / LH / LH-ATEX

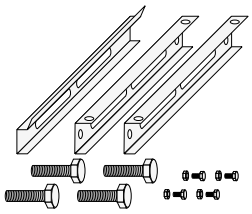
| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Fastening brackets**<br>for wall and ceiling mounting of<br>folded sheet steel 2mm, galvanised<br><br>Consisting of:<br>- 2 brackets<br>- Hexagon bolts for mounting to LH device | LH-EC/LH 25, 40, LH 25-ATEX, 40-ATEX<br>LH-EC/LH 63, 100, LH 63-ATEX, 100-ATEX | 65 00 638<br>65 00 639 | **53,-**<br>**62,-** |

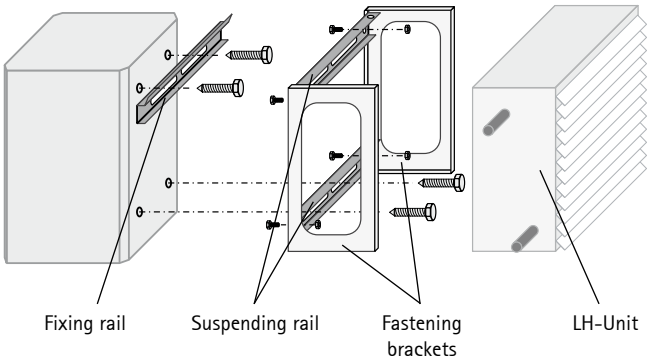


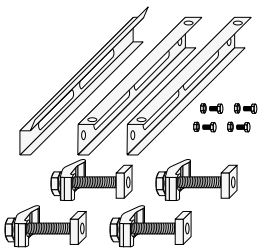
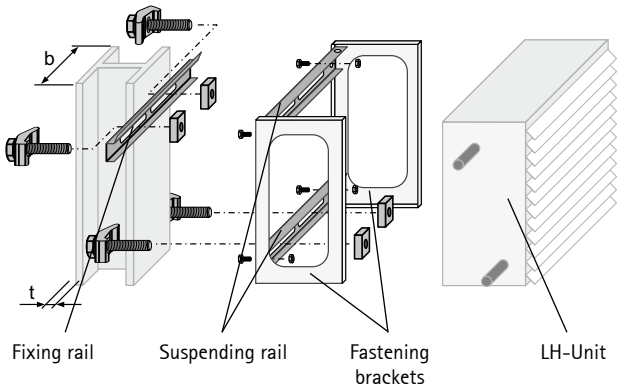
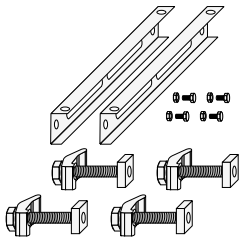
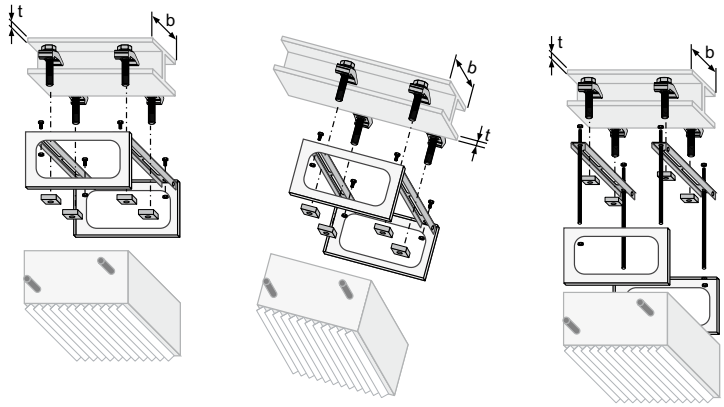

| LH-EC/LH | a | b | c | d | e | f | g | h | i |
|---|---|---|---|---|---|---|---|---|---|
| 25 | 480 | 250 | 380 | 70 | 30 | 170 | 155 | 155 | 434 |
| 40 | 480 | 250 | 2x170 | 90 | 50 | 2x170 | 70 | 70 | 564 |
| 63 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 734 |
| 100 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 894 |

| | | | |
|---|---|---|---|
| **Fastening set for concrete bar – vertical**<br>for mounting to a concrete support by suspending<br>from pre-mounted fixing rails.<br>Consisting of:<br>Fixing rail, 2 pcs suspending rails,<br>Nuts and bolts<br>(only in conjunction with fastening brackets,<br>Art. no. 65 00 638)<br>galvanized sheet steel | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX | 65 00 781<br>65 00 782 | **83,-**<br>**83,-** |



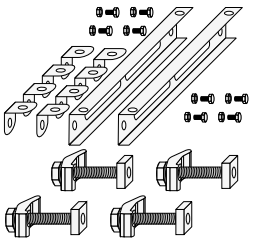


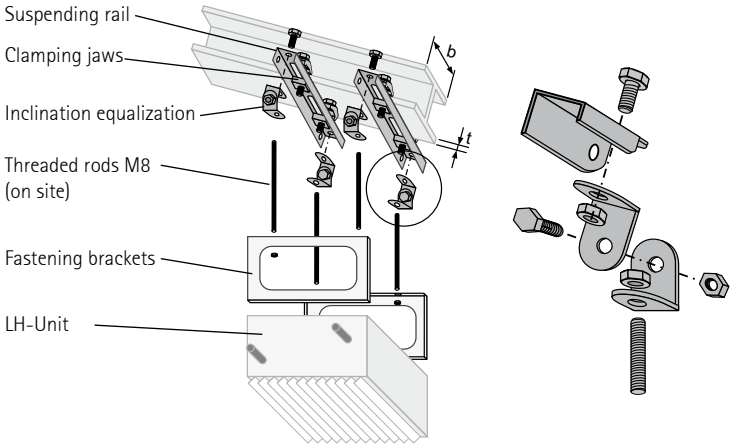
# Accessories for unit heater LH-EC / LH / LH-ATEX

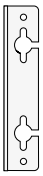
| Gerätebefestigungen | for products | Art. no. | € |
|---|---|---|---|
|  **Fastening set fot steel bar – vertical**<br>For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws. Suitable for all steel girders with flange width „b" from 100mm to 300mm and a flange thickness „t" from 6mm to 21mm.<br>Consisting of:<br>Fixing rail, 2 pcs. suspending rails, 4 pcs clamping jaws, nuts and bolts (only in conjunction with fastening brackets, Art. no. 65 00 638)<br>galvanized sheet steel<br>  <br> | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX | 65 00 783<br>65 00 784 | **161,–**<br>**161,–** |
|  **Fastening set for steel bar – horizontal and inclined without inclination equalization.**<br>For fastening to a horizontal or inclined steel bar at a flange width „b" of 100-300 mm, and a flange thickness „t" of 6-21 mm.<br>Consisting of:<br>2 pcs. suspending rails, 4 pcs. clamping jaws, screws and nuts. (only in conjunction with fastening brackets, Art. no. 65 00 638)<br>galvanized sheet steel<br>  <br><br>**Attention:**<br>Prior to the application of fastening sets the static conditions of the concrete or steel bars have to be checked and taken into account. Assembly exclusively with basic units at a total depth of 300mm. | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX | 65 00 785<br>65 00 786 | **155,–**<br>**155,–** |

# Accessories for unit heater LH-EC / LH / LH-ATEX

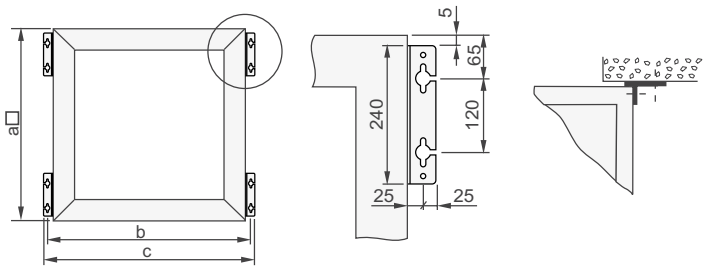
| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Fastening set for steel bar – inclined with inclination equalization**<br>For fastening an LH-Unit to a steel bar at a flange width „b" of 100-300 mm, and a flange thickness „t" of 6-21 mm.<br>Consisting of:<br>2 pcs. suspending rails, 4 pcs. clamping jaws, 4 pcs. inclination equalization, screws and nuts (only in conjunction with fastening brackets, Art. no. 65 00 638)<br>galvanized sheet steel | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX | 65 00 787<br>65 00 788 | **176,-**<br>**176,-** |
| **Hanging bracket, loose**<br>for wall or ceiling mounting the LH device with fitted mixed air recirculation air, outdoor air or filter box.<br>Galvanized sheet steel<br>For mounting, 4 hanging brackets are necessary.<br>These are included with the corresponding intake accessories.<br>(Sealing against the wall/ceiling by the customer) | LH-EC, LH, LH-ATEX<br>1 item<br>2-piece set<br>4-piece set | <br>65 11 454<br>65 23 052<br>65 23 053 | <br>**7,80**<br>**15,60**<br>**31,30** |





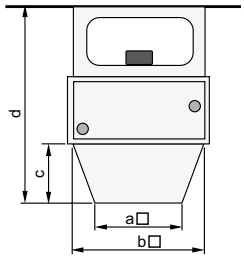



| LH | a | b | c |
|---|---|---|---|
| 25 | 500 | 550 | 600 |
| 40 | 630 | 680 | 730 |
| 63 | 800 | 850 | 900 |
| 100 | 1000 | 1050 | 1100 |

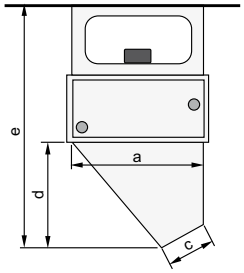


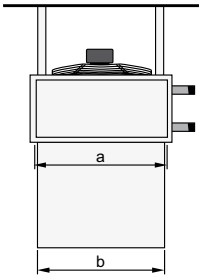
# Accessories for unit heater LH-EC / LH / LH-ATEX

| Discharge accessories | for products | Art. no. | € |
|---|---|---|---|
| **Discharge cone**<br>For increasing the jet range when mounted high.<br>Galvanized sheet steel. | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 65 13 541<br>65 13 542<br>65 13 543<br>65 13 544 | **96,–**<br>**112,–**<br>**119,–**<br>**173,–** |
| **Discharge nozzle**<br>For large jet ranges, suitable as air curtain at doors.<br>Discharge temperature for air curtain approx. 10-15 °C above room temperature.<br>Galvanized sheet steel. | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 65 13 051<br>65 13 052<br>65 13 053<br>65 13 054 | **115,–**<br>**130,–**<br>**163,–**<br>**209,–** |
| **Four-way-discharge**<br>With adjustable air guide fins, suitable for heating low rooms, even air distribution to all four sides.<br>Galvanized sheet steel.<br>Fins in "Wolf silver", similar to RAL 9006. | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 65 13 061<br>65 13 062<br>65 13 063<br>65 13 064 | **141,–**<br>**161,–**<br>**185,–**<br>**204,–** |

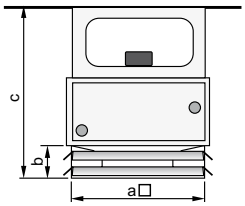



| LH-EC/LH | a | b | c | d |
|---|---|---|---|---|
| 25 | 280 | 460 | 200 | 750 |
| 40 | 370 | 590 | 240 | 790 |
| 63 | 430 | 760 | 270 | 920 |
| 100 | 530 | 920 | 320 | 1010 |




| LH-EC/LH | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 460 | 420 | 190 | 390 | 940 |
| 40 | 590 | 550 | 250 | 480 | 1030 |
| 63 | 760 | 720 | 260 | 585 | 1235 |
| 100 | 920 | 880 | 320 | 685 | 1375 |

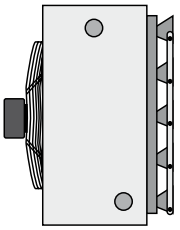
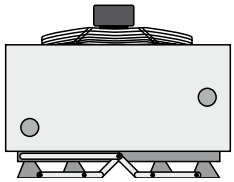



| LH-EC/LH | a | b | c |
|---|---|---|---|
| 25 | 500 | 155 | 705 |
| 40 | 630 | 155 | 705 |
| 63 | 800 | 155 | 805 |
| 100 | 1000 | 155 | 845 |

# Accessories for unit heater LH-EC / LH / LH-ATEX

| Discharge accessories | for products | | Art. no. | € |
|---|---|---|---|---|
| **Wide spread discharge**<br>For greater lateral spread of the hot air jet.<br>Air jet cone up to about 120°; horizontal and vertical fins individually adjustable.<br>Powder-coated, colour "Wolf silver", similar to RAL 9006. | LH-EC/LH 25,<br>LH-EC/LH 40,<br>LH-EC/LH 63,<br>LH-EC/LH 100, | LH 25-ATEX<br>LH 40-ATEX<br>LH 63-ATEX<br>LH 100-ATEX | 25 65 020<br>25 65 120<br>25 65 220<br>25 65 320 | **115,-**<br>**141,-**<br>**204,-**<br>**264,-** |
| **Discharge cross (loose)**<br>Improvement of the air circulation and temperature distribution through thorough mixing of the hot air jet with the room air.<br>The reduced temperature of the hot air jet increases its range.<br>Reducing the air temperature in the roof area, so reducing ventilation and transmission heat losses; energy saving up to 15%. | LH-EC/LH 25,<br>LH-EC/LH 40,<br>LH-EC/LH 63,<br>LH-EC/LH 100, | LH 25-ATEX<br>LH 40-ATEX<br>LH 63-ATEX<br>LH 100-ATEX | 65 13 821<br>65 13 822<br>65 13 823<br>65 13 824 | **112,-**<br>**119,-**<br>**130,-**<br>**141,-** |
| **Adaptor cone for induction louvre**<br>For increasing the jet range in higher halls in which the maximum mounting height of the ceiling-mounted units with induction louvre alone is no longer sufficient.<br>Galvanised sheet steel.<br><br>LH-EC/LH: a 460, b 760, c 270, d 1040, e 120<br>100: a 590, b 920, c 320, d 1130, e 120<br><br>Required size of the induction louvre:<br>for adaptor cone LH63: induction louvre LH25<br>for adaptor cone LH100: induction louvre LH40<br>see accessories "Induction louvre for ceiling-mounted unit" | LH-EC/LH 63,<br>LH-EC/LH 100, | LH 63-ATEX<br>LH 100-ATEX | 65 00 934<br>65 00 937 | **123,-**<br>**173,-** |

# Accessories for unit heater LH-EC / LH / LH-ATEX

| | Discharge accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Induction louvre for wall-mounted unit** | | | |
| | manual setting | LH-EC/LH 25, LH 25-ATEX | 65 00 473 | **217,–** |
| | | LH-EC/LH 40, LH 40-ATEX | 65 00 485 | **254,–** |
| | | LH-EC/LH 63, LH 63-ATEX | 65 00 502 | **293,–** |
| | | LH-EC/LH 100, LH 100-ATEX | 65 00 513 | **330,–** |
| | with actuator 230V / 50Hz fitted | LH-EC/LH 25 | 65 00 475 | **408,–** |
| | | LH-EC/LH 40 | 65 00 487 | **447,–** |
| | | LH-EC/LH 63 | 65 00 504 | **483,–** |
| | | LH-EC/LH 100 | 65 00 515 | **520,–** |
| | with actuator 24V ~ fitted | LH-EC/LH 25 | 65 00 957 | **408,–** |
| | | LH-EC/LH 40 | 65 00 958 | **447,–** |
| | | LH-EC/LH 63 | 65 00 959 | **483,–** |
| | | LH-EC/LH 100 | 65 00 960 | **520,–** |
|  | **Induction louvre for ceiling-mounted unit** | | | |
| | manual setting | LH-EC/LH 25, LH 25-ATEX | 65 00 474 | **314,–** |
| | | LH-EC/LH 40, LH 40-ATEX | 65 00 486 | **360,–** |
| | | LH-EC/LH 63, LH 63-ATEX | 65 00 503 | **415,–** |
| | | LH-EC/LH 100, LH 100-ATEX | 65 00 514 | **484,–** |
| | with actuator 230V / 50Hz fitted | LH-EC/LH 25 | 65 00 476 | **510,–** |
| | | LH-EC/LH 40 | 65 00 488 | **555,–** |
| | | LH-EC/LH 63 | 65 00 505 | **605,–** |
| | | LH-EC/LH 100 | 65 00 516 | **675,–** |
| | with actuator 24V ~ fitted | LH-EC/LH 25 | 65 00 961 | **510,–** |
| | | LH-EC/LH 40 | 65 00 962 | **555,–** |
| | | LH-EC/LH 63 | 65 00 963 | **605,–** |
| | | LH-EC/LH 100 | 65 00 964 | **675,–** |
| | **Key button for (230V / 50Hz) Actuator for induction louvre** | LH-EC, LH | 27 01 063 | **88,–** |

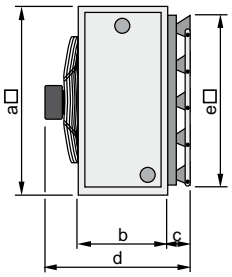
**Induction louvre for optimising air throw and temperature distribution**

**Functional description**
The induction louver with secondary-air cone divides the warm air into separate flows and inducts secondary air (room air) directly into the current of warm air downstream from the deflector vanes.. The inducted secondary air causes intensive mixing of the warm air with the ambient air over a very short distance, thus reducing the temperature of the warm air stream.
This reduction in temperature prevents the warm air from rising, thus extending throw and depth of penetration into the room, especially in systems with high air-discharge temperatures..
The induction louvre (and thus the direction of the warm air stream) is adjustable either by hand or with the aid of an actuator and can therefore be set to suit any operating conditions or room.

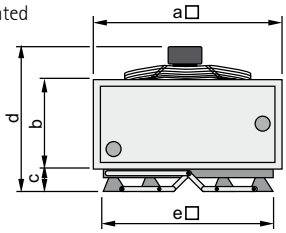
**Energy savings**
Avoids high temperatures close to the ceiling and the associated heat losses by ventilation and transmission. Energy savings up to 15% are possible.
Easily retrofitted for upgrading
The induction louvre is easily installed, so upgrading existing systems poses no problems.

**Scope of supply**
Induction louvre, manually adjustable.
Alternative:
Induction louvre monted to LH-Unit, with actuator 230V/50 Hz suitable for drive via key button or Actuator, 24V, controllable by ventilation module LM2.

Wall-mounted unit



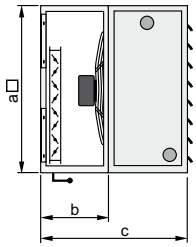

Ceiling-mounted unit

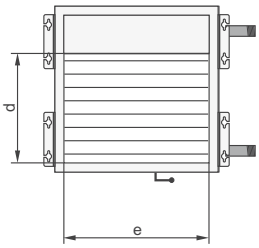



| LH-EC/LH/ LH-ATEX | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 500 | 300 | 120 | 530 | 460 |
| 40 | 630 | 300 | 120 | 535 | 590 |
| 63 | 800 | 300 | 120 | 540 | 760 |
| 100 | 1000 | 340 | 120 | 605 | 920 |

# Accessories for unit heater LH-EC / LH / LH-ATEX

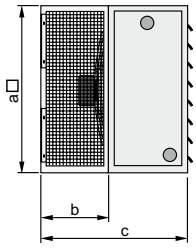
| Intake accessories | for products | Art. no. | € |
|---|---|---|---|
| **Mixing box**<br>For individual adaptation to the outdoor air amount.<br>Outdoor air intake on the back panel, recirculation air intake at the side or, when turning mixed air box around by 90°, from the top.<br>Stepless manual adjustment from pure return air operation to mixed air operation to pure outdoor air operation.<br>Galvanised sheet steel.<br>Suspension bracket as standard.<br><br>**Note:** When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014.<br><br>Alternative: (see page 22)<br>Actuator, 230V, stepless (Art. no. 22 69 522)<br>or in conjunction with ventilation module LM2<br>Actuator, 24V, stepless (Art. no. 22 69 521) | LH-EC/LH 25<br>LH-EC/LH 40<br>LH-EC/LH 63<br>LH-EC/LH 100 | on request | **on request** |
| **Mixing box**<br>galvanized sheet steel<br>Damper with bronze bearing | LH-ATEX | on request | **on request** |

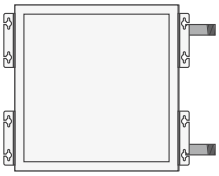



| LH-EC/LH | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 500 | 500 | 800 | 400 | 400 |
| 40 | 630 | 500 | 800 | 360 | 530 |
| 63 | 800 | 500 | 800 | 530 | 700 |
| 100 | 1000 | 540 | 880 | 690 | 860 |

| | | | |
|---|---|---|---|
| **Recirculation air box with lateral intake**<br>For recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom.<br>Galvanized sheet steel.<br>Suspension bracket as standard. | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 65 13 251<br>65 13 252<br>65 13 253<br>65 13 254 | **156,-**<br>**185,-**<br>**215,-**<br>**258,-** |

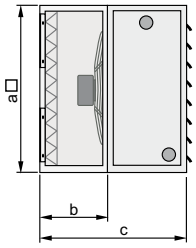


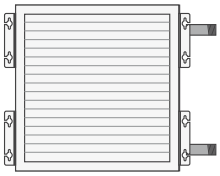



| LH-EC/LH | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 500 | 800 |
| 63 | 800 | 500 | 800 |
| 100 | 1000 | 540 | 880 |

# Accessories for unit heater LH-EC / LH / LH-ATEX

| Intake accessories | for products | Art. no. | € |
|---|---|---|---|
| **Filter box**<br>With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4. Angle brackets optional.<br>Galvanized sheet steel | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 65 13 091<br>65 13 092<br>65 13 093<br>65 13 094 | **254,–**<br>**350,–**<br>**386,–**<br>**474,–** |

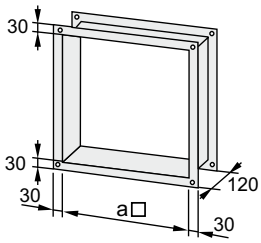


| LH-EC/LH | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 300 | 600 |
| 63 | 800 | 300 | 600 |
| 100 | 1000 | 340 | 680 |

| | | | |
|---|---|---|---|
| **Flexible connection, 4-hole profil** | LH-EC/LH 25, LH 25-ATEX<br>LH-EC/LH 40, LH 40-ATEX<br>LH-EC/LH 63, LH 63-ATEX<br>LH-EC/LH 100, LH 100-ATEX | 25 25 025<br>25 25 040<br>25 25 063<br>25 25 100 | **48,–**<br>**74,–**<br>**100,–**<br>**112,–** |

**Note:** In combination with LH-ATEX, an earthing strap is required for potential equalisation (Art. no. 27 65 450).

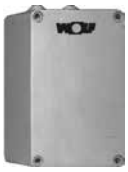
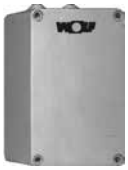



| LH-EC/LH | a |
|---|---|
| 25 | 400 |
| 40 | 530 |
| 63 | 700 |
| 100 | 860 |

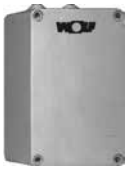
# Accessories for unit heater LH-EC / LH / LH-ATEX

| | Switching devices | for products | Art. no. | € |
|---|---|---|---|---|
| | **Stepless speed controller**<br>For stepless operation of one or several unit heaters with EC-motor. (0 - 10V) | LH-EC | 27 45 100 | **197,-** |
| | **1-position switch D1-2**<br>Full motor protection switch (8A, 400V) with reclosure preventing device<br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. Motor full protection is effected by PTC in connection with PTC triggering unit for control panel installation. | LH, LH-ATEX | 27 45 465 | **149,-** |
| | **2-position switch DS-2**<br>Full motor protection switch (8A, 400V) with reclosure preventing device<br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. Motor full protection is effected by PTC in connection with PTC triggering unit for control panel installation. | LH, LH-ATEX | 27 45 467 | **249,-** |
| | **3-position switch E 3-7T**<br>Full motor protection switch (7A, 230V) with reclosure preventing device | LH | 27 01 064 | **269,-** |
| | **3-position switch D 3-4**<br>Full motor protection switch (4A, 400V) with reclosure preventing device<br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. | LH, LH-ATEX | 27 01 065 | **378,-** |
| | **5-position switch D5...**<br>Full motor protection switch with reclosure preventing device<br>**D5-1** (1A, 400V)<br>**D5-3** (2A, 400V)<br>**D5-7** (4A, 400V)<br>**D5-12** (7A, 400V)<br>**D5-19** (12A, 400V)<br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. | LH, LH-ATEX<br>LH, LH-ATEX<br>LH, LH-ATEX<br>LH, LH-ATEX<br>LH, LH-ATEX | 27 40 015<br>27 40 010<br>27 40 013<br>27 40 014<br>27 40 017 | **378,-**<br>**424,-**<br>**520,-**<br>**615,-**<br>**980,-** |
| | **5-position switch E5-7T**<br>Full motor protection switch (7A, 230V) with reclosure preventing device | LH | 27 40 011 | **344,-** |
| | **All-pole Isolator AR8 fitted and wired** | LH-EC, LH | 79 65 015 | **204,-** |

# Accessories for unit heater LH-EC / LH / LH-ATEX

| | Switching controllers / Servomotors | for products | Art. no. | € |
|---|---|---|---|---|
|  | **A1 Ü controller,** w/out ex-proof switch<br>(only suitable for one unit)<br><br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. | LH 40-ATEX, 63-ATEX, 100-ATEX | 79 65 030 | **176,–** |
| | **Ex-proof switch**<br>for A1 Ü controller, operating voltage 690 V, max. current 16 A (4A), protection class IP 66 | LH-ATEX | 27 39 000 | **108,–** |
|  | **A1 automatic relay**<br>for Open/Close actuator (3.15A, 230V) | LH-EC, LH | 79 65 020 | **88,–** |
| | **A1S automatic relay**<br>for actuator, stepless, with built-in position indicator (0 to 100%)<br>(3,15A, 230V) | LH-EC, LH | 79 40 101 | **198,–** |
| | **Actuator, 24V, stepless, for mixed air damper**<br>in connection with ventilation module LM2 | LH-EC, LH | 22 69 521 | **306,–** |
| | **Open/Close actuator 24V, for outdoor air damper** | LH-EC, LH | 22 69 556 | **223,–** |
| | **Open/Close actuator 230V / 50Hz, for outdoor air damper**<br>(i.e. A1S automatic relay Art. no. 79 65 020) | LH-EC, LH | 22 69 523 | **288,–** |
| | **Actuator, 230V / 50 Hz, stepless, for mixed air damper**<br>(i.e. A1S automatic relay Art. no. 79 40 101) | LH-EC, LH | 22 69 522 | **301,–** |
| | **Position controller**<br>for installation on wiring board front<br>for progressive actuator in connection with automatic relay A1. | LH-EC, LH | 27 44 360 | **80,–** |
| | for front-panel installation in control cabinet<br>for controlling the stepless actuator in conjunction with automatic relay A1. | LH-EC, LH | 27 44 389 | **115,–** |

# Accessories for unit heater LH-EC / LH / LH-ATEX

| | Thermostats / Terminal box | for products | Art. no. | € |
|---|---|---|---|---|
| | **Room thermostat** | LH-EC, LH | 27 34 000 | **45,-** |
| | **Room thermostat with summer/winter switch** | LH-EC, LH | 27 34 700 | **79,-** |
| | **Room thermostat clock with weekly program** | LH-EC, LH | 27 44 079 | **217,-** |
| | **Remote sensor for room thermostat timer** | LH-EC, LH | 27 44 051 | **34,60** |
| | **Room thermostat, industrial version** | LH-EC, LH | 27 35 300 | **88,-** |
| | **Anti-frost thermostat mounted** | LH-EC/LH 25, 40, 63<br>LH-EC/LH 100 | 27 30 050<br>27 30 150 | **162,-**<br>**167,-** |
| | **Analogue timer**<br>for reduced operation with weekly program | LH-EC | 27 36 251 | **150,-** |
| | **Earthing strap for potential equalization** | LH-EC, LH, LH-ATEX | 27 65 450 | **5,10** |
|  | **Intermediate terminal box for parallel operation up to 3 LH**<br><br>**Note:** In combination with LH-ATEX, mounting only outside the explosion risk area. | LH, LH-ATEX | 79 65 043 | **144,-** |

Energiesparen und Klimaschutz serienmäßig

# Parkhotel Schönbrunn, Wien

## 8 Geräte der Baureihe KG Top mit integrierter Wärmerückgewinnung

# TLH-EC / TLH TopWing Unit heater


| | |
|---|---|
| TLH-EC Basic units | Page 26 |
| TLH Basic units | Page 27 |
| WRS control systems | Page 28 |
| Dimensions TLH-EC / TLH | Page 30 |
| Connecting accessories / Device fastenings | Page 31 |
| Device fastenings | Page 32 |
| Discharge accessories | Page 35 |
| Intake accessories | Page 38 |
| Switching devices | Page 39 |
| Thermostats / Terminal box | Page 41 |

**Unit heater with discharge louvre**
**for wall or ceiling mounting;**
**outdoor air, mixed air or return air operation;**
**for heating or ventilation.**
**Casing: traffic white RAL 9016**
**Discharge louvre: "Wolf silver"**
**Full motor protection by temperature monitoring**
**Energy saving EC-fans (1x230V)**

# TopWing TLH-EC

**EC motor 230V / 50Hz**

| **Heat exchanger *: copper-aluminium LPHW** | **TLH-EC 25** | | **TLH-EC 40** | | **TLH-EC 63** | | **TLH-EC 100** | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| Type 1 | 65 23 853 | **1.270,-** | 65 23 857 | **1.765,-** | 65 23 861 | **2.445,-** | 65 23 912 | **3.095,-** |
| Type 2 | 65 23 854 | **1.355,-** | 65 23 858 | **1.860,-** | 65 23 862 | **2.510,-** | 65 23 913 | **3.225,-** |
| Type 3 | 65 23 855 | **1.425,-** | 65 23 859 | **1.960,-** | 65 23 863 | **2.680,-** | 65 23 914 | **3.540,-** |
| Type 4 | 65 23 856 | **1.495,-** | 65 23 860 | **2.060,-** | 65 23 864 | **2.860,-** | 65 23 915 | **3.715,-** |

* Heat exchanger galvanised steel, steam by request.
RAL and special colours by request.

**Unit heater with discharge louvre**
**for wall or ceiling mounting;**
**outdoor air, mixed air or return air operation;**
**for heating or ventilation.**
**Casing: traffic white RAL 9016**
**Discharge louvre: "Wolf silver"**
**Full motor protection with built-in thermal overload PTCe**

# TopWing TLH

## Single phase AC motor 230V / 50Hz

| Heat exchanger *: copper-aluminium LPHW | TLH 25 | | TLH 40 | | TLH 63 | | TLH 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| Type 1 | 65 00 156 | **1.095,-** | 65 00 164 | **1.465,-** | 65 23 674 | **1.900,-** | - | **-** |
| Type 2 | 65 00 157 | **1.180,-** | 65 00 165 | **1.565,-** | 65 23 675 | **1.965,-** | - | **-** |
| Type 3 | 65 00 158 | **1.250,-** | 65 00 166 | **1.660,-** | 65 23 676 | **2.135,-** | - | **-** |
| Type 4 | 65 00 159 | **1.320,-** | 65 00 167 | **1.765,-** | 65 23 677 | **2.315,-** | - | **-** |

## Three-phase motor 3 x 400V

| Heat exchanger *: copper-aluminium LPHW | TLH 25 | | TLH 40 | | TLH 63 | | TLH 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| Type 1 | 65 23 634 | **985,-** | 65 23 638 | **1.315,-** | 65 23 642 | **1.755,-** | 65 23 646 | **2.270,-** |
| Type 2 | 65 23 635 | **1.045,-** | 65 23 639 | **1.455,-** | 65 23 643 | **1.83,-** | 65 23 647 | **2.400,-** |
| Type 3 | 65 23 636 | **1.105,-** | 65 23 640 | **1.525,-** | 65 23 644 | **1.990,-** | 65 23 648 | **2.720,-** |
| Type 4 | 65 23 637 | **1.205,-** | 65 23 641 | **1.650,-** | 65 23 645 | **2.175,-** | 65 23 649 | **2.895,-** |

* Heat exchanger galvanised steel, steam by request.
RAL and special colours by request.

# Accessories for TLH-EC / TLH TopWing unit heater

Changed art. no. are marked in red.

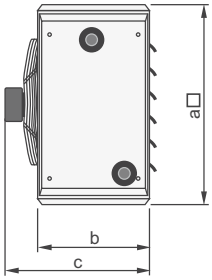
| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | TLH-EC, TLH | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | TLH-EC, TLH | 27 44 275 | **27,70** |
| | **Ventilation module LM1 (incl. room temperature sensor)**<br>• Ventilation module for controlling unit heaters with two-stage motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Demand-optimised room temperature control via the rotary speed of the unit heater<br>• Operation of the heating circuit pump<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on | TLH | 27 44 603 | **390,–** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control<br>• 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Mixed air flap control<br>• Induction louvre control | TLH-EC, TLH | 27 44 604 | **390,–** |
| | **Outside, ceiling or room temperature sensor** | TLH-EC, TLH | 27 92 021 99 | **28,70** |

# Accessories for TLH-EC / TLH TopWing unit heater

| | WRS control systems | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Differential pressure switch**<br>for on-site control | **loose** | TLH-EC, TLH | 27 44 030 | **112,-** |
| | | **mounted** | TLH-EC, TLH | 65 23 043 | **204,-** |
| | **5-position switch**<br>Electronic five-stage speed controller, input 0-10V | | TLH | | |
| | | (2A, 400V) | | 27 44 840 | **950,-** |
| | | (4A, 400V) | | 27 44 841 | **950,-** |
| | | (6A, 230V) | | 27 45 066 | **670,-** |
| | **Supply air sensor (NTC 5K)**<br>for measuring the supply air temperature | | TLH-EC, TLH | 88 52 829 | **53,-** |
| | **Sensor holder**<br>for supply air sensor | | TLH-EC, TLH | 27 92 029 | **24,50** |
| | **ISM 5 - LON-interface module**<br>to connect ventilation modules LM1 and LM2<br>to a building management system applying<br>LON-standard network variables | | TLH-EC, TLH | 27 45 029 | **1.600,-** |

# Accessories for TLH-EC / TLH TopWing unit heater

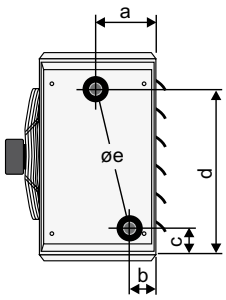
| Dimensions, basic units | for products | Art. no. | € |
|---|---|---|---|




**Dimensions, basic units**

TLH-EC, TLH

| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 540 | 300 | 410 |
| 40 | 670 | 300 | 415 |
| 63 | 840 | 300 | 420 |
| 100 | 1040 | 340 | 485 |



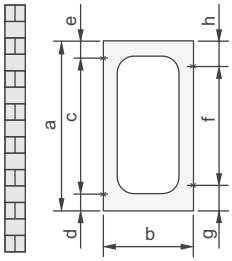

**Connections, basic units**

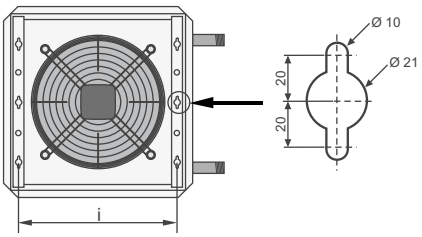
TLH-EC, TLH

| TLH-EC/TLH | a | b | c | d | Øe |
|---|---|---|---|---|---|
| 25-1 | 98 | 68 | 92 | 445 | ¾" |
| 25-2/-3/-4 | 158 | 68 | 95 | 445 | 1" |
| 40-1 | 98 | 68 | 96 | 574 | ¾" |
| 40-2/-3/-4 | 143 | 83 | 100 | 570 | 1" |
| 63-1 | 103 | 63 | 95 | 746 | 1" |
| 63-2/-3/-4 | 143 | 83 | 98 | 742 | 1¼" |
| 100-1 | 124 | 84 | 115 | 926 | 1" |
| 100-2/-3/-4 | 179 | 89 | 109 | 932 | 1½" |

# Accessories for TLH-EC / TLH TopWing unit heater

| Connecting accessories / Device fastenings | for products | | Art. no. | € |
|---|---|---|---|---|
| **Shut-off sets for heat exchanger for flow and return**<br>consisting of:<br>Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility ¾" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar. | | | | |
| Passage design | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | Type 2/3/4<br>Type 2/3/4<br>Type 1<br>Type 1 | 20 08 030 | **108,-** |
| Corner design | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | Type 2/3/4<br>Type 2/3/4<br>Type 1<br>Type 1 | 20 08 040 | **115,-** |
| **Hydraulic balancing valve** | TLH-EC, TLH | | | |
| DN 20 4 - 15 l/min | | | 20 70 931 | **217,-** |
| DN 20 8 - 30 l/min | | | 20 70 932 | **217,-** |
| DN 25 6 - 20 l/min | | | 20 70 933 | **226,-** |
| DN 25 10 - 40 l/min | | | 20 70 934 | **226,-** |
| DN 32 20 - 70 l/min | | | 20 70 935 | **279,-** |
| DN 40 30 - 120 l/min | | | 20 70 936 | **368,-** |
| **Flange set**<br>consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts | | | | |
| DN 20 R ¾" | TLH-EC/TLH 25, 40, | Type 1 | 20 70 201 | **71,-** |
| DN 25 R 1" | TLH-EC/TLH 25, 40,<br>TLH-EC/TLH 63,100, | Type 2/3/4<br>Type 1 | 20 70 202 | **75,-** |
| DN 32 R 1¼" | TLH-EC/TLH 63, | Type 2/3/4 | 20 70 203 | **105,-** |
| DN 40 R 1½" | TLH-EC/TLH 100, | Type 2/3/4 | 20 70 204 | **117,-** |
| **Fastening brackets**<br>For wall- and ceiling-mounting, made of folded sheet steel, 2mm thick, powder-coated, colour traffic white RAL 9016.<br><br>Consisting of:<br>- 2 brackets<br>- Hexagon bolts for mounting to TLH device | TLH-EC/TLH 25, 40<br>TLH-EC/TLH 63, 100 | | 65 00 494<br>65 00 497 | **53,-**<br>**62,-** |

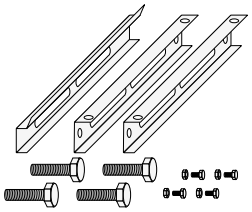


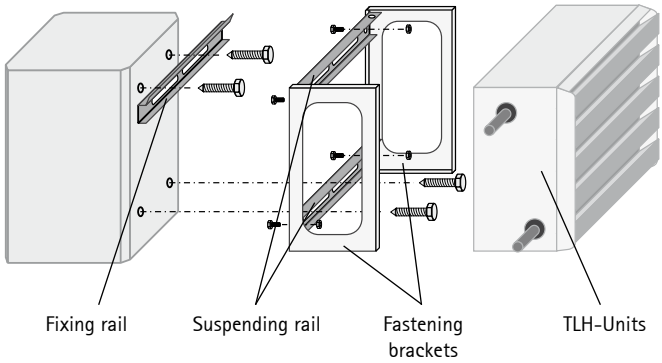



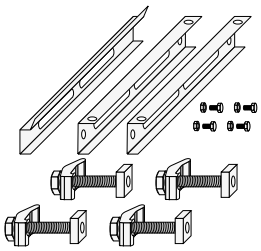

| TLH-EC/TLH | a | b | c | d | e | f | g | h | i |
|---|---|---|---|---|---|---|---|---|---|
| 25 | 480 | 250 | 380 | 70 | 30 | 170 | 155 | 155 | 434 |
| 40 | 480 | 250 | 2x170 | 90 | 50 | 2x170 | 70 | 70 | 564 |
| 63 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 734 |
| 100 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 894 |

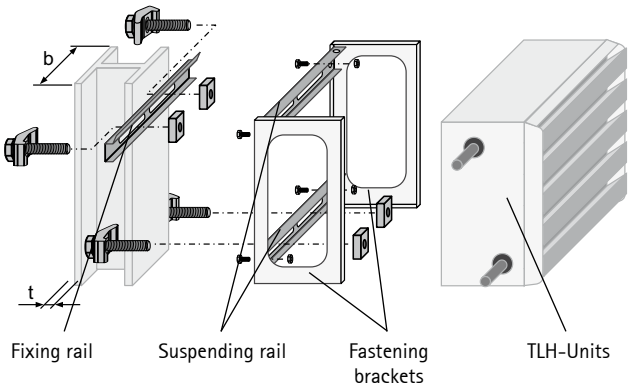
# Accessories for TLH-EC / TLH TopWing unit heater

| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Fastening set for concrete bar – vertical**<br>for mounting to a concrete support by suspending from pre-mounted fixing rails.<br>Consisting of:<br>Fixing rail, 2 pcs suspending rails,<br>Nuts and bolts<br>(only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLH-EC/TLH 25<br>TLH-EC/TLH 40 | 65 00 781<br>65 00 782 | **83,–**<br>**83,–** |
| **Fastening set fot steel bar – vertical**<br>For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws.<br>Suitable for all steel girders with flange width „b“ from 100mm to 300mm and a flange thickness „t“ from 6mm to 21mm.<br>Consisting of:<br>Fixing rail, 2 pcs suspending rails,<br>4 pcs clamping jaws, nuts and bolts<br>(only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLH-EC/TLH 25<br>TLH-EC/TLH 40 | 65 00 783<br>65 00 784 | **161,–**<br>**161,–** |

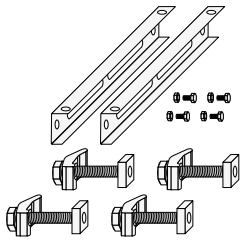
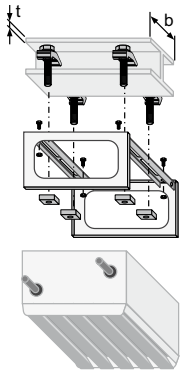
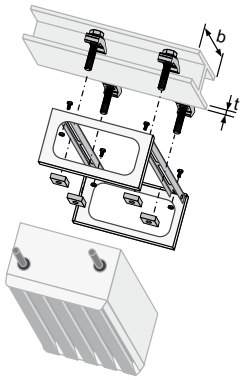
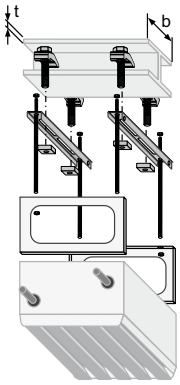
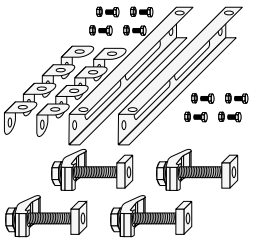
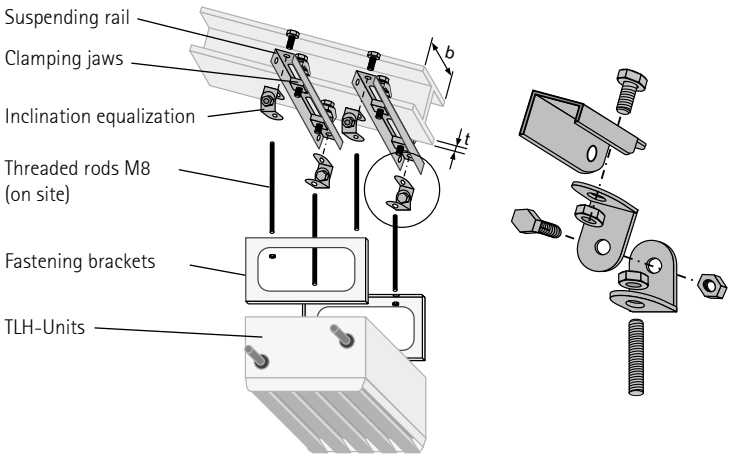




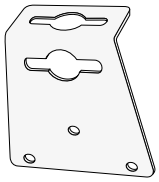


# Accessories for TLH-EC / TLH TopWing unit heater

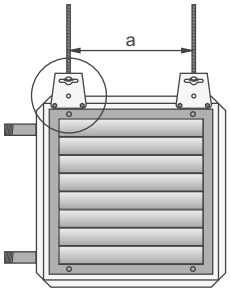
| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
|  **Fastening set for steel bar – horizontal and inclined without inclination equalization.**<br>For fastening to a horizontal or inclined steel bar<br>at a flange width „b" of 100-300 mm,<br>and a flange thickness „t" of 6-21 mm.<br>Consisting of:<br>2 pcs. suspending rails, 4 pcs clamping jaws,<br>screws and nuts. (only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLH-EC/TLH 25<br>TLH-EC/TLH 40 | 65 00 785<br>65 00 786 | **155,-**<br>**155,-** |
|  Direct fastening on horizontal steel bar<br>  Direct fastening on inclined steel bar<br>  Indirect fastening on horizontal steel bar<br><br>**Attention:**<br>Prior to the application of fastening sets the static conditions of the concrete or steel bars have to be checked and taken into account. | | | |
|  **Fastening set for steel bar – inclined with inclination equalization**<br>For fastening an LH-Unit to a steel bar<br>at a flange width „b" of 100-300 mm,<br>and a flange thickness „t" of 6-21 mm.<br>Consisting of:<br>2 pcs. suspending rails, 4 pcs. clamping jaws,<br>4 pcs. inclination equalization,<br>screws and nuts (only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLH-EC/TLH 25<br>TLH-EC/TLH 40 | 65 00 787<br>65 00 788 | **176,-**<br>**176,-** |
|   | | | |

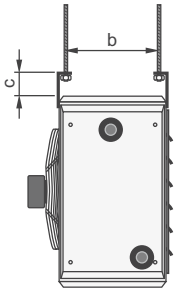
# Accessories for TLH-EC / TLH TopWing unit heater

| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Hangers for configurations with horizontal / vertikal air flow**<br>For suspending the TLH heater horizontally / vertically from the ceiling, powder-coated, color traffic white RAL 9016. Suitable for use in conjunction with threaded rods or perforated strip for configurations with horizontal air flow.<br>1 Set = 4 items | TLH-EC, TLH | 65 00 038 | **33,20** |

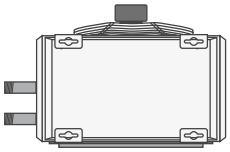


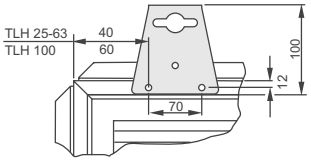
**Horizontal air flow**



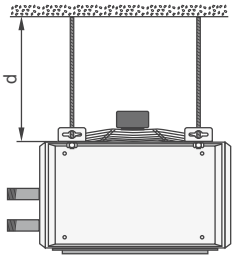



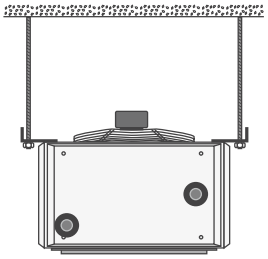

| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 350 | 266 | 60 |
| 40 | 480 | 266 | 60 |
| 63 | 650 | 266 | 60 |
| 100 | 810 | 306 | 60 |

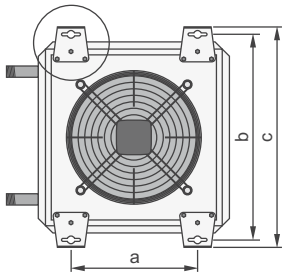


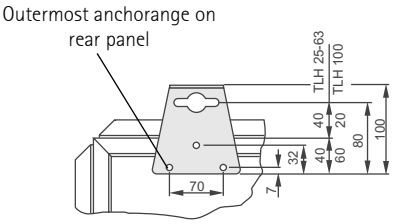



**Vertical air flow**



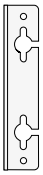



| TLH-EC/TLH | a | b | c | $d_{min}$ |
|---|---|---|---|---|
| 25 | 270 | 580 | 620 | 250 |
| 40 | 440 | 710 | 750 | 250 |
| 63 | 610 | 880 | 920 | 350 |
| 100 | 780 | 1040 | 1080 | 350 |

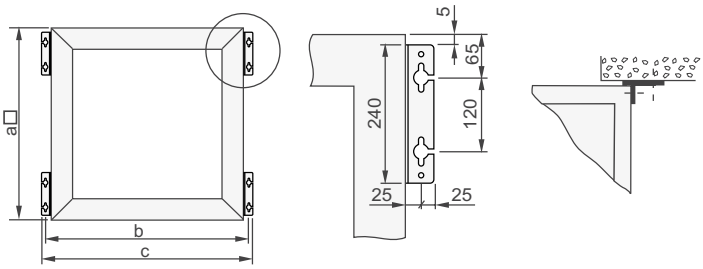
# Accessories for TLH-EC / TLH TopWing unit heater

| Device fastenings / Discharge accessories | for products | Art. no. | € |
|---|---|---|---|



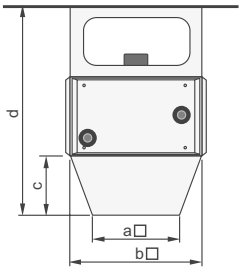
**Hanging bracket, loose**
for wall or ceiling mounting the TLH device with fitted mixed air recirculation air, outdoor air or filter box.
Powder-coated, color traffic white RAL 9016.
For mounting, 4 hanging brackets are necessary.
These are included with the corresponding intake accessories.
(Sealing against the wall/ceiling by the customer)

| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 500 | 550 | 600 |
| 40 | 630 | 680 | 730 |
| 63 | 800 | 850 | 900 |
| 100 | 1000 | 1050 | 1100 |




TLH-EC, TLH

| | | |
|---|---|---|
| 1 item | 65 00 325 | **8,10** |
| 4-piece set | 65 23 054 | **33,-** |

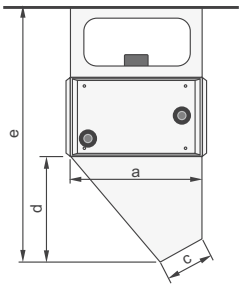


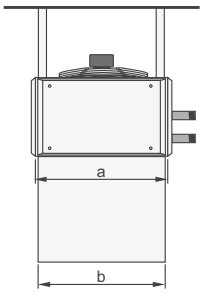

**Discharge cone**
For increasing the jet range when mounted high.
Powder-coated, color traffic white RAL 9016.

| TLH-EC/TLH | a | b | c | d |
|---|---|---|---|---|
| 25 | 280 | 460 | 200 | 750 |
| 40 | 370 | 590 | 240 | 790 |
| 63 | 430 | 760 | 270 | 920 |
| 100 | 530 | 920 | 320 | 1010 |

| | | |
|---|---|---|
| TLH-EC/TLH 25 | 65 00 333 | **108,-** |
| TLH-EC/TLH 40 | 65 00 403 | **126,-** |
| TLH-EC/TLH 63 | 65 00 406 | **136,-** |
| TLH-EC/TLH 100 | 65 00 409 | **198,-** |

**Discharge nozzle**
For large jet ranges, suitable as air curtain at doors.
Discharge temperature for air curtain approx. 10-15 °C above room temperature.
Powder-coated, color traffic white RAL 9016.



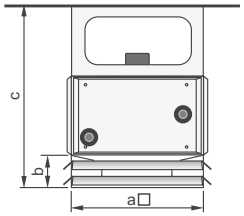




| TLH-EC/TLH | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 460 | 420 | 190 | 390 | 940 |
| 40 | 590 | 550 | 250 | 480 | 1030 |
| 63 | 760 | 720 | 260 | 585 | 1235 |
| 100 | 920 | 880 | 320 | 685 | 1375 |

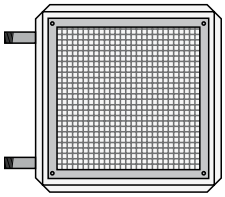
| | | |
|---|---|---|
| TLH-EC/TLH 25 | 65 00 412 | **130,-** |
| TLH-EC/TLH 40 | 65 00 424 | **150,-** |
| TLH-EC/TLH 63 | 65 00 436 | **189,-** |
| TLH-EC/TLH 100 | 65 00 448 | **244,-** |

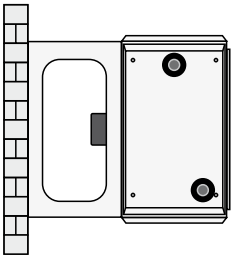
# Accessories for TLH-EC / TLH TopWing unit heater

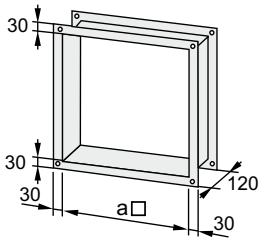
| Discharge accessories | for products | Art. no. | € |
|---|---|---|---|
| **Four-way-discharge**<br>With adjustable air guide fins, suitable for heating low rooms, even air distribution to all four sides.<br>Powder-coated, color traffic white RAL 9016.<br>Fins in "Wolf silver", similar to RAL 9006. | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | 65 00 460<br>65 00 465<br>65 00 467<br>65 00 469 | **161,–**<br>**185,–**<br>**213,–**<br>**238,–** |
| **Wide spread discharge**<br>For greater lateral spread of the hot air jet<br>Air jet cone up to about 120°; horizontal and vertical fins individually adjustable.<br>Powder-coated, colour "Wolf silver", similar to RAL 9006. | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | 25 65 020<br>25 65 120<br>25 65 220<br>25 65 320 | **115,–**<br>**141,–**<br>**204,–**<br>**264,–** |
| **Flexible connection, 4-hole profile** | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | 25 25 025<br>25 25 040<br>25 25 063<br>25 25 100 | **48,–**<br>**74,–**<br>**100,–**<br>**112,–** |




| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 500 | 155 | 705 |
| 40 | 630 | 155 | 705 |
| 63 | 800 | 155 | 805 |
| 100 | 1000 | 155 | 845 |

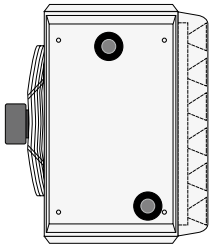
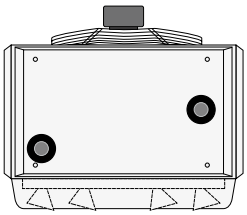







| TLH-EC/TLH | a |
|---|---|
| 25 | 400 |
| 40 | 530 |
| 63 | 700 |
| 100 | 860 |

# Accessories for TLH-EC / TLH TopWing unit heater

| | Discharge accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Induction louvre for wall-mounted unit**<br>with secondary-air cone color traffic white RAL 9016 | | | |
| | manual setting | TLH-EC/TLH 25 | 65 00 477 | **286,-** |
| | | TLH-EC/TLH 40 | 65 00 489 | **331,-** |
| | | TLH-EC/TLH 63 | 65 00 506 | **380,-** |
| | | TLH-EC/TLH 100 | 65 00 517 | **427,-** |
| | with actuator 230V~<br>fitted | TLH-EC/TLH 25 | 65 00 479 | **461,-** |
| | | TLH-EC/TLH 40 | 65 00 491 | **510,-** |
| | | TLH-EC/TLH 63 | 65 00 508 | **555,-** |
| | | TLH-EC/TLH 100 | 65 00 519 | **605,-** |
| | with actuator 24V~<br>fitted | TLH-EC/TLH 25 | 65 00 618 | **461,-** |
| | | TLH-EC/TLH 40 | 65 00 619 | **510,-** |
| | | TLH-EC/TLH 63 | 65 00 620 | **555,-** |
| | | TLH-EC/TLH 100 | 65 00 621 | **605,-** |
|  | **Induction louvre for ceiling-mounted unit**<br>with secondary-air cone color traffic white RAL 9016 | | | |
| | manual setting | TLH-EC/TLH 25 | 65 00 478 | **411,-** |
| | | TLH-EC/TLH 40 | 65 00 490 | **467,-** |
| | | TLH-EC/TLH 63 | 65 00 507 | **540,-** |
| | | TLH-EC/TLH 100 | 65 00 518 | **625,-** |
| | with actuator 230V~<br>fitted | TLH-EC/TLH 25 | 65 00 480 | **580,-** |
| | | TLH-EC/TLH 40 | 65 00 492 | **635,-** |
| | | TLH-EC/TLH 63 | 65 00 509 | **715,-** |
| | | TLH-EC/TLH 100 | 65 00 520 | **805,-** |
| | with actuator 24V~<br>fitted | TLH-EC/TLH 25 | 65 00 622 | **580,-** |
| | | TLH-EC/TLH 40 | 65 00 623 | **635,-** |
| | | TLH-EC/TLH 63 | 65 00 624 | **710,-** |
| | | TLH-EC/TLH 100 | 65 00 625 | **805,-** |
| | **Key button for (230V / 50Hz)**<br>**Actuator for induction louvre with secondary-air cone** | TLH-EC/TLH 25, 40, 63, 100 | 27 01 063 | **88,-** |

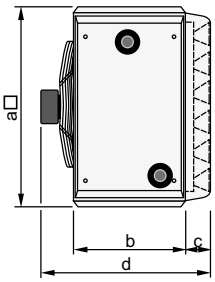
**Induction louvre for optimising air throw and temperature distribution**

**Functional description**
The induction louver with secondary-air cone divides the warm air into separate flows and inducts secondary air (room air) directly into the current of warm air downstream from the deflector vanes. The inducted secondary air causes intensive mixing of the warm air with the ambient air over a very short distance, thus reducing the temperature of the warm air stream.
This reduction in temperature prevents the warm air from rising, thus extending throw and depth of penetration into the room, especially in systems with high air-discharge temperatures..
The induction louvre (and thus the direction of the warm air stream) is adjustable either by hand or with the aid of an actuator and can therefore be set to suit any operating conditions or room.

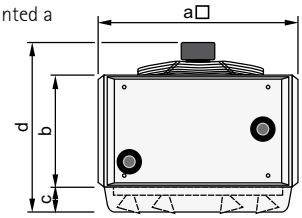
**Energy savings**
Avoids high temperatures close to the ceiling and the associated heat losses by ventilation and transmission. Energy savings up to 15% are possible.
Easily retrofitted for upgrading
The induction louvre is easily installed, so upgrading existing systems poses no problems.

**Scope of supply**
Induction louvre, manually adjustable.
Alternative:
Induction louvre monted to LH-Unit, with actuator 230V/50 Hz suitable for drive via key button or Actuator, 24V, controllable by ventilation module LM2..

Wall-mounted unit



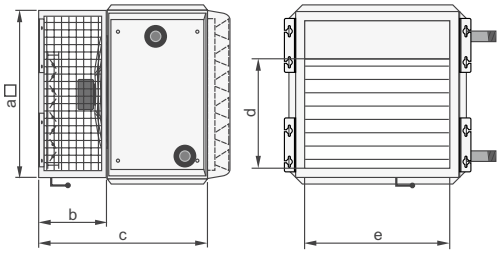

Ceiling-mounted a a unit




| TLH-EC/TLH | a | b | c | d |
|---|---|---|---|---|
| 25 | 540 | 300 | 120 | 530 |
| 40 | 670 | 300 | 120 | 535 |
| 63 | 840 | 300 | 120 | 540 |
| 100 | 1040 | 340 | 120 | 605 |

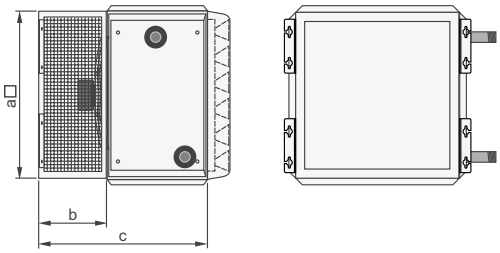
# Accessories for TLH-EC / TLH TopWing unit heater

| Intake accessories | for products | Art. no. | € |
|---|---|---|---|
| **Mixing box/thermally insulated mixing box**<br>Mixed air box in thermally insulated design<br>to avoid condensate accumulation.<br>For individual adaptation to the outdoor air amount.<br>Outdoor air intake on the back panel, recirculation air intake on side or, when turning mixed air box around 90°, from top or bottom.<br>Stepless manual adjustment from pure return air operation<br>to mixed air operation to pure outdoor air operation.<br>Powder-coated, colour traffic white RAL 9016.<br>Suspension bracket as standard. | | | |
| **without thermal insulation** | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | on request | **on request** |
| **with thermal insulation** | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | on request | **on request** |
| **Note:** When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014. | | | |
| Alternative: (see Page 40)<br>Actuator, 230V, stepless (Art. no. 22 69 522)<br>or in conjunction with ventilation module LM2<br>Actuator, 24V, stepless (Art. no. 22 69 521) | | | |



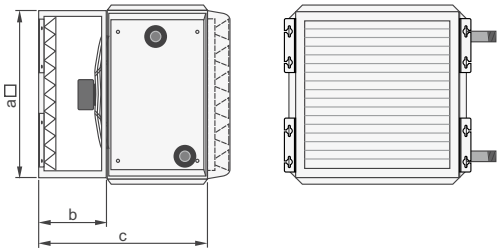

| TLH-EC/ TLH | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 500 | 500 | 800 | 245 | 400 |
| 40 | 630 | 500 | 800 | 360 | 530 |
| 63 | 800 | 500 | 800 | 530 | 700 |
| 100 | 1000 | 540 | 880 | 690 | 860 |

| | | | |
|---|---|---|---|
| **Recirculation air box with lateral intake**<br>for recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom.<br>Powder-coated, color traffic white RAL 9016.<br>Suspension bracket as standard. | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | 65 00 331<br>65 00 389<br>65 00 393<br>65 00 397 | **181,–**<br>**213,–**<br>**251,–**<br>**297,–** |




| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 500 | 800 |
| 63 | 800 | 500 | 800 |
| 100 | 1000 | 540 | 880 |

| | | | |
|---|---|---|---|
| **Filter box**<br>With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4 for TLH 63 and<br>G3 for TLH 25/40/100. Angle brackets optional.<br>Powder-coated, color traffic white RAL 9016. | TLH-EC/TLH 25<br>TLH-EC/TLH 40<br>TLH-EC/TLH 63<br>TLH-EC/TLH 100 | 65 00 549<br>65 00 554<br>65 00 559<br>65 00 564 | **293,–**<br>**402,–**<br>**444,–**<br>**545,–** |

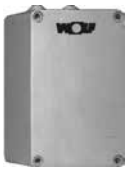



| TLH-EC/TLH | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 300 | 600 |
| 63 | 800 | 300 | 600 |
| 100 | 1000 | 340 | 680 |

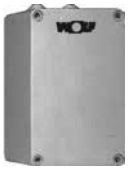
# Accessories for TLH-EC / TLH TopWing unit heater

| | Switching devices | for products | Art. no. | € |
|---|---|---|---|---|
| | **Stepless speed controller**<br>For stepless operation of one or<br>several unit heaters with EC-motor. (0 - 10V) | TLH-EC | 27 45 100 | **197,-** |
| | **1-position switch D1-2**<br>Full motor protection switch (8A, 400V)<br>with reclosure preventing device | TLH | 27 45 465 | **149,-** |
| | **2-position switch DS-2**<br>Full motor protection switch (AA, 400V)<br>with reclosure preventing device | TLH | 27 45 467 | **249,-** |
| | **3-position switch D 3-4**<br>Full motor protection switch (4A, 400V)<br>with reclosure preventing device | TLH | 27 01 065 | **378,-** |
| | **5-position switch D5...**<br>Full motor protection switch<br>with reclosure preventing device | | | |
| | **D5-1** (1A, 400V) | TLH | 27 40 015 | **378,-** |
| | **D5-3** (2A, 400V) | TLH | 27 40 010 | **424,-** |
| | **D5-7** (4A, 400V) | TLH | 27 40 013 | **520,-** |
| | **D5-12** (7A, 400V) | TLH | 27 40 014 | **615,-** |
| | **D5-19**(12A, 400V) | TLH | 27 40 017 | **980,-** |
| | **3-position switch E 3-7T**<br>Full motor protection switch ( 7A, 230V)<br>with reclosure preventing device | TLH | 27 01 064 | **269,-** |

# Accessories for TLH-EC / TLH TopWing unit heater

| | Switching devices | for products | Art. no. | € |
|---|---|---|---|---|
| | **5-position switch E5-7T**<br>Full motor protection switch (7A, 230V)<br>with reclosure preventing device | TLH | 27 40 011 | **344,-** |
| | **All-pole Isolator AR8**<br>**fitted and wired** | TLH-EC, TLH | 79 65 015 | **204,-** |
|  | **A1 automatic relay**<br>for Open/Close actuator (3.15A, 230V)<br>(for Art. no. 22 36 600) | TLH-EC, TLH | 79 65 020 | **88,-** |
| | **A1S automatic relay**<br>for actuator, stepless, with built-in<br>position indicator (0 to 100%) (3,15A, 230V)<br>(für Art. no. 22 36 550) | TLH-EC, TLH | 79 40 101 | **198,-** |
| | **Position controller**<br>for installation on wiring board front<br>for progressive actuator in connection<br>with automatic relay A1. (for Art. no. 79 65 020) | TLH-EC, TLH | 27 44 360 | **80,-** |
| | for front-panel installation in control cabinet<br>for controlling the stepless actuator in conjunction<br>with automatic relay A1. (for Art. no. 79 65 020) | TLH-EC, TLH | 27 44 389 | **115,-** |
| | **Actuator, 24V, stepless, for mixed air damper**<br>in connection with ventilation module LM2 | TLH-EC, TLH | 22 69 521 | **306,-** |
| | **Open/Close actuator 24V, for outdoor air damper** | TLH-EC, TLH | 22 69 556 | **223,-** |
| | **Open/Close actuator 230V / 50Hz,**<br>**for outdoor air damper**<br>(i.e. A1S automatic relay Art. no. 79 65 020) | TLH-EC, TLH | 22 69 523 | **288,-** |
| | **Actuator, 230V / 50 Hz, stepless,**<br>**for mixed air damper**<br>(i.e. A1S automatic relay Art. no. 79 40 101) | TLH-EC, TLH | 22 69 522 | **301,-** |

# Accessories for TLH-EC / TLH TopWing unit heater

| | Thermostats / Terminal box | for products | Art. no. | € |
|---|---|---|---|---|
| | **Room thermostat** | TLH-EC, TLH | 27 34 000 | **45,-** |
| | **Room thermostat with summer/winter switch** | TLH-EC, TLH | 27 34 700 | **79,-** |
| | **Room thermostat clock with weekly program** | TLH-EC, TLH | 27 44 079 | **217,-** |
| | **Remote sensor for room thermostat timer** | TLH-EC, TLH | 27 44 051 | **34,60** |
| | **Room thermostat, industrial version** | TLH-EC, TLH | 27 35 300 | **88,-** |
| | **Anti-frost thermostat mounted** | TLH-EC/TLH 25, 40, 63<br>TLH-EC/TLH 100 | 27 30 050<br>27 30 150 | **162,-**<br>**167,-** |
| | **Analogue timer**<br>for reduced operation with weekly program | TLH-EC | 27 36 251 | **150,-** |
| | **Earthing strap for potential equalization** | TLH-EC, TLH | 27 65 450 | **5,10** |
|  | **Intermediate terminal box for parallel operation up to 3 LH** | TLH | 79 65 043 | **144,-** |

Energiesparen und Klimaschutz serienmäßig

# Wolf KG Top
## Klimasysteme der Zukunft

# TLHK-EC / TLHK TopWing Unit heater


| | |
|---|---|
| Basic units TLHK-EC | Page 44 |
| Basic units TLHK | Page 45 |
| WRS control systems | Page 45 |
| Dimensions TLHK-EC /TLHK | Page 48 |
| Connecting accessories | Page 49 |
| Device fastenings | Page 50 |
| Intake accessories | Page 52 |

**Unit heater for heating or cooling**
**in return air or mixed air operation**
**for wall mounting,**
**Discharge louvre: traffic white RAL 9016**
**Full motor protection by temperature monitoring**
**Energy saving EC-fans (1x230V)**

# TopWing TLHK-EC

**Heat exchangers copper-aluminium LPHW / ch.w.**
**Induction louvre with secondary air cone**
**Free condensate drain**

| Manually adjustable induction louvre | TLHK-EC 25 | | TLHK-EC 40 | | TLHK-EC 63 | | TLHK-EC 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| EC motor 230V / 50Hz | 65 23 865 | **1.800,-** | 65 23 868 | **2.330,-** | 65 23 871 | **3.025,-** | 65 23 916 | **3.385,-** |

| Induction louvre with servomotor 230V / 50Hz<br>For control via pushbutton | TLHK-EC 25 | | TLHK-EC 40 | | TLHK-EC 63 | | TLHK-EC 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| EC motor 230V / 50Hz | 65 23 866 | **1.950,-** | 65 23 869 | **2.495,-** | 65 23 872 | **3.190,-** | 65 23 917 | **3.545,-** |

| Induction louver with servomotor 24V<br>can be controlled via LM2 ventilation control unit | TLHK-EC 25 | | TLHK-EC 40 | | TLHK-EC 63 | | TLHK-EC 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| EC motor 230V / 50Hz | 65 23 867 | **1.950,-** | 65 23 870 | **2.495,-** | 65 23 873 | **3.190,-** | 65 23 918 | **3.545,-** |

RAL and special colours by request.

**Unit heater for heating or cooling**
**in return air or mixed air operation**
**for wall mounting,**
**Discharge louvre: traffic white RAL 9016**
**Full motor protection with built-in thermal overload PTC**

# TopWing TLHK

**Heat exchangers copper-aluminium LPHW / ch.w.**
**Induction louvre with secondary air cone**
**Free condensate drain**

| Manually adjustable induction louvre | TLHK 25 | | TLHK 40 | | TLHK 63 | | TLHK 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Single phase AC motor 230V / 50Hz** | 65 23 375 | **1.625,-** | 65 23 377 | **2.030,-** | 65 23 678 | **2.485,-** | - | **-** |
| **Three-phase motor 3 x 400V** | 65 23 650 | **1.505,-** | 65 23 651 | **1.910,-** | 65 23 652 | **2.375,-** | 65 23 653 | **2.565,-** |

| Induction louvre with servomotor 230V / 50Hz<br>For control via pushbutton | TLHK 25 | | TLHK 40 | | TLHK 63 | | TLHK 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Single phase AC motor 230V / 50Hz** | 65 23 391 | **1.775,-** | 65 23 395 | **2.195,-** | 65 23 679 | **2.645,-** | - | **-** |
| **Three-phase motor 3 x 400V** | 65 23 654 | **1.665,-** | 65 23 655 | **2.070,-** | 65 23 656 | **2.535,-** | 65 23 657 | **2.725,-** |

| Induction louver with servomotor 24V<br>can be controlled via LM2 ventilation control unit | TLHK 25 | | TLHK 40 | | TLHK 63 | | TLHK 100 | |
|---|---|---|---|---|---|---|---|---|
| | Art. no. | € | Art. no. | € | Art. no. | € | Art. no. | € |
| **Single phase AC motor 230V / 50Hz** | 65 23 393 | **1.775,-** | 65 23 397 | **2.195,-** | 65 23 680 | **2.645,-** | - | **-** |
| **Three-phase motor 3 x 400V** | 65 23 658 | **1.665,-** | 65 23 659 | **2.070,-** | 65 23 660 | **2.535,-** | 65 23 661 | **2.725,-** |

RAL and special colours by request.

# Accessories for TLHK-EC / TLHK TopWing unit heater

| WRS control systems | for products | Art. no. | € |
|---|---|---|---|
| **Key button for (230V / 50Hz)**<br>**Actuator for induction louvre with secondary-air cone** | TLHK-EC, TLHK | 27 01 063 | **88,-** |

# Accessories
# for TLHK-EC / TLHK TopWing unit heater

Changed art. no. are marked in red.

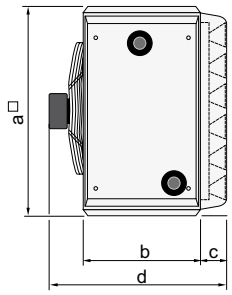
| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | TLHK-EC, TLHK | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | TLHK-EC, TLHK | 27 44 275 | **27,70** |
| | **Ventilation module LM1 (incl. room temperature sensor)**<br>• Ventilation module for controlling unit heaters with two-stage motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Demand-optimised room temperature control via the rotary speed of the unit heater<br>• Operation of the heating circuit pump<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on | TLHK | 27 44 603 | **390,–** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control<br>• 2-stage motor control in connection with ventilation module LM1 or variable speed control via EC-motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Mixed air flap control<br>• Induction louvre control | TLHK-EC, TLHK | 27 44 604 | **390,–** |
| | **Outside, ceiling or room temperature sensor** | TLHK-EC, TLHK | 27 92 021 99 | **28,70** |

# Accessories for TLHK-EC / TLHK TopWing unit heater

| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Anti-frost thermostat mounted** | TLHK-EC/TLHK 25, 40, 63<br>TLHK-EC/TLHK 100 | 27 30 050<br>27 30 150 | **162,-**<br>**167,-** |
| | **Differential pressure switch**<br>for on-site control **loose**<br>**mounted** | <br>TLHK-EC, TLHK<br>TLHK-EC, TLHK | <br>27 44 030<br>65 23 043 | <br>**112,-**<br>**204,-** |
| | **Earthing strap for potential equalization** | TLHK-EC, TLHK | 27 65 450 | **5,10** |
| | **5-position switch**<br>Electronic five-stage speed controller, input 0-10VV<br>(2A, 400V)<br>(4A, 400V)<br>(6A, 230V) | TLHK | <br><br>27 44 840<br>27 44 841<br>27 45 066 | <br><br>**950,-**<br>**950,-**<br>**670,-** |
| | **Supply air sensor (NTC 5K)**<br>for measuring the supply air temperature | TLHK-EC, TLHK | 88 52 829 | **53,-** |
| | **Sensor holder**<br>for supply air sensor | TLHK-EC, TLHK | 27 92 029 | **24,50** |
| | **ISM 5 - LON-interface module**<br>to connect ventilation modules LM1 and LM2<br>to a building management system applying<br>LON-standard network variables | TLHK-EC, TLHK | 27 45 029 | **1.600,-** |

# Dimensions TLHK-EC / TLHK TopWing unit heater

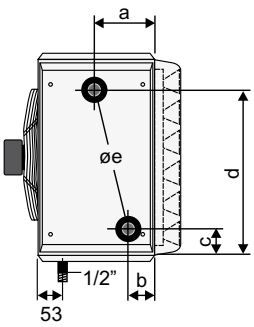
| Dimensions, basic units | for products | Art. no. | € |
|---|---|---|---|




**Dimensions, basic units**

TLHK-EC / TLHK

| TLHK-EC/TLHK | a | b | c | d |
|---|---|---|---|---|
| 25 | 540 | 300 | 120 | 530 |
| 40 | 670 | 300 | 120 | 535 |
| 63 | 840 | 300 | 120 | 540 |
| 100 | 1040 | 340 | 120 | 605 |




**Connections, basic units**

TLHK-EC / TLHK

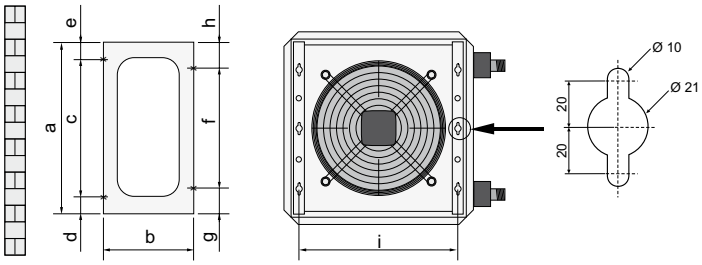
| TLHK-EC/TLHK | a | b | c | d | Øe |
|---|---|---|---|---|---|
| 25 | 158 | 68 | 94 | 445 | 1" |
| 40 | 143 | 83 | 99 | 570 | 1" |
| 63 | 143 | 83 | 99 | 743 | 1¼" |
| 100 | 179 | 89 | 109 | 932 | 1½" |

# Accessories for TLHK-EC / TLHK TopWing unit heater

| | Connecting accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Shut-off sets for heat exchanger for flow and return**<br>consisting of:<br>Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility ¾" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar. | | | |
| | Passage design | TLHK-EC/TLHK 25, 40 | 20 08 030 | **108,-** |
| | Corner design | TLHK-EC/TLHK 25, 40 | 20 08 040 | **115,-** |
| | **Flange set**<br>consisting of 2 threaded flanges, 2 welding neck flanges and 2 flat gaskets, plus hexagonal bolts and hexagonal nuts | | | |
| | DN 25 R 1" | TLHK 25, 40 | 20 70 202 | **75,-** |
| | DN 32 R 1¼" | TLHK 63 | 20 70 203 | **105,-** |
| | DN 40 R 1½" | TLHK 100 | 20 70 204 | **117,-** |
| | **Hydraulic balancing valvel** | TLHK-EC, TLHK | | |
| | DN 20 4 - 15 l/min | | 20 70 931 | **217,-** |
| | DN 20 8 - 30 l/min | | 20 70 932 | **217,-** |
| | DN 25 6 - 20 l/min | | 20 70 933 | **226,-** |
| | DN 25 10 - 40 l/min | | 20 70 934 | **226,-** |
| | DN 32 20 - 70 l/min | | 20 70 935 | **279,-** |
| | DN 40 30 - 120 l/min | | 20 70 936 | **368,-** |
| | **Condensate pump with potential-free alarm output**<br>consisting of:<br>Condensate pump with potential-free alarm output, PVC hose 10mm (6m long), non-return valve | TLHK-EC, TLHK | 20 71 268 | **227,-** |
| | **Tundish R1**<br>with siphon and rosette<br>Transparent plastic | TLHK-EC, TLHK | 20 11 005 | **21,40** |

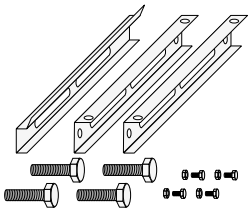
# Accessories for TLHK-EC / TLHK TopWing unit heater

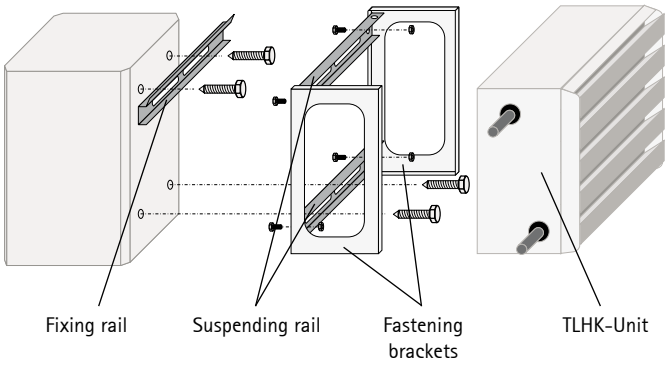
| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Fastening brackets**<br>For wall- and ceiling-mounting, made of folded, sheet steel, 2mm thick, powder-coated, colour traffic white RAL 9016.<br><br>Consisting of:<br>- 2 brackets<br>- Hexagon bolts for mounting to TLHK device | TLHK-EC/TLHK 25, 40<br>TLHK-EC/TLHK 63, 100 | 65 00 494<br>65 00 497 | **53,–**<br>**62,–** |




| TLHK-EC/TLHK | a | b | c | d | e | f | g | h | i |
|---|---|---|---|---|---|---|---|---|---|
| 25 | 480 | 250 | 380 | 70 | 30 | 170 | 155 | 155 | 434 |
| 40 | 480 | 250 | 2x170 | 90 | 50 | 2x170 | 70 | 70 | 564 |
| 63 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 734 |
| 100 | 784 | 350 | 170+340+170 | 72 | 32 | 3x170 | 137 | 137 | 894 |

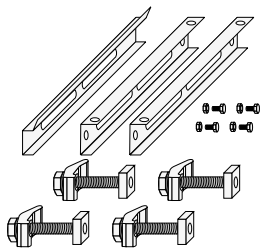
| | | | |
|---|---|---|---|
| **Fastening set for concrete bar – vertical**<br>for mounting to a concrete support by suspending from pre-mounted fixing rails.<br>consisting of:<br>Fixing rail, 2 pcs. suspending rails,<br>Nuts and bolts<br>(only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40 | 65 00 781<br>65 00 782 | **83,–**<br>**83,–** |

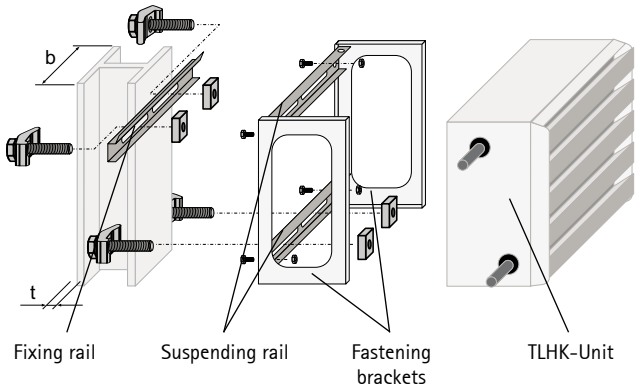


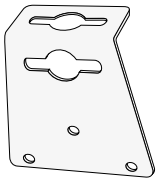


# Accessories for TLHK-EC / TLHK TopWing unit heater

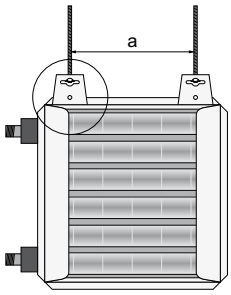
| Device fastenings | for products | Art. no. | € |
|---|---|---|---|
| **Fastening set fot steel bar - vertical**<br>For mounting to a steel girder by suspending from a pre-mounted mounting rail with clamping jaws.<br>Suitable for all steel girders with flange width „b" from 100mm to 300mm and a flange thickness „t" from 6mm to 21mm.<br>Consisting of:<br>Fixing rail, 2 pcs suspending rails,<br>4 pcs clamping jaws, nuts and bolts<br>(only in conjunction with fastening brackets, Art. no. 65 00 494)<br>galvanized sheet steel | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40 | 65 00 783<br>65 00 784 | **161,-**<br>**161,-** |
| **Hangers for configurations with horizontal air flow**<br>For suspending the TLHK vertically from the ceiling, powder-coated, color traffic white RAL 9016.<br>Suitable for use in conjunction with threaded rods or perforated strip for configurations with horizontal air flow.<br>1 set = 4 items | TLHK-EC, TLHK | 65 00 038 | **33,20** |

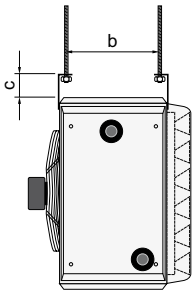




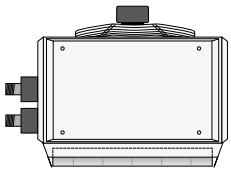



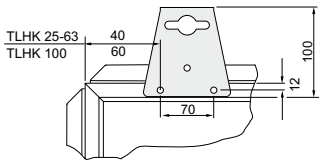
**Horizontal air flow**




| TLHK-EC/TLHK | a | b | c |
|---|---|---|---|
| 25 | 350 | 266 | 60 |
| 40 | 480 | 266 | 60 |
| 63 | 650 | 266 | 60 |
| 100 | 810 | 306 | 60 |





# Accessories for TLHK-EC / TLHK TopWing unit heater

| Device fastenings / Intake accessories | for products | Art. no. | € |
|---|---|---|---|
| **Hanging bracket, loose**<br>TLHK 25, 40, 63, 100<br>recirculation air, outdoor air or filter box.<br>Powder-coated, color traffic white RAL 9016.<br>For mounting, 4 hanging brackets are necessary.<br>These are included with the corresponding intake accessories.<br>(Sealing against the wall/ceiling by the customer) | TLHK-EC, TLHK | | |
| | 1 item | 65 00 325 | **8,10** |
| | 4-piece set | 65 23 054 | **33,–** |
| **Mixing box/thermally insulated mixing box**<br>Mixed air box in thermally insulated design<br>to avoid condensate accumulation.<br>For individual adaptation to the outdoor air amount.<br>Outdoor air intake on the back panel, recirculation air intake on side or, when turning mixed air box around 90°, from top or bottom.<br>Stepless manual adjustment between pure return air and mixed air operation.<br>Powder-coated, colour traffic white (RAL 9016).<br>Suspension bracket as standard. | | | |
| **without thermal insulation** | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40<br>TLHK-EC/TLHK 63<br>TLHK-EC/TLHK 100 | on request | **on request** |
| **with thermal insulation** | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40<br>TLHK-EC/TLHK 63<br>TLHK-EC/TLHK 100 | on request | **on request** |

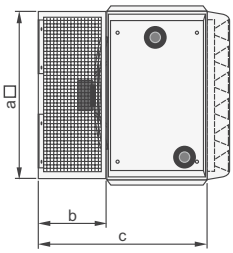
**Note:** When used in fresh air operation unit heaters are covered by the scope of application CE 1253/2014.

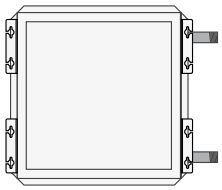
Alternative: (see Page 22)
Actuator, 24V, stepless (Art. no. 22 69 521)

| TLHK-EC/ TLHK | a | b | c | d | e |
|---|---|---|---|---|---|
| 25 | 500 | 500 | 800 | 245 | 400 |
| 40 | 630 | 500 | 800 | 360 | 530 |
| 63 | 800 | 500 | 800 | 530 | 700 |
| 100 | 1000 | 540 | 880 | 690 | 860 |

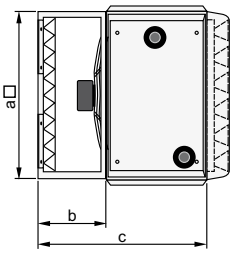
# Accessories for TLHK-EC / TLHK TopWing unit heater

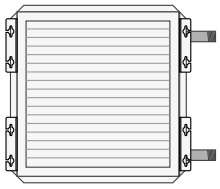
| Intake accessories | for products | Art. no. | € |
|---|---|---|---|
| **Recirculation air box with lateral intake**<br>for recirculation air intake through two grids at the side or, when turned by 90°, intake from top and bottom.<br>powder-coated, color traffic white RAL 9016.<br>Suspension bracket as standard. | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40<br>TLHK-EC/TLHK 63<br>TLHK-EC/TLHK 100 | 65 00 331<br>65 00 389<br>65 00 393<br>65 00 397 | **181,-**<br>**213,-**<br>**251,-**<br>**297,-** |
| **Filter box**<br>With filter element as dust trap in outdoor-air and mixed-air modes, filter category G4 for TLH 63 and G3 for TLH 25/40/100. Angle brackets optional.<br>Powder-coated, color traffic white RAL 9016. | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40<br>TLHK-EC/TLHK 63<br>TLHK-EC/TLHK 100 | 65 00 549<br>65 00 554<br>65 00 559<br>65 00 564 | **293,-**<br>**402,-**<br>**444,-**<br>**545,-** |
| **Flexible connection, 4-hole profile** | TLHK-EC/TLHK 25<br>TLHK-EC/TLHK 40<br>TLHK-EC/TLHK 63<br>TLHK-EC/TLHK 100 | 25 25 025<br>25 25 040<br>25 25 063<br>25 25 100 | **48,-**<br>**74,-**<br>**100,-**<br>**112,-** |



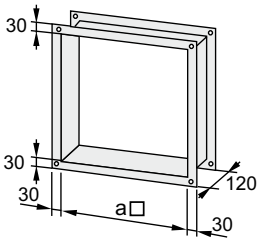



| TLHK-EC/TLHK | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 500 | 800 |
| 63 | 800 | 500 | 800 |
| 100 | 1000 | 540 | 880 |



| TLHK-EC/TLHK | a | b | c |
|---|---|---|---|
| 25 | 500 | 300 | 600 |
| 40 | 630 | 300 | 600 |
| 63 | 800 | 300 | 600 |
| 100 | 1000 | 340 | 680 |




| TLHK-EC/TLHK | a |
|---|---|
| 25 | 400 |
| 40 | 530 |
| 63 | 700 |
| 100 | 860 |

Energiesparen und Klimaschutz serienmäßig

# Lidl Logistikzentrum, Wundschuh

## Wolf KG Top W, CKL und CWL für ein optimiertes Klimatisierungs- und Lüftungskonzept

# LHD Unit Heater

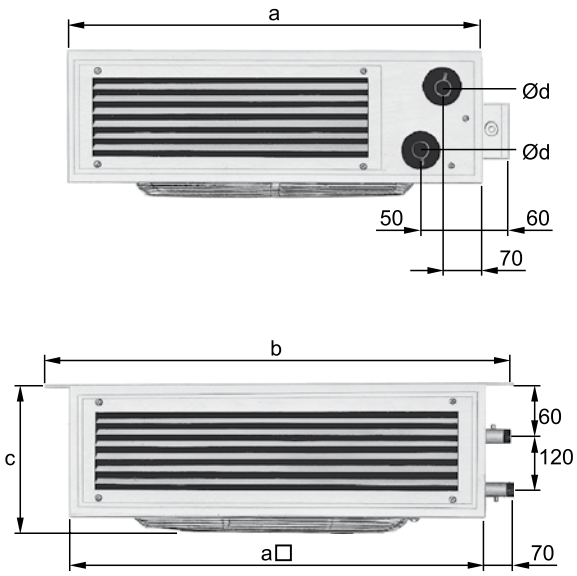

| | |
|---|---|
| **Basic units** | Page 56 |
| **WRS control systems** | Page 57 |
| **Switching devices** | Page 58 |
| **Terminal box / Room thermostate / Zubehör** | Page 59 |

**Unit heater for direct mounting on the ceiling in return air operation.**
**Air intake vertical, air outlet horizontal.**
**Colour: traffic white RAL 9016**
**Full motor protection with built-in thermal overload PTCe**

# LHD

| **Heat exchanger: copper-aluminium LPHW** | | **LHD 40** | | **LHD 63** | |
|---|---|---|---|---|---|
| | | Art. no. | **€** | Art. no. | **€** |
| **LHD** | Motor 3 x 400 V | 65 23 662 | **820,-** | 65 23 664 | **1.225,-** |

**Dimensions basic units LHD,** horizontal discharge




| LHD | a | b | c | Ød |
|---|---|---|---|---|
| 40 | 630 | 718 | 280 | 1" |
| 63 | 800 | 900 | 280 | 1" |

# Accessories for unit heater LHD

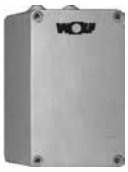
Changed art. no. are marked in red.

| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | LHD | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | LHD | 27 44 275 | **27,70** |
| | **Ventilation module LM1 (incl. room temperature sensor)**<br>• Ventilation module for controlling unit heaters with two-stage motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Demand-optimised room temperature control via the rotary speed of the unit heater<br>• Operation of the heating circuit pump<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on | LHD | 27 44 603 | **390,–** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control<br>• 2-stage motor control in connection with ventilation module LM1 or 5-stage motor control via 0-10 V signal in connection with 5-stage switch<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Mixed air flap control<br>• Induction louvre control | LHD | 27 44 604 | **390,–** |
| | **Outside or room temperature sensor** | LHD | 27 92 021 99 | **28,70** |

# Accessories for unit heater LHD

| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **5-position switch**<br>Electronic five-stage speed controller, input 0-10V<br>(2A, 400V)<br>(4A, 400V) | LHD | <br><br>27 44 840<br>27 44 841 | <br><br>**950,-**<br>**950,-** |
| | **Supply air sensor (NTC 5K)**<br>for measuring the supply air temperature | LHD | 88 52 829 | **53,-** |
| | **Sensor holder**<br>for supply air sensor | LHD | 27 92 029 | **24,50** |
| | **ISM 5 - LON-interface module**<br>to connect ventilation modules LM1 and LM2<br>to a building management system applying<br>LON-standard network variables | LHD | 27 45 029 | **1.600,-** |
| | **Switching devices** | for products | Art. no. | € |
| | **1-position switch D1-2**<br>Full motor protection switch (8A, 400V)<br>with reclosure preventing device | LHD | 27 45 465 | **149,-** |
| | **2-position switch DS-2**<br>Full motor protection switch (AA, 400V)<br>with reclosure preventing device | LHD | 27 45 467 | **249,-** |
| | **3-position switch D 3-4**<br>Full motor protection switch (4A, 400V)<br>with reclosure preventing device | LHD | 27 01 065 | **378,-** |
| | **5-position switch D5...**<br>Full motor protection switch<br>with reclosure preventing device<br>**D5-1** (1A, 400V)<br>**D5-3** (2A, 400V)<br>**D5-7** (4A, 400V)<br>**D5-12** (7A, 400V) | <br><br>LHD<br>LHD<br>LHD<br>LHD | <br><br>27 40 015<br>27 40 010<br>27 40 013<br>27 40 014 | <br><br>**378,-**<br>**424,-**<br>**520,-**<br>**615,-** |

# Accessories for unit heater LHD

| | Terminal box / Room thermostate / Accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Intermediate terminal box for parallel operation up to 3 LHD** | LHD | 79 65 043 | **144,-** |
| | **Room thermostat** | LHD | 27 34 000 | **45,-** |
| | **Room thermostat clock with weekly program** | LHD | 27 44 079 | **217,-** |
| | **Remote sensor for room thermostat timer** | LHD | 27 44 051 | **34,60** |
| | **Room thermostat, industrial version** | LHD | 27 35 300 | **88,-** |
| | **Hydraulic balancing valvel**<br>DN 20 4 - 15 l/min<br>DN 20 8 - 30 l/min<br>DN 25 6 - 20 l/min<br>DN 25 10 - 40 l/min<br>DN 32 20 - 70 l/min<br>DN 40 30 - 120 l/min | LHD | <br>20 70 931<br>20 70 932<br>20 70 933<br>20 70 934<br>20 70 935<br>20 70 936 | <br>**217,-**<br>**217,-**<br>**226,-**<br>**226,-**<br>**279,-**<br>**368,-** |
| | **Flange set**<br>consisting of 2 threaded flanges,<br>2 welding neck flanges and 2 flat gaskets,<br>plus hexagonal bolts and hexagonal nuts<br>DN 25 R 1" | LHD | 20 70 202 | **75,-** |

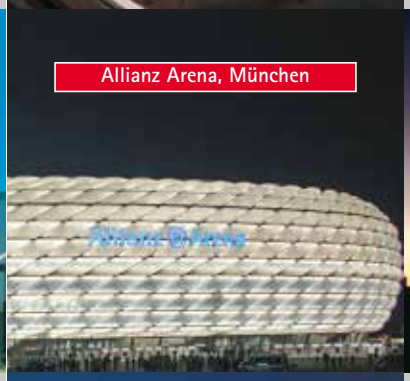
Energiesparen und Klimaschutz serienmäßig

# Wolf Referenzen

O2-World, Berlin

Marie-Elisabeth-Lüders-Haus, Berlin

Messe, Wien


Allianz Arena, München

Europäische Sternwarte ESO, Chile

Kreml, Moskau

Porsche Zentrum, Dortmund

Seit 50 Jahren ist Wolf eines der führenden Unternehmen in Europa für Klima-, Heizungs- und Lüftungstechnik.

Weltweite Referenzen belegen diese Kompetenz von Wolf in Technik, Service und Know-How.

Die Kompetenzmarke
für Energiesparsysteme

# TLHD-EC / TLHD-K-EC / TLHD / TLHD-K
## TopWing Unit heater


| | |
|---|---|
| Basic units TLHD-EC for heating | Page 62 |
| Basic units TLHD-K-EC for heating or cooling | Page 62 |
| Basic units TLHD for heating | Page 63 |
| Basic units TLHD-K for heating or cooling | Page 63 |
| WRS control systems | Page 64 |
| Accessories | Page 66 |
| Controllers | Page 70 |
| Controllers / Electrical accessories | Page 71 |
| Thermostates | Page 72 |

**Unit heater for heating,**
**for mounting on the ceiling for return air operation**
**or on an intermediate ceiling for**
**return air or mixed air operation.**
**Colour: traffic white RAL 9016**
**Full motor protection by temperature monitoring**
**Energy saving EC-fans (1x230V)**

# TopWing TLHD-EC

**Basic units for return air operation**

| Heat exchanger: copper-aluminium LPHW | TLHD-EC 40 | | TLHD-EC 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating (230V) | 65 23 782 | **1.945,-** | 65 23 784 | **2.730,-** |

**Basic units for mixed air operation***
with additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

| Heat exchanger: copper-aluminium LPHW | TLHD-EC 40 | | TLHD-EC 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating (230V) | 65 23 783 | **2.015,-** | 65 23 785 | **2.785,-** |

* Mixing temperature before the heat exchanger min. +5°C..

**Unit heater for heating or cooling,**
**for mounting on the ceiling for return air operation**
**or on an intermediate ceiling for**
**return air or mixed air operation.**
**Colour: traffic white RAL 9016**
**Full motor protection by temperature monitoring**
**Energy saving EC-fans (1x230V)**

# TopWing TLHD-K-EC

**Basic units for return air operation**
with integrated condensate pump

| Heat exchanger: copper-aluminium LPHW / ch.w. | TLHD-K-EC 40 | | TLHD-K-EC 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating / Cooling (230V) | 65 23 786 | **2.580,-** | 65 23 788 | **3.325,-** |

**Basic units for mixed air operation***
with integrated condensate pump and additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

| Heat exchanger: copper-aluminium LPHW / ch.w. | TLHD-K-EC 40 | | TLHD-K-EC 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating / Cooling (230V) | 65 23 787 | **2.620,-** | 65 23 789 | **3.380,-** |

* Mixing temperature before the heat exchanger min. +5°C.

**Unit heater for heating,**
**for mounting on the ceiling for return air operation**
**or on an intermediate ceiling for**
**return air or mixed air operation.**
**Colour: traffic white RAL 9016**
**Full motor protection with built-in thermal overload PTC**

# TopWing TLHD

## Basic units for return air operation

| Heat exchanger: copper-aluminium LPHW | TLHD 40 | | TLHD 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating (400V) | 65 23 074 | **1.315,-** | 65 23 082 | **1.670,-** |

## Basic units for mixed air operation*

with additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

| Heat exchanger: copper-aluminium LPHW | TLHD 40 | | TLHD 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating (400V) | 65 23 076 | **1.390,-** | 65 23 084 | **1.775,-** |

* Mixing temperature before the heat exchanger min. +5°C.

**Unit heater for heating or cooling,**
**for mounting on the ceiling for return air operation**
**or on an intermediate ceiling for**
**return air or mixed air operation.**
**Colour: traffic white RAL 9016**
**Full motor protection with built-in thermal overload PTCe**

# TopWing TLHD-K

## Basic units for return air operation

with integrated condensate pump

| Heat exchanger: copper-aluminium LPHW / ch.w. | TLHD-K 40 | | TLHD-K 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating / Cooling (400V) | 65 23 078 | **1.815,-** | 65 23 086 | **2.160,-** |

## Basic units for mixed air operation*

with integrated condensate pump and additional thermal insulation of the unit for the avoidance of condensate accumulation on the unit

| Heat exchanger: copper-aluminium LPHW / ch.w. | TLHD-K 40 | | TLHD-K 63 | |
|---|---|---|---|---|
| | Art. no. | € | Art. no. | € |
| Heating / Cooling (400V) | 65 23 080 | **1.890,-** | 65 23 088 | **2.270,-** |

* Mixing temperature before the heat exchanger min. +5°C.

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

Changed art. no. are marked in red.

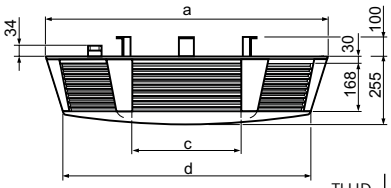
| | WRS control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions (information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 275 | **27,70** |
| | **Ventilation module LM1 (incl. room temperature sensor)**<br>• Ventilation module for controlling unit heaters with two-stage motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Demand-optimised room temperature control via the rotary speed of the unit heater<br>• Operation of the heating circuit pump<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on | TLHD, TLHD-K | 27 44 603 | **390,–** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control<br>• 2-stage motor control in connection with ventilation module LM1 or 5-stage motor control via 0-10 V signal in connection with 5-stage switch<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Operation of the heat generator<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Mixed air flap control<br>• Induction louvre control | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 604 | **390,–** |
| | **Outside or room temperature sensor** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 92 021 99 | **28,70** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

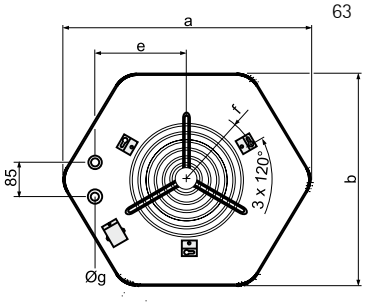
| | WRS control systems | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Differential pressure switch**<br>for on-site control | **loose** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 030 | **112,-** |
| | | **mounted** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 65 23 043 | **204,-** |
| | **5-position switch**<br>Electronic five-stage speed controller, input 0-10V | | TLHD, TLHD-K | | |
| | | (2A, 400V) | | 27 44 840 | **950,-** |
| | | (4A, 400V) | | 27 44 841 | **950,-** |
| | **Supply air sensor (NTC 5K)**<br>for measuring the supply air temperature | | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 88 52 829 | **53,-** |
| | **Sensor holder**<br>for supply air sensor | | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 92 029 | **24,50** |
| | **ISM 5 - LON-interface module**<br>to connect ventilation modules LM1 and LM2<br>to a building management system applying<br>LON-standard network variables | | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 45 029 | **1.600,-** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| Accessories | for products | Art. no. | € |
|---|---|---|---|
| **Dimensions, basic units** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | | |




| TLHD | a | b | c | d | e | f | Øg |
|---|---|---|---|---|---|---|---|
| 40 | 960 | 860 | 326 | 815 | 288 | R 317 | 1" |
| 63 | 1120 | 1000 | 405 | 975 | 358 | R 382 | 1" |



**Shut-off sets for heat exchanger for flow and return***
consisting of:
Threaded connection 1" for connecting to feed and return with flat gasket, automatic vent valve, fill and drain cock, ball valves with female thread 1" in feed and return, connecting facility ¾" male thread (e.g. for the thermometer) in feed and return suitable for hot water temperatures up to max. 110 °C and operating pressure up to max. 10 bar.
* not suitable for direct mounting on the unit

| | | | |
|---|---|---|---|
| Passage design | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 20 08 030 | **108,–** |
| Corner design | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 20 08 040 | **115,–** |

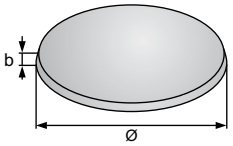
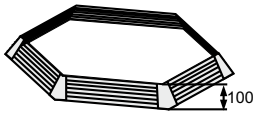
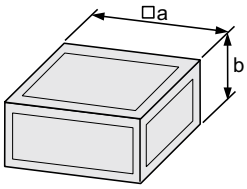
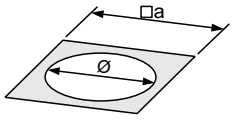
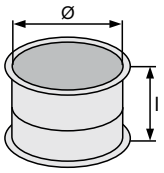
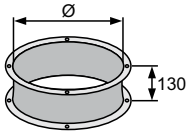
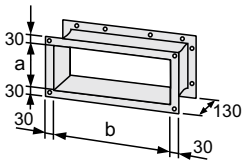
**Hydraulic balancing valve** — TLHD-EC, TLHD-K-EC, TLHD, TLHD-K

| | | | |
|---|---|---|---|
| DN 20 | 4 - 15 l/min | 20 70 931 | **217,–** |
| DN 20 | 8 - 30 l/min | 20 70 932 | **217,–** |
| DN 25 | 6 - 20 l/min | 20 70 933 | **226,–** |
| DN 25 | 10 - 40 l/min | 20 70 934 | **226,–** |
| DN 32 | 20 - 70 l/min | 20 70 935 | **279,–** |
| DN 40 | 30 - 120 l/min | 20 70 936 | **368,–** |

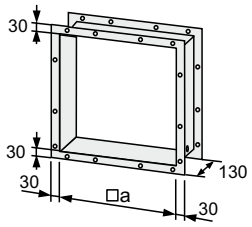
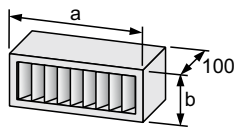
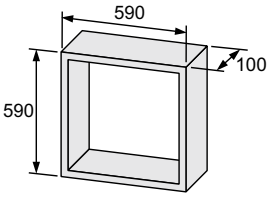
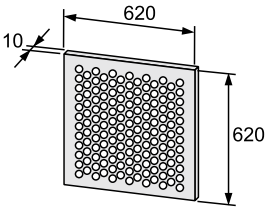
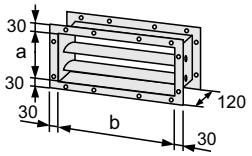
**Tundish R1**
with siphon and rosette
Transparent plastic

TLHD-EC, TLHD-K-EC, TLHD, TLHD-K — 20 11 005 — **21,40**

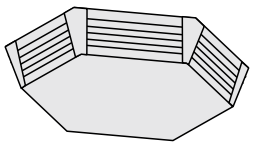
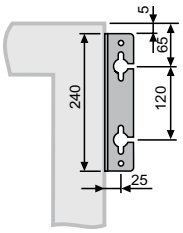
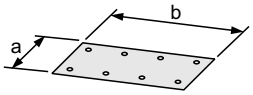
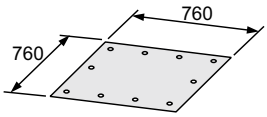
# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Top filter**<br>for TLHD-EC, TLHD-K-EC, TLHD, TLHD-K, grade G4<br>(not suitable for duct connection)<br>TLHD / Ø / b<br>40 / 520 / 40<br>63 / 650 / 50 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 23 097<br>65 23 098 | **71,-**<br>**79,-** |
|  | **Suction ring**<br>for the lining of the intake air gap when assembling directly to the ceiling or as decorative cover in all installation<br>colour traffic white RAL 9016 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 11 553<br>65 11 554 | **254,-**<br>**269,-** |
|  | **Empty element**<br>panelling double-walled 25mm, insulated<br>galvanised sheet steel<br>TLHD / a / b<br>40 / 630 / 300<br>63 / 800 / 345 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 11 577<br>65 11 578 | **314,-**<br>**415,-** |
|  | **Metal adapter sheet**<br>for the connection of round shifter piece with empty element or attachment frames, insulated<br>galvanised sheet steel<br>TLHD / a / Ø<br>40 / 590 / 453<br>63 / 760 / 569 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 11 587<br>65 11 588 | **136,-**<br>**176,-** |
|  | **Shifter piece**<br>to equalize dimensional differences<br>l min = 300mm, l max = 500mm<br>galvanised sheet steel<br>TLHD / Ø<br>40 / 453<br>63 / 569 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 25 26 040<br>25 26 063 | **226,-**<br>**264,-** |
|  | **Flexible canvas connector**<br>for connection to TLHD<br>TLHD / Ø<br>40 / 453<br>63 / 569 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 11 535<br>65 11 537 | **112,-**<br>**141,-** |
|  | **Flexible connection, 4-hole profile**<br>for connection to duct<br>TLHD / a / b<br>40 / 200 / 530<br>63 / 245 / 700 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 25 24 015<br>25 24 020 | **53,-**<br>**68,-** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Flexible connection, 4-hole profile**<br>for connection to roof lead-through<br>TLHD / a<br>40 / 530<br>63 / 700 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 25 25 040<br>25 25 063 | **74,–**<br>**100,–** |
|  | **Filter attachment box**<br>with filter grade G4<br>galvanised sheet steel<br>TLHD / a / b<br>40 / 630 / 300<br>63 / 800 / 345 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 61 05 100<br>61 05 101 | **273,–**<br>**300,–** |
|  | **Attachment frame insulated**<br>For installation in grid ceiling 620 x 620 for the connection of the louvre damper or adaptor plate to the recirculation air intake grille<br>galvanised sheet steel | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 65 11 595 | **156,–** |
|  | **Recirculation air intake plate**<br>colour traffic white RAL 9016<br>for the installation into the attachment frame<br>suitable for Euro grid ceiling | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 65 23 104 | **100,–** |
|  | **Shutter**<br>for duct<br>galvanised sheet steel<br>TLHD / a / b<br>40 / 200 / 530<br>63 / 245 / 700 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 25 75 984<br>25 75 985 | **97,–**<br>**147,–** |

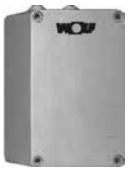
# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Ceiling exhaust TD**<br>Housing such as TLHD(-EC), without heat exchangers, without fan motor unit, as ceiling<br>colour traffic white RAL 9016 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 65 11 549<br>65 11 550 | **665,-**<br>**875,-** |
|  | **Hanging bracket**<br>For mounting of fan element / supply air device and empty elements, directly on ceiling<br>(For mounting, 4 hanging brackets are necessary.)<br>Galvanised sheet steel | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K<br>1 item<br>2-piece set<br>4-piece set | <br>65 11 454<br>65 23 052<br>65 23 053 | <br>**7,80**<br>**15,60**<br>**31,30** |
|  | **Universal panelling metal sheet, front side**<br>as transition from empty element / fan element to duct on site. The openings must be prepared individually on site.<br>Galvanised sheet steel<br>TLHD / a / b<br>40 / 260 / 590<br>63 / 305 / 760 | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 40<br>TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 60 13 102<br>60 01 131 | **47,-**<br>**58,-** |
|  | **Universalverkleidungsblech quadratisch**<br>as transition from empty element TLHD(-ED) 63 to accessory shutter / shifter piece TLHD(-ED) 40. The openings must be prepared individually on site.<br>Galvanised sheet steel | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K 63 | 60 11 123 | **58,-** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| | Controller | for products | Art. no. | € |
|---|---|---|---|---|
| | **Variable speed controller**<br>for continuous operation of one or<br>several unit heaters with EC-motors (0 - 10V) | TLHD-EC / TLHD-K-EC | 27 45 100 | **197,-** |
| | **1-position switch D1-2**<br>Full motor protection switch (8A, 400V)<br>with reclosure preventing device | TLHD / TLHD-K | 27 45 465 | **149,-** |
| | **2-position switch DS-2**<br>Full motor protection switch (8A, 400V)<br>with reclosure preventing device | TLHD / TLHD-K | 27 45 467 | **249,-** |
| | **3-position switch D 3-4**<br>Full motor protection switch (4A, 400V)<br>with reclosure preventing device | TLHD / TLHD-K | 27 01 065 | **378,-** |
| | **5-position switch D5...**<br>Full motor protection switch<br>with reclosure preventing device<br>**D5-1** (1A, 400V)<br>**D5-3** (2A, 400V)<br>**D5-7** (4A, 400V)<br>**D5-12** (7A, 400V)<br>**D5-19** (12A, 400V) | <br><br><br>TLHD / TLHD-K<br>TLHD / TLHD-K<br>TLHD / TLHD-K<br>TLHD / TLHD-K<br>TLHD / TLHD-K | <br><br><br>27 40 015<br>27 40 010<br>27 40 013<br>27 40 014<br>27 40 017 | <br><br><br>**378,-**<br>**424,-**<br>**520,-**<br>**615,-**<br>**980,-** |
| | **Analogue time switch**<br>for setback mode with 7-day program | TLHD-EC, TLHD-K-EC | 27 36 251 | **150,-** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

| | Controller / Electrical accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **All-pole Isolator AR8 / 1Ö+1S** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 649 | **74,-** |
|  | **A1 automatic relay**<br>for Open/Close actuator (3,15A, 230V) | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 79 65 020 | **88,-** |
| | **A1S automatic relay**<br>for actuator, stepless, with built-in position indicator (0 to 100%) (3,15A, 230V) | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 79 40 101 | **198,-** |
| | **Actuator 230V/50Hz for damper or mixer, stepless** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 22 69 522 | **301,-** |
| | **Actuator, 230V / 50Hz, for opening/closing the damper** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 22 69 523 | **288,-** |
| | **Position controller**<br>for installation on wiring board front<br>for progressive actuator in connection with automatic relay A1. | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 360 | **80,-** |
| | for front-panel installation in control cabinet<br>for controlling the stepless actuator in conjunction with automatic relay A1. | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 389 | **115,-** |

# Accessories for TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing unit heater

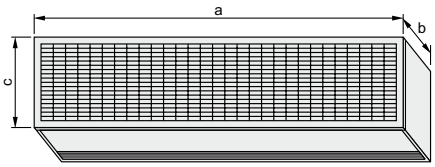
| | Thermostates | for products | Art. no. | € |
|---|---|---|---|---|
| | **Frost protection contact thermostat**<br>Setting range 0°C to 60 °C<br>(to be mounted on the return) | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 30 100 | **76,–** |
| | **Anti-frost thermostat SP-1**<br>incl. sensor well<br>(to be mounted in the return) | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 97 005 | **44,–** |
| | **Anti-frost thermostat mounted** | TLHD(-EC) 40<br>TLHD-K(-EC) 40<br>TLHD(-EC) 63<br>TLHD-K(-EC) 63 | 65 23 478<br>65 23 479<br>65 23 480<br>65 23 481 | **107,–**<br>**107,–**<br>**107,–**<br>**107,–** |
| | **Room thermostat** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 34 000 | **45,–** |
| | **Room thermostat with summer/winter switch** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 34 700 | **79,–** |
| | **Room thermostat clock with weekly program** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 079 | **217,–** |
| | **Remote sensor for room thermostat timer** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 44 051 | **34,60** |
| | **Room thermostat, industrial version** | TLHD-EC, TLHD-K-EC, TLHD, TLHD-K | 27 35 300 | **88,–** |

# TL-2 Warm air curtain unit


| | |
|---|---|
| **Basic units** | Page 74 |
| **Accessories** | Page 75 |

# TL-2

| | | Art. no. | € |
|---|---|---|---|
| **Basic unit without controller*** | TL-2 A10/1000 | 21 38 003 | **2.140,–** |
| Warm air curtain device with intake filter | TL-2 A10/1500 | 21 38 004 | **2.990,–** |
| Filter: renewable, category G2 | TL-2 A10/2000 | 21 38 005 | **3.425,–** |
| LPHW - geat exchanger, Co / Al | TL-2 A10/2500 | 21 38 006 | **4.585,–** |
| Fans 230V / 50Hz | TL-2 A10/3000 | 21 38 007 | **5.880,–** |
| Casing: traffic withe RAL 9016 | | | |
| | TL-2 A20/1000 | 21 38 008 | **2.485,–** |
| | TL-2 A20/1500 | 21 38 009 | **3.055,–** |
| | TL-2 A20/2000 | 21 38 010 | **3.935,–** |
| | TL-2 A20/2500 | 21 38 011 | **4.925,–** |
| | TL-2 A20/3000 | 21 38 012 | **6.390,–** |
| | TL-2 A30/1000 | 21 38 013 | **2.790,–** |
| | TL-2 A30/1500 | 21 38 014 | **3.485,–** |
| | TL-2 A30/2000 | 21 38 015 | **4.800,–** |
| | TL-2 A30/2500 | 21 38 016 | **5.435,–** |
| | TL-2 A30/3000 | 21 38 017 | **7.165,–** |
| | TL-2 A40/1000 | on request | **on request** |
| | TL-2 A40/1500 | | |
| | TL-2 A40/2000 | | |
| | TL-2 A40/2500 | | |
| | TL-2 A40/3000 | | |
| **Steam heat exchanger** | | on request | **on request** |
| **Electric heat exchanger** | | on request | **on request** |




| TL-2 | A10-30 | | | A40 | | |
|---|---|---|---|---|---|---|
| | a | b | c | a | b | c |
| 1000 | 1000 | 555 | 260 | 1000 | 610 | 290 |
| 1500 | 1500 | 555 | 260 | 1500 | 610 | 290 |
| 2000 | 2000 | 555 | 260 | 2000 | 610 | 290 |
| 2500 | 2500 | 555 | 260 | 2500 | 610 | 290 |
| 3000 | 3000 | 555 | 260 | 3000 | 610 | 290 |

* It is compulsory to use a control of type WTC3 or WTC5 for the operation of the warm air curtain devices.

# Accessories for TL-2 Warm air curtain unit

| | Accessories | für Produkte | Art. no. | € |
|---|---|---|---|---|
| | **Control system WTMC 300**<br>Operating module wired (remote control),<br>Control board (Master) and optional power board (Slave)<br>For a 3-stage or progressive control of warm air curtain units<br>• Graphical display and adaption via touch panel<br>• 2-language, easy and self explaining menu guiding<br>• Extendable up to 9 units and controllable in parallel<br>• Hand/automatic function: room thermostat and/or door contact<br>• Summer/winter function: control of magnetic valve or pump<br>• Key blocking<br>• Display of malfunctions via memory for remote diagnosis | TL-2 A10-30 NEW | 21 38 615 | **439,–** |
| | **Control system WTMC 500**<br>Operating module wired (remote control),<br>Control board (Master) and optional power board (Slave)<br>For a 5-stage or progressive control of warm air curtain units<br>• Graphical display and adaption via touch panel<br>• 2-language, easy and self explaining menu guiding<br>• Extendable up to 9 units and controllable in parallel<br>• Hand/automatic function: room thermostat and/or door contact with adjustable run-on-time<br>• Summer/winter function: control of magnetic valve or pump<br>• Key blocking<br>• Display of malfunctions via memory for remote diagnosis<br>• Integrated, electronic filter monitoring<br>• Potential-free release, operating and malfunction message to BMS | TL-2 A10-30 NEW | 21 38 616 | **830,–** |
| | **Control system type WTMC 300 E**<br>Suitable for warm air curtain units with electric heating coil | TL-2 A10-30 NEW | on request | **on request** |
| | **Anti-frost thermostat type WTF** | TL-2 A10-40 | 21 00 355 | **197,–** |
| | **Ceiling mounting set type WDH 4** | TL-2 A20/1000, TL-2 A20/1500, TL-2 A20/2000<br>TL-2 A20/1000, TL-2 A20/1500, TL-2 A20/2000<br>TL-2 A30/1000, TL-2 A30/1500, TL-2 A30/2000<br>TL-2 A40/1000, TL-2 A40/1500, TL-2 A40/2000 | 21 00 358 | **71,–** |
| | **Ceiling mounting set type WDH 6** | TL-2 A10/2500, TL-2 A10/3000<br>TL-2 A20/2500, TL-2 A20/3000<br>TL-2 A30/2500, TL-2 A30/3000<br>TL-2 A40/2500, TL-2 A40/3000 | 21 00 359 | **104,–** |
| | **Thermostatic control valve type WTR 2, loose** | | | |
| | 2-way straight-through valve DN20/$k_{VS}$ 5,0 | TL-2 A10-40 | 21 00 361 | **162,–** |
| | Angle valve DN20/$k_{VS}$ 7,0 | TL-2 A10-40 | 21 00 363 | **162,–** |
| | **Thermostatic mixing valve WTR 3, loose** | | | |
| | Angle valve DN20/$k_{VS}$ 4,5<br>DN25/$k_{VS}$ 6,5<br>DN32/$k_{VS}$ 9,5 | TL-2 A10-40<br>TL-2 A10-40<br>TL-2 A10-40 | 21 00 371<br>on request | **365,–**<br>**on request** |
| | **Thermoelectric shut-off valve type WTAV, loose**<br>in connection with speed/air amount controller | | | |
| | 2-way straight-through valve DN20/$k_{VS}$ 1,1 | TL-2 A10-40 | 21 00 380 | **215,–** |
| | Angle valve DN20/$k_{VS}$ 1,1 | TL-2 A10-40 | 21 00 381 | **215,–** |

Energiesparen und Klimaschutz serienmäßig

# Schlosshotel Lerbach, Bergisch Gladbach

## GTK 35 M, MGK 250 und eine Speicherladestation LS von Wolf

# LD 15 Ceiling fan


| | |
|---|---|
| **Basic unit** | Page 78 |
| **Accessories** | Page 78 |

**Ceiling fan for**
**high air circulation rate and**
**low power consumption,**
**low-noise operation,**
**energy saving through warm air return in winter operation,**
**cooling in summer operation,**
**long service life and high operational reliability.**

# LD 15

| **Basic unit** | Art. no. | **€** |
|---|---|---|
| Ceiling-mounted fan, overall height 690mm<br>Impeller diameter 142cm<br>Protection class IP20 | 22 40 050 | **185,-** |

* Actuation also possible via ventilation module LM1 and LM2.

| **Custom models** | Art. no. | **€** |
|---|---|---|
| shorter or longer suspension rods<br>overall height 440mm<br>Protection class IP54<br>With protection grille<br>Air throw up to 20m room height | on request | |

* Actuation also possible via ventilation module LM1 and LM2.

# Accessories LD 15 Ceiling fan

| | **Accessories** | für Produkte | | Art. no. | **€** |
|---|---|---|---|---|---|
| | **Warm air return control system**<br>230V / 50Hz<br>Current max. 8A<br>(4A motor power)<br>1 changeover, relay contactt | LD 15 | | 27 01 060 | **386,-** |
| | **Stepless speed control**<br>230V / 50Hz<br>maximum five ceiling fans only | LD 15 | Current max. 1,5A | 27 44 439 | **197,-** |
| | | | Current max. 3,0A | 27 01 062 | **204,-** |

# WS Warm air heater


| | |
|---|---|
| **Basic units / Drive** | Page 80 |
| **Accessories for air inlet** | Page 81 |
| **Accessories for air outlet** | Page 82 |
| **Other accessories / Flue gas pipe** | Page 83 |
| **Electrical accessories** | Page 84 |
| **Mounting accessories / Wiring** | Page 85 |

**Wolf warm air heater for fuel oil, natural gas and liquefied petroleum gas, usable as a vertical or horizontal device.**
**Casing: Galvanised sheet steel**

# WS

**Basic units**

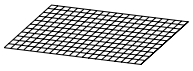
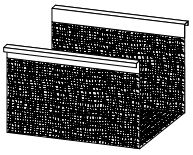
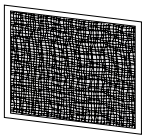
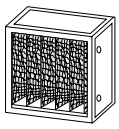
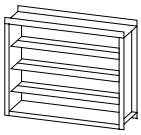
| | | Art. no. | € |
|---|---|---|---|
| **Warm air heater type 1** | WS 40 | 70 14 001 | **1.490,–** |
| | WS 63 | 70 24 001 | **1.740,–** |
| | WS 100 | 70 34 001 | **2.420,–** |
| | WS 160 | 70 44 001 | **3.500,–** |
| | WS 250 | 70 54 001 | **4.645,–** |
| | WS 400* | 70 64 001 | **5.740,–** |
| **Warm air heater type 2** | WS 40 | 70 14 002 | **1.490,–** |
| | WS 63 | 70 24 002 | **1.740,–** |
| | WS 100 | 70 34 002 | **2.540,–** |
| | WS 160 | 70 44 002 | **3.500,–** |
| | WS 250 | 70 54 002 | **4.875,–** |
| | WS 400 | 70 64 002 | **6.155,–** |
| **Warm air heater type 3** | WS 40* | 70 14 003 | **1.495,–** |
| | WS 63* | 70 24 003 | **1.745,–** |
| | WS 100* | 70 34 003 | **2.420,–** |
| | WS 160* | 70 44 003 | **3.550,–** |
| | WS 250 | 70 54 003 | **5.180,–** |
| | WS 400* | 70 64 003 | **6.730,–** |
| **Warm air heater type 4** | WS 250* | 70 54 004 | **5.435,–** |

* These device types are available only for foreign countries

# Accessories for WS warm air heater

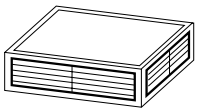
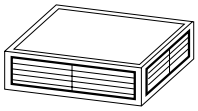
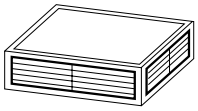
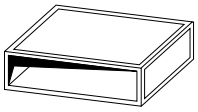
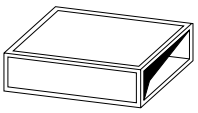
| **Drive / Switch board** | | for products | Art. no. | € |
|---|---|---|---|---|
| **Drive 3-stage, 230V** | 0,37 kW | WS 40, 63 | 21 17 110 | **620,–** |
| | 0,55 kW | WS 40, 63 | 21 17 130 | **875,–** |
| **Switch board for electric motor, 3-stage, 230V** | 0,37 kW | WS 40, 63 | 79 70 020 | **273,–** |
| | 0,55 kW | WS 40, 63 | 79 70 020 | **273,–** |
| **Drive 1-stage, 3 x 400V** | 0,37 kW | WS 100 - 400 | 70 34 030 | **461,–** |
| | 0,55 kW | WS 100 - 400 | 70 34 031 | **493,–** |
| | 0,75 kW | WS 100 - 400 | 70 34 032 | **520,–** |
| | 1,1 kW | WS 100 - 400 | 70 34 033 | **565,–** |
| | 1,5 kW | WS 100 - 400 | 70 34 034 | **625,–** |
| | 2,2 kW | WS 100 - 400 | 70 34 035 | **675,–** |
| | 3,0 kW | WS 100 - 400 | 70 44 030 | **790,–** |
| | 4,0 kW | WS 100 - 400 | 70 64 030 | **915,–** |
| | 5,5 kW | WS 100 - 400 | 70 54 030 | **1.120,–** |
| | 7,5 kW | WS 100 - 400 | 70 64 031 | **1.290,–** |
| | 11 kW | WS 100 - 400 | 70 64 032 | **1.775,–** |
| **Switch board for electric motor, 1-stage, 3 x 400V** | 0,37 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 0,55 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 0,75 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 1,1 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 1,5 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 2,2 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 3,0 kW | WS 100 - 400 | 79 70 030 | **360,–** |
| | 4,0 kW | WS 100 - 400 | 79 70 040 | **745,–** |
| | 5,5 kW | WS 100 - 400 | 79 70 040 | **745,–** |
| | 7,5 kW | WS 100 - 400 | 79 70 040 | **745,–** |
| | 11 kW | WS 100 - 400 | 79 70 040 | **745,–** |

# Accessories for WS warm air heater

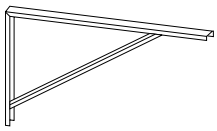
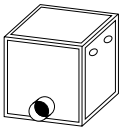
| | Accessories for air inlet | for products | Art. no. | € |
|---|---|---|---|---|
| | **Duct connction frame**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 25 76 149<br>25 76 151<br>25 76 153<br>25 76 156<br>25 76 159<br>25 76 162 | **39,40**<br>**47,-**<br>**51,-**<br>**74,-**<br>**115,-**<br>**115,-** |
| | **Duct connection frame over cross-section**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 25 76 150<br>25 76 152<br>25 76 154<br>25 76 157<br>25 76 160<br>25 76 160 | **39,40**<br>**47,-**<br>**51,-**<br>**74,-**<br>**115,-**<br>**115,-** |
| | **Dummy plate at the bottom**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 60 11 122<br>70 22 510<br>70 32 510<br>60 52 605<br>60 52 606<br>60 52 606 | **39,40**<br>**47,-**<br>**51,-**<br>**74,-**<br>**115,-**<br>**115,-** |
|  | **Air intake grille at the bottom**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 12 500<br>70 22 500<br>70 32 500<br>70 42 500<br>70 52 500<br>70 62 500 | **39,40**<br>**47,-**<br>**51,-**<br>**74,-**<br>**115,-**<br>**115,-** |
|  | **Slide-in filter with mat**<br>grade G4 | WS 40<br>WS 63 | 70 12 210<br>70 22 210 | **204,-**<br>**286,-** |
|  | **Filter frame with mat**<br>grade G4 | WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 32 240<br>70 42 240<br>70 52 240<br>70 62 240 | **115,-**<br>**121,-**<br>**144,-**<br>**189,-** |
| | **Filter mat for slide-in filter/filter frameen**<br>grade G4 | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 022<br>70 24 022<br>70 34 022<br>70 44 022<br>70 54 022<br>70 64 022 | **39,40**<br>**47,-**<br>**28,70**<br>**39,40**<br>**51,-**<br>**74,-** |
|  | **Duct air filter with mat,** grade G4<br>galvanised sheet steel | WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 32 210<br>70 42 210<br>70 52 210<br>70 62 210 | **352,-**<br>**505,-**<br>**550,-**<br>**675,-** |
| | **Duct air filter with mat**<br>grade G4 | WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 34 023<br>70 44 023<br>70 54 023<br>70 64 023 | **74,-**<br>**104,-**<br>**144,-**<br>**249,-** |
|  | **Damper**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 25 75 972<br>25 75 995<br>25 75 996<br>25 75 997<br>25 75 998<br>25 75 999 | **121,-**<br>**189,-**<br>**235,-**<br>**258,-**<br>**316,-**<br>**365,-** |

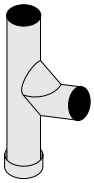
# Accessories for WS warm air heater

| Accessories for air inlet | for products | Art. no. | € |
|---|---|---|---|
| **Manual lever with lock, stepless**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 025<br>70 24 025<br>70 34 025<br>70 44 025<br>70 54 025<br>70 64 025 | **51,–**<br>**51,–**<br>**51,–**<br>**51,–**<br>**51,–**<br>**51,–** |
| **Connecting rod for 2 control flaps**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 026<br>70 24 026<br>70 34 026<br>70 44 026<br>70 54 026<br>70 64 026 | **71,–**<br>**71,–**<br>**79,–**<br>**79,–**<br>**104,–**<br>**104,–** |

| | Accessories for air outlet | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Air outlet hood with 2 grilles**<br>galvanised sheet steel<br>blades black | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 010<br>70 24 010<br>70 34 010<br>70 44 010<br>70 54 010<br>70 64 010 | **262,–**<br>**269,–**<br>**293,–**<br>**390,–**<br>**510,–**<br>**510,–** |
|  | **Air outlet hood with 3 grilles**<br>galvanised sheet steel<br>blades black | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 011<br>70 24 011<br>70 34 011<br>70 44 011<br>70 54 011<br>70 64 011 | **286,–**<br>**304,–**<br>**308,–**<br>**399,–**<br>**555,–**<br>**555,–** |
|  | **Air outlet hood with 4 grilles**<br>galvanised sheet steel<br>blades black | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 012<br>70 24 012<br>70 34 012<br>70 44 012<br>70 54 012<br>70 64 012 | **308,–**<br>**332,–**<br>**360,–**<br>**411,–**<br>**565,–**<br>**565,–** |
|  | **Duct connction hood, broad side**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 015<br>70 24 015<br>70 34 015<br>70 44 015<br>70 54 015<br>70 64 015 | **262,–**<br>**269,–**<br>**286,–**<br>**360,–**<br>**510,–**<br>**510,–** |
|  | **Duct connction hood, narrow side**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 14 016<br>70 24 016<br>70 34 016<br>70 44 016<br>70 54 016<br>70 64 016 | **262,–**<br>**269,–**<br>**286,–**<br>**360,–**<br>**510,–**<br>**510,–** |
| | **Duct connction frame**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 25 76 150<br>25 76 152<br>25 76 154<br>25 76 157<br>25 76 160<br>25 76 160 | **39,40**<br>**47,–**<br>**51,–**<br>**74,–**<br>**115,–**<br>**115,–** |

# Accessories for WS warm air heater

| | Other accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Earthing strap for potential equalization** | WS | 27 65 450 | **5,10** |
|  | **Set of brackets for horizontal design**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160 | 70 12 540<br>70 22 540<br>70 32 540<br>70 42 540 | **121,-**<br>**143,-**<br>**198,-**<br>**308,-** |
|  | **Combustion air intake hood**<br>galvanised sheet steel | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 70 13 229<br>70 23 229<br>70 33 229<br>70 43 229<br>70 53 229<br>70 63 229 | **204,-**<br>**235,-**<br>**286,-**<br>**355,-**<br>**520,-**<br>**520,-** |
| | **Set of lifting lugs for horizontal appliance** | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250 | 70 14 020<br>70 24 020<br>70 34 020<br>70 44 020<br>70 54 020 | **119,-**<br>**119,-**<br>**163,-**<br>**204,-**<br>**204,-** |
| | **Cleaning brush** | WS | 24 40 200 | **45,-** |

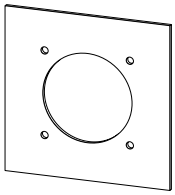
| | Flue gas pipe | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Flue gas pipe branch with soot pot** | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 26 15 501<br>26 18 501<br>26 18 501<br>26 20 501<br>26 25 501<br>26 35 501 | **247,-**<br>**253,-**<br>**253,-**<br>**290,-**<br>**345,-**<br>**515,-** |
| | **Flue gas pipe rain hood** | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 26 15 502<br>26 18 502<br>26 18 502<br>26 20 502<br>26 25 502<br>26 35 502 | **42,-**<br>**82,-**<br>**82,-**<br>**114,-**<br>**147,-**<br>**228,-** |
| | **Flue gas pipe 1000mm long, pluggable up to WS 250** | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 26 15 503<br>26 18 503<br>26 18 503<br>26 20 503<br>26 25 503<br>26 35 503 | **29,30**<br>**37,80**<br>**37,80**<br>**41,-**<br>**49,-**<br>**124,-** |
| | **Exhaust pipe collar for WS 400** | WS 400 | 26 35 504 | **52,-** |
| | **Flue gas pipe elbow 90° with cleaning flap** | WS 40<br>WS 63<br>WS 100<br>WS 160<br>WS 250<br>WS 400 | 26 15 505<br>26 18 505<br>26 18 505<br>26 20 505<br>26 25 505<br>26 35 505 | **31,60**<br>**41,-**<br>**41,-**<br>**46,-**<br>**54,-**<br>**124,-** |

# Accessories for WS warm air heater

| | Electrical accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Double and safety thermostat, fitted** | WS | 27 30 001 | **227,–** |
| | **Terminal box, fitted** | WS 40 - 160<br>WS 250, 400 | 70 14 008<br>70 54 008 | **80,–**<br>**108,–** |
| | **Room thermostat** | all WS | 27 34 000 | **45,–** |
| | **Room thermostat clock with weekly program** | all WS | 27 44 079 | **217,–** |
| | **Actuator, 230V, for opening/closing the damper, attached** | WS 40 - 160<br>WS 250, 400 | 70 14 006<br>70 54 006 | **382,–**<br>**432,–** |

| | Surcharge for control panel | for products | Art. no. | € |
|---|---|---|---|---|
| | **with hours run meter** | allw WS | 79 70 039 | **79,–** |
| | **with contactor control for threephase current burner, 1-stage** | WS 160 - 400 | 70 44 007 | **215,–** |
| | **with time switch with daily or weekly program and power reserve** | WS | 27 36 250 | **235,–** |

# Accessories for WS warm air heater



| Mounting accessories / Wiring | | for products | Art. no. | € |
|---|---|---|---|---|
| **Wiring complete** | | WS 40 | 70 14 009 | **108,–** |
| | | WS 63 | 70 24 009 | **108,–** |
| | | WS 100 | 70 34 009 | **176,–** |
| | | WS 160 | 70 44 009 | **185,–** |
| | | WS 250 | 70 54 009 | **238,–** |
| | | WS 400 | 70 64 009 | **304,–** |
| **Burner plate** | type A | WS 40 - 100 | 70 13 180 | **45,–** |
| | type B | WS 40 - 100 | 70 13 190 | **45,–** |
| | type C | WS 160, 250 | 70 43 170 | **58,–** |
| | type D | WS 160 - 400 | 70 43 180 | **58,–** |
| | type E | WS 160 - 400 | 70 43 190 | **58,–** |
| **Burner plate special design** | | WS 40 - 100 | - | **69,–** |
| | | WS 160 - 250 | - | **73,–** |
| | | WS 400 | - | **91,–** |

Energiesparen und Klimaschutz serienmäßig

# Wolf - das Unternehmen

Die Wolf GmbH ist einer der führenden Anbieter der Klima- und Heizungsbranche. Beginn einer rasanten Entwicklung in die Spitze der europäischen Gebäudetechnik war zunächst die Klima- und Lüftungstechnik. Opernhäuser, Flughäfen, Sportstadien und Bürogebäude sind mit Klima- und Lüftungsgeräten von Wolf ausgerüstet.
Der Einstieg in die Heiztechnik in den achtziger Jahren war ein bedeutender Meilenstein in der erfolgreichen Geschichte des Unternehmens. Umweltfreundliche und wirtschaftliche Heizprodukte von Wolf haben sich schnell als Markenfabrikate mit anspruchsvoller Qualität etabliert. Produktion und Service auf höchstem Niveau sind die Grundlage dafür.

Die Kompetenzmarke für Energiesparsysteme

# ER Smoke extract fans


| | |
|---|---|
| **Basic unit** | Page 88 |
| **Accessories** | Page 89 |

**Smoke extract fan**
**RDM 56: 400°C / 120min.**
**RDM 57: 600°C / 120min.**

# ER

## Basic unit

| Smoke extract fans with back draught damper | | Art. no. | € |
|---|---|---|---|
| **RDM 56, 400°C / 120 min.** | RDM 56-2528-2W-11 | 21 36 848 | **1.690,–** |
| | RDM 56-2531-4D-10 | 21 36 849 | **1.725,–** |
| | RDM 56-3535-4D-10 | 21 36 850 | **1.835,–** |
| | RDM 56-3540-4D-10 | 21 36 851 | **1.875,–** |
| | RDM 56-3545-4W-13 | 21 36 852 | **1.965,–** |
| | RDM 56-3545-HD-10 | 21 36 853 | **2.180,–** |
| | RDM 56-4550-4W-16 | 21 36 854 | **2.400,–** |
| | RDM 56-4550-HD-14 | 21 36 855 | **2.740,–** |
| | RDM 56-4556-4W-17 | 21 36 856 | **2.780,–** |
| | RDM 56-4556-6W-13 | 21 36 857 | **2.605,–** |
| | RDM 56-4556-HD-16 | 21 36 858 | **3.000,–** |
| | RDM 56-5663-6W-16 | 21 36 859 | **3.470,–** |
| | RDM 56-5663-HD-19 | 21 36 860 | **3.975,–** |
| | RDM 56-5671-6W-21 | 21 36 861 | **3.915,–** |
| | RDM 56-5671-HD-24 | 21 36 862 | **4.685,–** |
| | RDM 56-7180-6W-24 | 21 36 863 | **5.295,–** |
| | RDM 56-7180-8D-21 | 21 36 864 | **5.310,–** |
| | RDM 56-7180-HD-28 | 21 36 865 | **6.160,–** |
| | RDM 56-7190-6W-28 | 21 36 866 | **6.605,–** |
| | RDM 56-7190-HD-26 | 21 36 867 | **8.235,–** |
| | RDM 56-9090-4W-31 | 21 36 868 | **9.885,–** |
| | RDM 56-9090-GD-34 | 21 36 869 | **13.045,–** |
| | RDM 56-9090-ID-34 | 21 36 870 | **11.705,–** |
| **RDM 57, 600°C / 120min.** | RDM 57-2528-2W-11 | 21 36 825 | **1.835,–** |
| | RDM 57-2531-4D-10 | 21 36 826 | **1.885,–** |
| | RDM 57-3535-4D-10 | 21 36 827 | **1.995,–** |
| | RDM 57-3540-4D-10 | 21 36 828 | **2.015,–** |
| | RDM 57-3545-4W-13 | 21 36 829 | **2.145,–** |
| | RDM 57-3545-HD-10 | 21 36 830 | **2.340,–** |
| | RDM 57-4550-4W-16 | 21 36 831 | **2.595,–** |
| | RDM 57-4550-HD-14 | 21 36 832 | **2.910,–** |
| | RDM 57-4556-4W-17 | 21 36 833 | **3.000,–** |
| | RDM 57-4556-6D-13 | 21 36 834 | **2.825,–** |
| | RDM 57-4556-HD-16 | 21 36 835 | **3.220,–** |
| | RDM 57-5663-6W-16 | 21 36 836 | **3.685,–** |
| | RDM 57-5663-HD-19 | 21 36 837 | **4.190,–** |
| | RDM 57-5671-6W-21 | 21 36 838 | **4.110,–** |
| | RDM 57-5671-HD-24 | 21 36 839 | **4.900,–** |
| | RDM 57-7180-6W-24 | 21 36 840 | **5.590,–** |
| | RDM 57-7180-8D-21 | 21 36 841 | **5.605,–** |
| | RDM 57-7180-HD-28 | 21 36 842 | **6.435,–** |
| | RDM 57-7190-6W-28 | 21 36 843 | **6.965,–** |
| | RDM 57-7190-HD-26 | 21 36 844 | **8.625,–** |
| | RDM 57-9090-4W-31 | 21 36 845 | **10.865,–** |
| | RDM 57-9090-GD-34 | 21 36 846 | **14.040,–** |
| | RDM 57-9090-ID-34 | 21 36 847 | **14.465,–** |

# Accessories for ER smoke extract fans

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **ZBS Flat roof upstand 600°C**<br>External material aluminium,<br>Interior lining made of coated sheet steel | RDM 56/57 - 25 . . - . . - . .<br>RDM 56/57 - 35 . . - . . - . .<br>RDM 56/57 - 45 . . - . . - . .<br>RDM 56/57 - 56 . . - . . - . .<br>RDM 56/57 - 71 . . - . . - . .<br>RDM 56/57 - 90 . . - . . - . . | 21 36 806<br>21 36 807<br>21 36 808<br>21 36 809<br>21 36 810<br>21 36 811 | **424,-**<br>**468,-**<br>**550,-**<br>**600,-**<br>**865,-**<br>**1.530,-** |
| | **ZBS Flat roof upstand 400°C**<br>galvanised sheet steel<br>(only in combination with duct connection and RDM 56, otherwise ZBS flat roof base 600°C) | RDM 56 - 25 . . - . . - . .<br>RDM 56 - 35 . . - . . - . .<br>RDM 56 - 45 . . - . . - . .<br>RDM 56 - 56 . . - . . - . .<br>RDM 56 - 71 . . - . . - . .<br>RDM 56 - 90 . . - . . - . . | 21 36 537<br>21 36 538<br>21 36 539<br>21 36 540<br>21 36 541<br>21 36 817 | **238,-**<br>**258,-**<br>**304,-**<br>**390,-**<br>**486,-**<br>**1.295,-** |
| | **ZKE intake connecting piece (flexible connection)** | RDM 56/57 - 25 . . - . . - . .<br>RDM 56/57 - 35 . . - . . - . .<br>RDM 56/57 - 45 . . - . . - . .<br>RDM 56/57 - 56 . . - . . - . .<br>RDM 56/57 - 71 . . - . . - . .<br>RDM 56/57 - 90 . . - . . - . . | 21 36 818<br>21 36 819<br>21 36 820<br>21 36 821<br>21 36 822<br>21 36 823 | **217,-**<br>**300,-**<br>**353,-**<br>**451,-**<br>**610,-**<br>**1.475,-** |
| | **ZKF Intake flange / Mating flange**<br>galvanised sheet steel | RDM 56/57 - 25 . . - . . - . .<br>RDM 56/57 - 35 . . - . . - . .<br>RDM 56/57 - 45 . . - . . - . .<br>RDM 56/57 - 56 . . - . . - . .<br>RDM 56/57 - 71 . . - . . - . .<br>RDM 56/57 - 90 . . - . . - . . | 21 36 698<br>21 36 699<br>21 36 700<br>21 36 701<br>21 36 702<br>21 36 824 | **23,70**<br>**26,60**<br>**42,-**<br>**49,-**<br>**68,-**<br>**146,-** |
| | **ZSG Mesh safety guard** | RDM 56/57 - 25 . . - . . - . .<br>RDM 56/57 - 35 . . - . . - . .<br>RDM 56/57 - 45 . . - . . - . .<br>RDM 56/57 - 56 . . - . . - . .<br>RDM 56/57 - 71 . . - . . - . .<br>RDM 56/57 - 90 . . - . . - . . | 21 36 682<br>21 36 683<br>21 36 684<br>21 36 685<br>21 36 686<br>21 36 687 | **42,-**<br>**49,-**<br>**60,-**<br>**77,-**<br>**89,-**<br>**137,-** |
| | **ZDS Silencer upstand**<br>coated sheet steel | RDM 56/57 - 25 . . - . . - . .<br>RDM 56/57 - 35 . . - . . - . .<br>RDM 56/57 - 45 . . - . . - . .<br>RDM 56/57 - 56 . . - . . - . .<br>RDM 56/57 - 71 . . - . . - . . | 21 36 721<br>21 36 722<br>21 36 723<br>21 36 724<br>21 36 725 | **865,-**<br>**1.050,-**<br>**1.350,-**<br>**1.800,-**<br>**2.910,-** |

# Accessories for ER smoke extract fans

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **ESH 21 Isolatior switch** | RDM 56/57 2528-2W-11<br>RDM 56/57 2531-4D-10<br>RDM 56/57 3535-4D-10<br>RDM 56/57 3540-4D-10<br>RDM 56/57 3545-4W-13<br>RDM 56/57 4550-4W-16<br>RDM 56/57 4556-4W-17<br>RDM 56/57 4556-6W-13<br>RDM 56/57 5663-6W-16<br>RDM 56/57 5671-6W-21<br>RDM 56/57 7180-8D-21 | 21 36 668 | **48,–** |
| | | RDM 56/57 3545-HD-10<br>RDM 56/57 4550-HD-14<br>RDM 56/57 4556-HD-16<br>RDM 56/57 5663-HD-19<br>RDM 56/57 5671-HD-24<br>RDM 56/57 7180-HD-28<br>RDM 56/57 7180-6W-24 | 21 36 678 | **88,–** |
| | | RDM 56/57 7190-6W-28<br>RDM 56/57 7190-HD-26 | 21 36 715 | **127,–** |
| | | RDM 56/57 9090-4W-31 | 21 36 804 | **205,–** |
| | | RDM 56/57 9090-ID-34<br>RDM 56/57 9090-GD-34 | 21 36 805 | **436,–** |
| | **ARM-1 Automatic smoke detector** | all smoke extract fans | 21 38 101 | **344,–** |
| | **AMM-2 Automatic multi sensor smoke detector** | all smoke extract fans | 21 38 102 | **383,–** |

# Accessories for ER smoke extract fans

Changed art. no. are marked in red.

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **DKM-2K-OR Manual activation button** | all smoke extract fans | 21 38 100 | **122,-** |
| | **EBG Smoke detector switch panel**<br>Performs the following tasks in case of fire<br>- automatically switches on a smoke extraction fan<br>- switches two-speed fan motors to the high speed<br>- disconnects a built-in frequency converter from the main supply and connects the motor directly to the mains supply<br>- provides emergency power for the control for 72h (Observe battery lifetime) | RDM 56/57 2528-2W-11<br>RDM 56/57 2531-4D-10<br>RDM 56/57 3535-4D-10<br>RDM 56/57 3540-4D-10<br>RDM 56/57 3545-4W-13<br>RDM 56/57 4550-4W-16<br>RDM 56/57 4556-4W-17<br>RDM 56/57 4556-6W-13<br>RDM 56/57 5663-6W-16<br>RDM 56/57 5671-6W-21<br>RDM 56/57 7180-8W-21 | 21 37 039 | **4.645,-** |
| | | RDM 56/57 3545-HD-10<br>RDM 56/57 4550-HD-14<br>RDM 56/57 4556-HD-16<br>RDM 56/57 5663-HD-19<br>RDM 56/57 5671-HD-24 | 21 37 043 | **5.390,-** |
| | | RDM 56/57 7180-6W-24<br>RDM 56/57 7190-6W-28 | 21 37 040 | **5.395,-** |
| | | RDM 56/57 7180-HD-28<br>RDM 56/57 7190-HD-26 | 21 37 044 | **5.630,-** |
| | | RRDM 56/57 9090-4W-31 | 21 37 045 | **6.765,-** |
| | | RDM 56/57 9090-ID-34 | 21 37 046 | **6.850,-** |
| | | RDM 56/57 9090-GD-34 | 21 37 047 | **7.145,-** |

Energiesparen und Klimaschutz serienmäßig

# Comfort-Wohnungs-Lüftung

## Bestes Raumklima und höchste Effizienz

# DV-2 Roof extract fans


| | |
|---|---|
| **DV-2 Basic units** | Page 94 |
| **Accessories** | Page 94 |

**Roof extract fans with attached isolator switch, for the extraction of used air from rooms.**
**With Energy saving EC-fans, variable speed control.**
**casing of plastic, can be recycled to 100%, colour light grey (RAL 7035)**

# DV-2 NEW

**Basic units**

| DV-2 Roof extract fans | | Art. no. | € |
|---|---|---|---|
| | DV-2-225-230V | 21 38 620 | **1.925,-** |
| | DV-2-225-400V | 21 38 621 | **2.165,-** |
| | DV-2-250-230V | 21 38 622 | **2.145,-** |
| | DV-2-250-400V | 21 38 623 | **2.340,-** |
| | DV-2-315-230V | 21 38 624 | **2.260,-** |
| | DV-2-315-400V | 21 38 625 | **2.450,-** |
| | DV-2-400-400V | 21 38 626 | **2.885,-** |
| | DV-2-450-400V | 21 38 627 | **3.165,-** |
| | DV-2-500-400V | 21 38 628 | **4.835,-** |

# Accessories DV-2 roof extract fans

| Accessories | for products | Art. no. | € |
|---|---|---|---|
| **Flat roof upstand**<br>for flat roof installation<br>plastic, RAL 7035, with insulation<br>Height: 200mm | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 630<br>21 38 631<br>21 38 632<br>21 38 633<br>21 38 634 | **300,-**<br>**344,-**<br>**448,-**<br>**510,-**<br>**610,-** |
| **Flat roof upstand high**<br>for flat roof installation<br>plastic, RAL 7035<br>Integration of a silencer possible<br>Height DV-2 -225 up to DV-2-400: 500mm<br>Height DV-2-450/ DV-2-500: 700mm | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 635<br>21 38 636<br>21 38 637<br>21 38 638<br>21 38 639 | **376,-**<br>**476,-**<br>**600,-**<br>**795,-**<br>**975,-** |

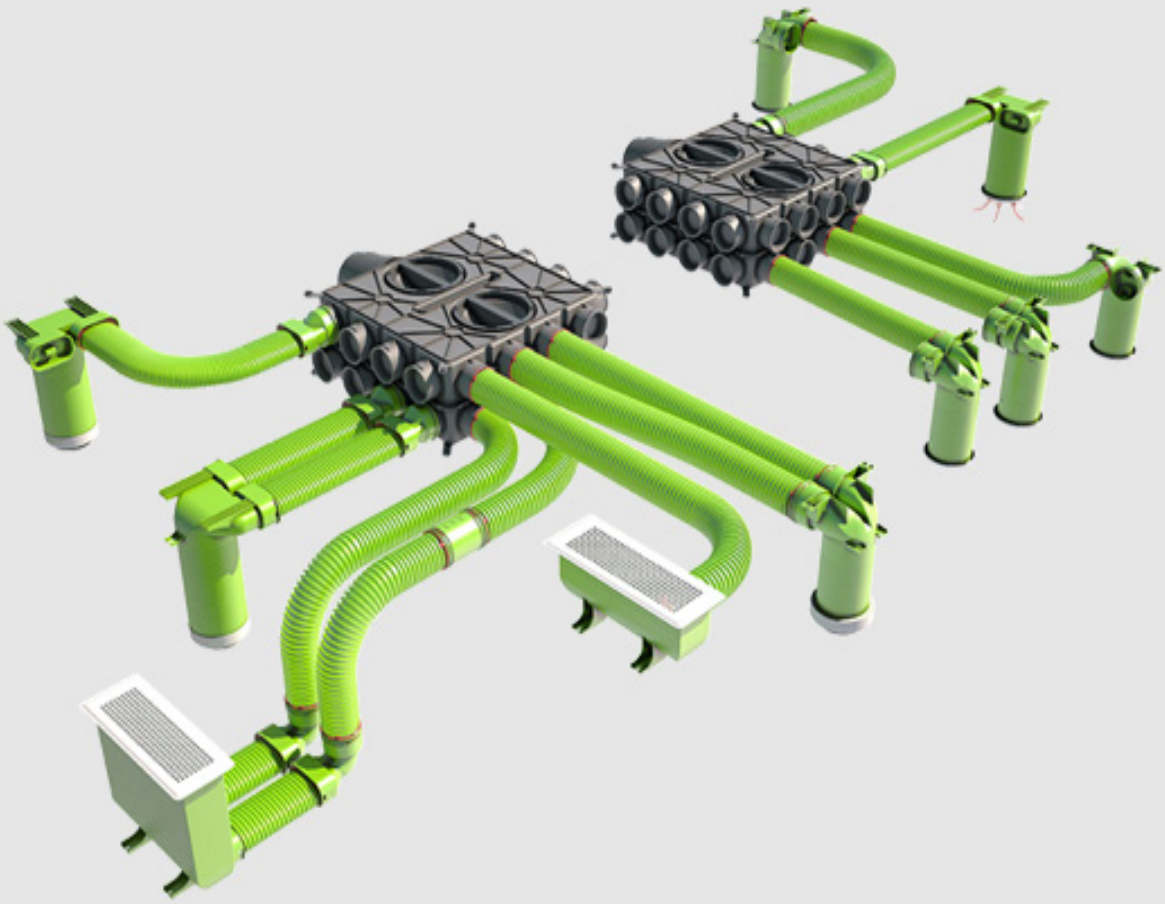
# Accessories for DV-2 roof extract fans

| | Accessories | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Automatic closing flap for flat roof upstand**<br>galvanised sheet steel with plastic fins | | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 640<br>21 38 641<br>21 38 642<br>21 38 643<br>21 38 644 | **176,-**<br>**212,-**<br>**276,-**<br>**296,-**<br>**408,-** |
| | **Automatic closing flap for flat roof upstand high**<br>galvanised sheet steel with plastic fins | | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 645<br>21 38 646<br>21 38 647<br>21 38 648<br>21 38 649 | **176,-**<br>**212,-**<br>**276,-**<br>**296,-**<br>**408,-** |
| | **Intake silencer**<br>galvanised sheet steel<br>for installation on air intake of roof extract fan<br>Combination possible with flat roof upstand<br>and flat roof upstand high | | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 650<br>21 38 651<br>21 38 652<br>21 38 653<br>21 38 654 | **344,-**<br>**428,-**<br>**580,-**<br>**630,-**<br>**875,-** |
| | **Duct connection panel**<br>galvanised sheet steel<br>for connection of a round duct | Ø 200<br>Ø 250<br>Ø 250<br>Ø 315<br>Ø 355<br>Ø 400<br>Ø 400<br>Ø 450<br>Ø 560 | DV-2-225<br>DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-400<br>DV-2-450<br>DV-2-450<br>DV-2-500 | 21 38 655<br>21 38 656<br>21 38 657<br>21 38 658<br>21 38 659<br>21 38 660<br>21 38 661<br>21 38 662<br>21 38 663 | **92,-**<br>**92,-**<br>**100,-**<br>**100,-**<br>**124,-**<br>**124,-**<br>**144,-**<br>**144,-**<br>**176,-** |
| | **Sealing panel**<br>of weather resistant, closed-cell plastic,<br>for sealing the fan base,<br>silencer and roof upstand | | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 664<br>21 38 665<br>21 38 666<br>21 38 667<br>21 38 668 | **24,-**<br>**32,-**<br>**36,-**<br>**40,-**<br>**60,-** |
| | **Intermediate piece**<br>galvanised sheet steel<br>to provide an airtight connection tot he<br>silencer/closing flap | | DV-2-225<br>DV-2-250/DV-2-315<br>DV-2-400<br>DV-2-450<br>DV-2-500 | 21 38 669<br>21 38 670<br>21 38 671<br>21 38 672<br>21 38 673 | **112,-**<br>**144,-**<br>**152,-**<br>**164,-**<br>**212,-** |
| | **Variable speed controller**<br>for continuous operation of the roof extract fan | | DV-2 | 27 45 937 | **88,-** |

Energiesparen und Klimaschutz serienmäßig

# Luftverteilsystem

## So individuell wie Ihr Bauvorhaben



### Das „Alles-ist-möglich-Konzept"

Air Excellent ist ein ausgereiftes und vollständiges System zur Erstellung eines hochwertigen Lüftungssystems.
Es ist einfach durch Klick-Verbindungen zu installieren.
Das Luftkanalsystem besteht neben dem eigentlichen Luftkanal aus einer Vielzahl weiterer Komponenten für Kanalführung und Verteilung im Gebäude und Luftauslässen. Hochwertiges Material gewährleistet eine lange Lebensdauer.

# Comfort home ventilation system CWL


| | | | |
|---|---|---|---|
| CWL | Comfort home ventilation system CWL | CWL Excellent<br>CWL-T Excellent<br>CWL-F Excellent | Page 98<br>Page 99<br>Page 100 |
| | Decentral ventilation units with heat recovery | CWL-D-70 | Page 101 |
| | Control systems and electrical accessories | | Page 102 |
| | Accessories | | Page 105 |
| | ISO pipe system | | Page 106 |
| | Roof connections | | Page 107 |
| | Outside wall connections and silencers | | Page 108 |
| | Air distributor | | Page 109 |
| | Flexible hose system, round | | Page 110 |
| | Accessories flexible hose system round and flat duct | | Page 111 |
| | Flat duct system Excellent | | Page 112 |
| | Air supply / extraction valves | | Page 114 |
| | Filters | | Page 115 |

**Rebate groups:**
CWL = 22

CWL-180 Excellent

CWL-300/400 Excellent

**The comfort home ventilation system from Wolf offers energy-saving and convenient ventilation all year. Suitable for apartments, detached houses, apartment blocks and offices. The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.**

# CWL Excellent

## Central ventilation units with heat recovery

| TYPE | | CWL-180 Excellent | CWL-300 Excellent | CWL-400 Excellent |
|---|---|---|---|---|
| Energy efficiency class | | B [1] | A [2] | A [2] |
| Max. air flow rate at 150 Pa | m³/h | 180 | 300 | 400 |
| Max. power consumption | W | 16 - 132 | 3 - 138 | 3 - 172 |
| Duct connection diameter | mm | 125 | 160 | 180 |
| Dimensions H x W x D | mm | 600 x 560 x 315 | 765 x 677 x 564 | 765 x 677 x 564 |
| Weight | kg | 25 | 38 | 38 |
| • Compact design for wall mounting | | ✓ | ✓ | ✓ |
| • Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies) | | ✓ | ✓ | ✓ |
| • Removable cross countercurrent plate-type heat exchanger made from plastic | | ✓ | ✓ | ✓ |
| • Up to 95% heat recovery | | ✓ | ✓ | ✓ |
| • Bypass as standard | | – | ✓ | ✓ |
| • Automatic frost stat control | | ✓ | ✓ | ✓ |
| • Constant flow fans | | ✓ | ✓ | ✓ |
| • Low energy consumption through DC fans | | ✓ | ✓ | ✓ |
| • BM-2 for operation(optional) | | ✓ | ✓ | ✓ |
| • elektr. preheater 1000W integrated in device | | – | ✓ | ✓ |
| • Filter grade G4 optional G7 as accessorie | | – | ✓ | ✓ |
| • Fully wired. Filter change requirement indicated at the device, the programming unit or at the 4-step switch. | | ✓ | ✓ | ✓ |
| • DIBt approval | | – | ✓ | ✓ |
| • Passive house certificate | | – | ✓ | ✓ |
| **Designs** | | | | |
| 4/0 L | Art. no. | 21 37 995* | 21 37 990 | 21 37 942 |
| | € | **2.235,–** | **2.675,–** | **3.250,–** |
| 2/2 L | Art. no. | - | 21 37 991 | 21 37 943* |
| | € | **–** | **2.675,–** | **3.250,–** |
| 3/1 L | Art. no. | - | - | 21 37 944* |
| | € | **–** | **–** | **3.250,–** |
| 4/0 R | Art. no. | 21 37 994 | 21 37 992* | 21 37 939* |
| | € | **2.235,–** | **2.675,–** | **3.250,–** |
| 2/2 R | Art. no. | - | 21 37 993* | 21 37 940* |
| | € | **–** | **2.675,–** | **3.250,–** |
| 3/1 R | Art. no. | - | - | 21 37 941* |
| | € | **–** | **–** | **3.250,–** |

* Delivery time on request

[1] A with time switch and minimum one sensors
[2] A+ with minimum two sensors

**Rebate groups:**
CWL = 22

**The comfort home ventilation system from Wolf offers energy-saving and convenient ventilation all year. Suitable for apartments, detached houses, apartment blocks and offices. The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.**

# CWL-T Excellent

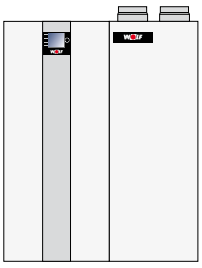
## Central ventilation units with heat recovery

| TYPE | | CWL-T-300 Excellent |
|---|---|---|
| Energy efficiency class | | A [1] |
| Max. air flow rate at 150 Pa | m³/h | 300 |
| Max. power consumption | W | 10 - 164 |
| Duct connection diameter | mm | 150/160 |
| Dimensions H x W x D | mm | 1287,5 x 475 x 586 |
| Weight | kg | 50 |
| • Compact design for floor standing | | ✓ |
| • Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies) | | ✓ |
| • Removable cross countercurrent plate-type heat exchanger made from plastic | | ✓ |
| • Up to 95% heat recovery | | ✓ |
| • Bypass as standard | | ✓ |
| • Automatic frost stat control | | ✓ |
| • Constant Flow Ventilatoren | | ✓ |
| • Low energy consumption through DC fans | | ✓ |
| • Siphon included | | ✓ |
| • elektr. preheater 1000W integrated in device | | ✓ |
| • Filter grade G4 optional F7 as accessorie | | ✓ |
| • Fully wired. Filter change requirement indicated at the programming unit or at the 4-step switch. | | ✓ |
| • DIBt approval | | applied |
| • Passive house certificate | | applied |
| • Hydraulic postheating element (optional) | | ✓ |
| **Designs**<br><br>**Note:**<br>BM-2 is required for operation | | |
| 4/0 L | Art. no. | 21 38 103 |
| | € | **2.615,-** |

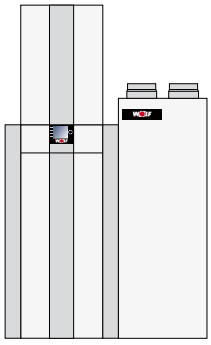
[1] A+ with minimum two sensors

## Installation options

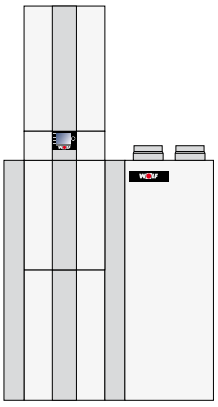
to the right or the left of the heat generator



In conjunction with TOB oil condensing boiler



In conjunction with CGS-2 gas condensing centre



In conjunction with BWL-1S split heat pump

Rebate groups:
CWL = 22

**The comfort home ventilation system with integrated bypass from Wolf offers energy-saving and convenient ventilation all year.**
**Suitable for apartments, detached houses, apartment blocks and offices.**
**The heat in the extract air is extracted by the cross- and counter-flow heat exchanger and supplied to the fresh supply air.**

# CWL-F Excellent

## Central ventilation units with heat recovery

| TYPE | | CWL-F-150 Excellent | CWL-F-300 Excellent |
|---|---|---|---|
| Energy efficiency class | | A [1] | A [2] |
| Max. air flow rate at 150 Pa | m³/h | 150 | 300 |
| Max. power consumption | W | 11 - 72 | 9 - 163 |
| Duct connection diameter | mm | 125 | 160 |
| Dimensions H x W x D | mm | 1000 x 660 x 198 | 1185 x 644 x 310 |
| Weight | kg | 25 | 37 |
| • Compact design for ceiling and wall mounting | | ✓ | ✓ |
| • Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies) | | ✓ | ✓ |
| • Removable cross countercurrent plate-type heat exchanger made from plastic | | ✓ | ✓ |
| • Up to 95% heat recovery | | ✓ | ✓ |
| • Bypass as standard | | ✓ | ✓ |
| • Automatic frost stat control | | ✓ | ✓ |
| • Constant Flow Ventilatoren | | ✓ | ✓ |
| • Low energy consumption through DC fans | | ✓ | ✓ |
| • elektr. preheater 375W integrated in device | | ✓ | – |
| • Filter grade G4 optional F7 as accessorie | | ✓ | ✓ |
| • Fully wired. Filter change requirement indicated at the programming unit or at the 4-step switch. | | ✓ | ✓ |
| • DIBt approval | | ✓ | ✓ |
| • Passive house certificate | | ✓ | ✓ |
| **Designs**<br><br>**Note:**<br>BM-2 is required for operation | | | |
| without preheater | Art. no. | 21 38 091* | 21 38 098 |
| | € | **2.225,-** | **2.585,-** |
| with preheater | Art. no. | 21 38 099 | - |
| | € | **2.330,-** | **-** |

* Delivery time on request

[1] In combination with BM-2
[2] A+ with minimum two sensors

Rebate groups:
CWL = 22

Decentral ventilation units with heat recovery

# CWL-D-70

NEW
available
April 2016

## Decentral ventilation units with heat recovery

| TYPE | | CWL-D-70 |
|---|---|---|
| Energy efficiency class | | A |
| Max. air flow rate | m³/h | 70 |
| Diameter unit connection | mm | 250 |
| Tapping drill hole | Ø mm | 260 (with 3° slope to the outside) |
| for wall thicknesses (with accessories) | mm | 500-600 (300-500) |
| Weight | kg | 12 (13,5 incl. front cover) |
| • Internal cover white | | ✓ |
| • Clean, pollen-free fresh air – airing with your windows closed, excluding street noise (not only for those suffering from allergies) | | ✓ |
| • removable synthetic cross-/counterflow plate heat exchanger | | ✓ |
| • Minimum 80% heat recovery | | ✓ |
| • Bypass as standard | | ✓ |
| • Automatic frost stat control | | ✓ |
| • Low energy consumption through DC fans | | ✓ |
| • elektr. preheater 275W integrated in device | | ✓ |
| • Filter grade G4 optional F7 as accessorie for supply air | | ✓ |
| • Fully wired. Filter change requirement indicated at the device. | | ✓ |
| • DIBt approval | | applied |
| • Passive house certificate | | applied |
| **Designs** | | |
| Outside wall hood white (RAL9010) | Art. no. | 21 38 512 |
| | € | **930,–** |
| Outside wall hood stainless steel | Art. no. | 21 38 513 |
| | € | **930,–** |

# Accessories

| Accessories | | for products | Art. no. | € |
|---|---|---|---|---|
| **Extension 200mm** for wall thicknesses 300-400mm | white (RAL 9010) | CWL-D-70 | 25 77 614 | **110,–** |
| | stainless steel | | 25 77 615 | **125,–** |
| **Extension 100mm** for wall thicknesses 400-500mm | white (RAL 9010) | CWL-D-70 | 25 77 616 | **75,–** |
| | stainless steel | | 25 77 617 | **90,–** |
| **Additional PCB** (required for connecting sensors) | | CWL-D-70 | 25 77 618 | **120,–** |
| **$CO_2$ sensor intern** | | CWL-D-70 | 25 77 619 | **412,–** |
| **Humidity sensor intern** | | CWL-D-70 | 25 77 620 | **292,–** |
| **Power switch optional** | | CWL-D-70 | 25 77 621 | **65,–** |
| **G4 Filter-Set (2xG4 + 1xG4 Ø180)** | | CWL-D-70 | 16 69 246 | **58,–** |
| **F7 Filter-Set (2xG4 + 1xF7 Ø180)** | | CWL-D-70 | 16 69 247 | **98,–** |

# Control systems and electrical accessories

**Rebate groups:**
CWL = 22

| | Control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **BM-2 operating module**<br>**without outside temperature sensor** | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 27 45 306 | **377,-** |
| | **Wall holder for BM-2**<br>Wall holder for using the operating module BM-2<br>as remote control | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 17 31 129 | **27,70** |
| | **Air quality sensor (VOC)**<br>Mixed gas sensor for determining the air quality;<br>Output signal 0 - 10V, power supply 24V<br><br>Extension kit for additional functions with the CWL-180 Excellent<br>and CWL-F-300 Excellent art. no. 27 45 273 is required | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 27 44 756 | **355,-** |
| | **Humidity sensor**<br>for capturing the relative humidity;<br>Output signal 0 - 10V, power supply 24V<br><br>Extension kit for additional functions with the CWL-180 Excellent<br>and CWL-F-300 Excellent art. no. 27 45 273 is required | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 27 45 192 | **215,-** |
| | **$CO_2$-Sensor for surface mounting**<br>for capturing the $CO_2$ value,<br>Output signal 0-10V, power supply 24V<br><br>Extension kit for additional functions with the CWL-180 Excellent<br>and CWL-F-300 Excellent art. no. 27 45 273 is required | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 27 44 854 | **488,-** |
| | **CO2-Sensor eBus for flush mounting**<br>for capturing the CO2 value,<br>Output signal 0-10V, power supply 24V<br><br>Extension kit for additional functions with the CWL-180 Excellent<br>and CWL-F-300 Excellent art. no. 27 45 273 is required | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 27 45 666 | **488,-** |

# Control systems and electrical accessories

**Rebate groups:**
CWL = 22

| | Control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **ISM7e – external interface module**<br>- LAN and WLAN interface module for wall mounting or mobile application<br>- Connection of Wolf heating appliances to the Wolf Smartset portal/App<br>- mobile application for parametrisation of the heating syste<br>- Voltage supply via mains adapter or USB<br><br>consisting of:<br>Interface module ISM7e, installation and operation manual, eBus-cable, mains adapter, etwork cable<br><br>**Note:** Only used together with BM-2. | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 45 596 | **406,-** |
| | **KNX - external interface module-kit**<br>Interface kit for an integration of Wolf ventilation units into a KNX network<br><br>consisting of:<br>Interface module ISM8i, KNX-IP-BAOS Modul, installation and operation manual, network cable<br><br>**Note:** Only used together with BM-2. | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 45 738 | **845,-** |
| | **Mod-Bus-external interface kit**<br>Interface kit for an integration of Wolf ventilation units into a Mod-Bus network | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 45 805 | **386,-** |
| | **Extension kit for additional functions**<br><br>9-pole plug connection for<br>- postheating element<br>- air quality sensor<br>- humidity sensor<br>- smoke detector | CWL-180 Excellent, CWL-F-300 Excellent | 27 45 273 | **88,-** |
| | **Modular distributor RJ12**<br><br>consisting of:<br>cable and splitter | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 45 312 | **28,70** |
| | **RH-Duct work sensor,**<br>for capturing the relative humidity;<br><br>optional:<br>Connection kit for RH-duct work sensor Art.-no. 27 45 372<br>Reduction DN180 to DN 200 | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 45 372<br><br><br>25 77 296 | **233,-**<br><br><br>**164,-** |
| | **CWL-Sevicetool**<br>for an easy parametrization<br><br>Free software to be found on our homepage. | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 25 77 544 | **256,-** |

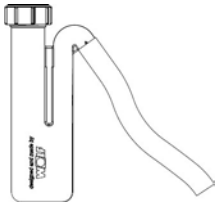
# Control systems and electrical accessories

**Rebate groups:**
CWL = 22

| | Control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **4-stage switch with filter replacement indicator**<br><br>**Note:** Connecting cable, black necessary. | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 44 518 | **77,-** |
| | **Surface mounted housing for 4-stage switch** | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 44 519 | **46,-** |
| | **Remote control**<br>consisting of transmitter and receiver<br><br>**Note:** Connecting cable, black necessary. | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 27 44 523 | **535,-** |
| | **Connecting cable, black**<br>for 4-tep switch and operating module | CWL Excellent, CWL-T Excellent, CWL-F Excellent | | |
| | 5 metres (2 x RJ12/6) | | 27 44 520 | **20,90** |
| | 10 metres (2 x RJ12/6) | | 27 44 521 | **31,-** |
| | 15 metres (2 x RJ12/6) | | 27 44 522 | **42,-** |
| | **Electrical preheater 1000 W** | | | |
| | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 27 45 444 | **389,-** |
| | DN160 | CWL-F-300 Excellent | 27 45 259 | **389,-** |
| | **Electrical reheater 1000 W**<br>- Extension kit for additional functions with the CWL-180 Excellent and CWL-F-300 Excellent art. no. 27 45 273 is required<br>- A DN150/125 reducer art. no. 25 75 793 is required with the CWL-180 Excellent | | | |
| | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 27 45 445 | **402,-** |
| | DN160 | CWL-300 Excellent, CWL-F-300 Excellent, CWL-T 300 Excellent | 27 45 258 | **402,-** |
| | DN180 | CWL-400 Excellent | 27 45 206 | **402,-** |

# Accessories

**Rebate groups:**
CWL = 22

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ball syphon** | CWL-300/400 Excellent<br>CWL-T-300 Excellent | 25 77 348 | **107,-** |
| | **Ball syphon** | CWL-F-150 Excellent NEW<br>CWL-F-300 Excellent | 25 77 580 | **119,-** |
| | **Enthalpy heat exchanger for moisture recovery** | CWL-300/400 Excellent<br>CWL-F-300 Excellent | 20 71 748<br>20 71 749 | **1.880,-**<br>**1.655,-** |
| | **Hydraulic postheating element 3000 W**<br>incl. flow valve with thermostatic head, automatic vent and corrugated stainless steel pipes | CWL-T Excellent | 27 45 587 | **935,-** |
| | **Automatic condensate pumping station with potential-free ready to plug**<br>consisting of:<br>Condensate pump with potential-free alarm output, PVC hose 10mm (6m long), non-return valve, condensate feed adapter | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 20 71 268 | **227,-** |
| | **Summer replacement cassette**<br>Alternative insert instead of standard heat exchanger, without heat recovery. | CWL-180 Excellent | 21 37 931 | **173,-** |
|  | **Syphon**<br>Barrier height 90mm | CWL-300/400 Excellent | 86 11 033 | **17,-** |

# ISO pipe system

**Rebate groups:**
CWL = 22

| | ISO pipe system | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **ISO-pipe** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 77 369 | **66,-** |
| | Length 2000mm | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 362 | **69,-** |
| | | DN180 | CWL-400 Excellent | 25 77 371 | **86,-** |
| | **ISO-pipe bend 90°** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 76 009 | **27,70** |
| | | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 363 | **18,50** |
| | | DN180 | CWL-400 Excellent | 25 76 011 | **31,50** |
| | **ISO-pipe bend 45°** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 76 012 | **20,90** |
| | | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 364 | **14,60** |
| | | DN180 | CWL-400 Excellent | 25 76 014 | **27,70** |
| | **ISO-pipe T-piece** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 76 019 | **52,-** |
| | | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 572 | **61,-** |
| | **ISO-pipe Y-piece 45°** | DN180 | CWL-400 Excellent | 25 75 792 | **106,-** |
| | **ISO-pipe reducing piece** | | CWL Excellent, CWL-T Excellent, CWL-F Excellent | | |
| | | DN160/125 | | 25 77 404 | **19,60** |
| | | DN180/125 | | 25 75 795 | **19,60** |
| | | DN180/160 | | 25 77 463 | **19,60** |
| | **Locking ring for ISO-pipe** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 76 020 | **7,30** |
| | One clamping ring is needed for each joint | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 365 | **7,30** |
| | | DN180 | CWL-400 Excellent | 25 76 022 | **8,30** |
| | **Assembly knife with special teeth**<br>for trimming pipes to length quickly and cleanly | | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 17 30 534 | **47,-** |

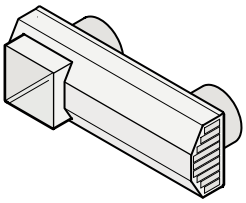
# Roof connections

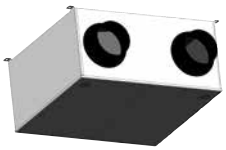
**Rebate groups:**
CWL = 22

| | Roof connections | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **CWL roof lead-through, thermally insulated**<br>Length 1159mm | | | | |
| | | DN125, **black** | CWL-180 Excellent,<br>CWL-F-150 Excellent | 25 75 801 | **164,-** |
| | | DN125, **red** | CWL-180 Excellent,<br>CWL-F-150 Excellent | 25 76 999 | **164,-** |
| | | DN160, **black** | CWL-300 Excellent,<br>CWL-T-300 Excellent,<br>CWL-F-300 Excellent | 25 75 802 | **164,-** |
| | | DN160, **red** | CWL-300 Excellent,<br>CWL-T-300 Excellent,<br>CWL-F-300 Excellent | 25 77 000 | **164,-** |
| | | DN180, **black** | CWL-400 Excellent | 25 75 803 | **183,-** |
| | **Sealing collar for roof lead-through** | | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 25 77 006 | **41,-** |
| | **Universal roof tile 25° to 45°** | | | | |
| | | **black** | CWL-180 Excellent,<br>CWL-300 Excellent,<br>CWL-F-150 Excellent,<br>CWL-F-300 Excellent | 25 77 001 | **86,-** |
| | | **red** | CWL-180 Excellent,<br>CWL-300 Excellent,<br>CWL-F-150 Excellent,<br>CWL-F-300 Excellent | 25 77 003 | **86,-** |
| | | **black** | CWL-400 Excellent | 25 77 002 | **176,-** |
| | **Ubbiflex high tack – glue**<br>to fasten the CWL universal tile on the roof tiles or roof | | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | 25 77 543 | **19,60** |
| | **CWL flat roof lead-through 0°** | DN160 | CWL-180 Excellent,<br>CWL-300 Excellent,<br>CWL-T-300 Excellent,<br>CWL-F-150 Excellent,<br>CWL-F-300 Excellent | 25 77 004 | **77,-** |
| | | DN180 | CWL-400 Excellent | 25 77 005 | **77,-** |
| | **Fastening clip for ISO pipe** | DN125 | CWL-180 Excellent,<br>CWL-F-150 Excellent | 25 77 007 | **5,90** |
| | | DN160 | CWL-300 Excellent,<br>CWL-T-300 Excellent,<br>CWL-F-300 Excellent | 25 77 405 | **6,40** |
| | | DN180 | CWL-400 Excellent | 25 77 009 | **6,80** |

# Outsidewall connections and silencers

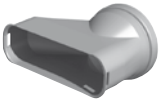
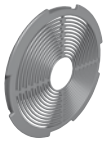
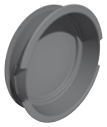
**Rebate groups:**
CWL = 22

| | Outsidewall connections | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Wall hood** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 75 806 | **89,–** |
| | **Colour: black** | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 75 807 | **91,–** |
| | | DN180 | CWL-400 Excellent | 25 75 808 | **98,–** |
| | **Wall hood** | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 75 809 | **89,–** |
| | **Colour: white (RAL 9010)** | DN160 | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 75 810 | **91,–** |
| | | DN180 | CWL-400 Excellent | 25 75 811 | **98,–** |
|  | **Double grille,** for outdoor and exhaust air<br>Colour: white | DN125 | CWL-180 Excellent, CWL-F-150 Excellent | 25 77 458 | **125,–** |
| | | DN160 | CWL-300 Excellent, CWL-F-300 Excellent, CWL-T-300 Excellent NEW | 25 77 579 | **160,–** |

| | Silencer | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Silencer,** for supply air or exhaust air<br>Length 1000mm | | | | |
| | | DN125, 50mm insulation | CWL-180 Excellent | 25 75 812 | **96,–** |
| | | DN160, 50mm insulation | CWL-300 Excellent, CWL-T-300 Excellent, CWL-F-300 Excellent | 25 77 367 | **98,–** |
| | | DN180, 50mm insulation | CWL-400 Excellent | 25 75 814 | **115,–** |
|  | **Silencer,** metal, for supply air and exhaust air<br>Sound attenuating material, closed porous acc. to DIN 1946-6 | | | | |
| | | DN125, Length 482mm | CWL-F-150 Excellent | 25 77 434 | **615,–** |
| | | DN160, Length 600mm | CWL-F-300 Excellent NEW | 25 77 606 | **615,–** |
| | **Silencer and air flow control**<br>for connection DN125 | | CWL Excellent, CWL-T Excellent CWL-F Excellent | 25 77 576 | **21,60** |
| | **Silencer and air flow control**<br>für connection floor grille | | CWL Excellent, CWL-T Excellent CWL-F Excellent | 25 77 577 | **28,80** |

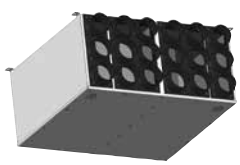
# Air distributor NEW

**Rebate groups:**
CWL = 22

| | for flexible hose system, round and flat duct | for products | Art. no. | € |
|---|---|---|---|---|
| | **Air distributor DN125–180, plastic,** for supply air or extraction<br>8 necks DN75 with 4 pipe caps<br>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor.<br>For 50x140 max. 6 connections possible.<br>**Note:** Click ring and sealing ring DN75 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 595 | **215,–** |
| | **Air distributor DN125–180, plastic,** for supply air or extraction<br>16 necks DN75 with 8 pipe caps<br>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor.<br>For 50x140 max. 12 connections possible.<br>**Note:** Click ring and sealing ring DN75 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 596 | **230,–** |
| | **Air distributor DN125–180, plastic,** for supply air or extraction<br>24 necks DN75 with 12 pipe caps<br>An adapter is required for connection of flexible hose or flat duct systems DN63, 50x100 and 50x140 to the air distributor.<br>For 50x140 max. 18 connections possible.<br>**Note:** Click ring and sealing ring DN75 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 597 | **250,–** |
| | **Adapter DN63**<br>for connection to the air distributorDN125-180, plastic<br>**Note:** Click ring and sealing ring DN63 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 598 | **7,–** |
| | **Adapter for flat duct 50x100**<br>for connection to the air distributor DN125-180, plastic<br>**Note:** Sealing ring 50x100 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 599 | **16,–** |
|  | **Adapter for flat duct 50x140**<br>for connection to the air distributor DN125-180, plastic<br>**Note:** Sealing ring 50x140 obligatory! | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 600 | **19,50** |
|  | **Orifice plate DN75** for air distributor DN125-180,<br>plastic, bag of 10 | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 589 | **32,–** |
|  | **Closing cap DN75** for air distributor DN125-180,<br>plastic | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 590 | **5,40** |
| | **Connection DN125–180** for air distributor DN125-180,<br>plastic | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 601 | **18,–** |
| | **Revisionskappe** for air distributor DN125-180,<br>plastic | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 602 | **6,60** |
| | **Attenuator kit** for air distributor DN125-180, plastic<br>consisting of 10 plug-in elements<br>Sound attenuating material, closed porous acc. to DIN 1946-6 | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | 25 77 603 | **45,–** |

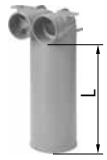
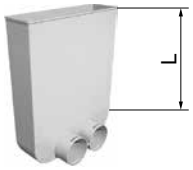
# Flexible hose system, round

**Rebate groups:**
CWL = 22

| | Flexible hose system round | for products | Art. no. | € |
|---|---|---|---|---|
| | **Air distribution hose** | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | | |
| | **with plain internal surface, with antistatic and antibacterial coating** **DN63/52,** roll 50m | | 25 77 411 | **249,–** |
| | **DN75/63,** roll 50m | | 25 77 413 | **292,–** |
| | **with plain internal surface** **DN63/52,** roll 50m | | 25 77 412 | **190,–** |
| | **DN75/63,** roll 50m | | 25 77 414 | **200,–** |
| | **Click connector for air distribution hose with antistatic and antibacterial coating** | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | | |
| | **DN63/52** | | 25 77 415 | **3,90** |
| | **DN75/63** | | 25 77 416 | **3,90** |
| | **Note:** Click ring oand sealing ring DN63/52 or DN75/63 obligatory! | | | |
| | **Sealing ring** | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | | |
| | **DN63/52,** bag of 10 | | 25 77 361 | **22,10** |
| | **DN75/63,** bag of 10 | | 25 77 360 | **23,30** |
| | **Click ring** | CWL Excellent, CWL-T Excellent<br>CWL-F Excellent | | |
| | **DN63/52,** bag of 10 | | 25 77 547 | **22,10** |
| | **DN75/63,** bag of 10 | | 25 77 548 | **23,60** |
| 5x 10x 10x | **Click connector kit for air distribution hose with antistatic and antibacterial coating**<br>consisting of:<br>5 Click connectors for air distribution hose<br>10 Sealing rings<br>10 Click rings | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | | |
| | **DN63/52** | | 25 77 555 | **63,–** |
| | **DN75/63** | | 25 77 556 | **65,–** |
|  | **Air distributor,** metal, for supply air- <u>and</u> extraction<br>incl. silencer<br>for direct installation onto CWL-F-Excellent<br>Sound attenuating material, closed porous acc. to DIN 1946-6 | | | |
| | **DN125:** 2x10 necks 75/63 with 5 pipe caps<br>Length 482mm | CWL-F-150 Excellent | 25 77 417 | **865,–** |
| | **DN160:** 2x9 necks 75/63 with 5 pipe caps<br>Length 600mm | CWL-F-300 Excellent NEW | 25 77 607 | **865,–** |
| | **Note:** Sealing ring DN75/63 obligatory! | | | |

Rebate groups:
CWL = 22

# Flexible hose system, round

| | Flexible hose system, round | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Connecting piece for valve DN125, one pipe cape and two pipe sockets**<br>incl. cover connecting piece for valve DN125<br>**DN63/52,** L = 325mm<br>**DN75/63,** L = 325mm<br>**Note:** Click ring and sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent | <br><br>25 77 294<br>25 77 295 | <br><br>**41,-**<br>**41,-** |
|  | **Connector for floor grille, one pipe cap and two pipe connectors**<br>Length L = 300mm<br>**DN63/52**<br>**DN75/63**<br>**Note:** Click ring and sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent | <br><br>25 77 281<br>25 77 575 | <br><br>**88,-**<br>**88,-** |
| | **Pipe cap for air distribution hose**<br>**DN63/52**<br>**DN75/63** | CWL Excellent, CWL-T Excellent, CWL-F Excellent | <br>25 75 835<br>25 75 824 | <br>**3,40**<br>**3,40** |
| | **Lubricant tube**<br>Contents 50ml | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 26 51 329 | **7,50** |

# Accessories flexible hose system round and flat duct

| | Flexible hose system round | for products | Art. no. | € |
|---|---|---|---|---|
| | **Extension for connecting piece DN125**<br>Length = 150mm | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 25 77 186 | **20,-** |
| | **Cover connecting piece for valve DN125**<br>Bag of 10 | | 25 77 090 | **26,20** |
| | **Transition 90° from round to flat duct 50x100**<br>**Note:** Click ring and sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 25 77 347 | **13,-** |
| | **Angular adapter 2x round DN75 to 1x flat duct 50x140**<br>**Note:** Click ring and sealing ring DN75 obligatory! | NEW | 25 77 594 | **20,60** |
| | **Universal clip for flat duct 50x100 and round tube Ø 63mm and Ø75 mm**<br>10 pieces | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 25 77 574 | **21,60** |

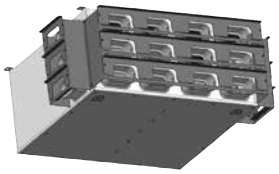
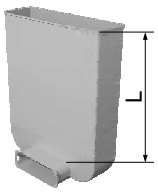
# Flat duct system Excellent

**Rebate groups:**
CWL = 22

| | Flat duct system Excellent | for products | Art. no. | € |
|---|---|---|---|---|
| | **Flat duct**<br>**with plain internal surface,**<br>**with antistatic and antibacterial coating**<br>**50x100,** roll 50m<br>**50x140,** roll 20m | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 163<br>25 77 582 | **625,–**<br>**270,–** |
| | **Closing cap for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100** bag of 10<br>**50x140** bag of 10 | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 457<br>25 77 583 | **48,–**<br>**55,–** |
| | **Bend 90° CWL for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100** vertical<br>**50x140** vertical<br>**Note:** Sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 164<br>25 77 587 | **19,–**<br>**22,–** |
| | **Bend 90° CWL for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100** horizontal<br>**50x140** horizontal<br>**Note:** Sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 165<br>25 77 586 | **19,–**<br>**22,–** |
| | **Click connector for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100**<br>**50x140**<br>**Note:** Sealing ring obligatory! | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 166<br>25 77 588 | **13,10**<br>**15,–** |
| | **Sealing ring for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100** bag of 10 | CWL Excellent, CWL-T Excellent, CWL-F Excellent | 25 76 167 | **80,–** |
| | **Sealing ring for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x140** bag of 10 | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 77 585 | **98,–** |
| | **Pipe cap for formed component**<br>**with antistatic and antibacterial coating**<br>**50x100**<br>**50x140** | CWL Excellent, CWL-T Excellent, CWL-F Excellent<br>NEW | 25 76 168<br>25 77 591 | **3,80**<br>**4,10** |

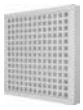
# Flat duct system Excellent

**Rebate groups:**
CWL = 22

| | Flat duct system Excellent | for products | Art. no. | € |
|---|---|---|---|---|
|  | **Air distributor,** metal, for supply air- and extraction<br>incl. silencer<br>for direct installation onto CWL-F-Excellent<br>Sound attenuating material, closed porous acc. to DIN 1946-6 | | | |
| | **DN125:** 2x6 necks 50x100 with 3 pipe caps<br>Length 482mm | CWL-F-150 Excellent | 25 77 430 | **865,-** |
| | **DN160:** 2x9 necks 50x100 with 5 pipe caps<br>Length 600mm | CWL-F-300 Excellent NEW | 25 77 608 | **865,-** |
| | **Note:** Sealing ring 50x100 obligatory! | | | |
| | **Orifice plate for flat duct**<br>**with antistatic and antibacterial coating**<br>**50x100** bag of 10. | CWL-F Excellent | 25 76 459 | **33,30** |
| | **Connecting piece for valve DN125,**<br>**two pipe necks and one pipe cap**<br>**with antistatic and antibacterial coating,**<br>incl. cover connecting piece for valve DN125 | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | | |
| | Length L = 240mm **50x100 - 90°** | | 25 76 172 | **41,-** |
| | Length L = 330mm **50x140 - 90°** | NEW | 25 77 592 | **44,-** |
| | **Note:** Sealing ring 50x100 or 50x140 obligatory! | | | |
| | **Connecting piece for floor grille,**<br>**one or two pipe necks and one pipe cap**<br>**with antistatic and antibacterial coating**<br>incl. closing cover | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | | |
| | Länge L = 220mm | | | |
| | **50x100** (two pipe necks) | | 25 76 173 | **67,-** |
| | **Note:** Sealing ring 50x100 obligatory! | | | |
|  | **Connecting piece for floor grille,**<br>**one or two pipe necks and one pipe cap**<br>**with antistatic and antibacterial coating**<br>Length L = 240mm | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | | |
| | **50x140** (one pipe neck) | NEW | 25 77 593 | **60,-** |
| | **Note:** Sealing ring 50x140 obligatory! | | | |
| | **Floor grille, metal** | CWL Excellent, CWL-T Excellent,<br>CWL-F Excellent | | |
| | white | | 25 76 175 | **67,-** |
| | stainless steel | | 25 76 176 | **67,-** |

# Air supply / extraction valves

**Rebate groups:**
CWL = 22

| | Air supply / extraction valves | for products | | Art. no. | € |
|---|---|---|---|---|---|
| | **Supply air valve, plastic, DN125**<br>incl. installation frame with rubber lip gasket | CWL Excellent, CWL-T Excellent, CWL-F Excellent | NEW | 25 77 610 | **29,–** |
| | **Supply air valve, metal, DN125**<br>incl. installation frame with rubber lip gasket | CWL Excellent, CWL-T Excellent, CWL-F Excellent | NEW | 25 77 611 | **29,–** |
| | **Exhaust air valve, plastic, DN1255**<br>incl. installation frame with rubber lip gasket | CWL Excellent, CWL-T Excellent, CWL-F Excellent | NEW | 25 77 612 | **29,–** |
| | **Filter bag** (5 pieces) | | NEW | 71 00 595 | **43,–** |
| | **Exhaust air valve, metal, DN125**<br>incl. installation frame with rubber lip gasket | CWL Excellent, CWL-T Excellent, CWL-F Excellent | NEW | 25 77 613 | **29,–** |
| | **Filter bag** (5 pieces) | | NEW | 71 00 595 | **43,–** |
|  | **Kitchen extract air valve with filter G3 (RAL 9010)** | CWL Excellent, CWL-T Excellent, CWL-F Excellent | | 25 75 834 | **143,–** |
| | **Filter matt class G3**<br>5 pieces, 200 x 190mm | | | 16 69 236 | **18,60** |
| | **Commissioning CWL** | **Prices: net** | | | |
| | without air adjustment | | | 00 99 746 | **255,–** |
| | with air adjustment | | | 00 99 748 | **350,–** |

# Filters

**Rebate groups:**
CWL = 22

| | Filters | | for products | Art. no. | € |
|---|---|---|---|---|---|
| | **Filter service set class G4**<br>295 x 140mm | 2 pieces | CWL-180, CWL-180 Excellent | 16 68 492 | **24,80** |
| | **Filter service set class G4**<br>415 x 237mm | 2 pieces | CWL-300, CWL-400 | 16 68 493 | **28,70** |
| | | 50 pieces | | 16 68 495 | **389,-** |
| | **Filter service set class G4 bypass**<br>500 x 237mm | 2 pieces | CWL-300 B, CWL-400 B | 16 68 494 | **28,70** |
| | | 50 pieces | | 16 68 496 | **389,-** |
| | **Filter service set class G4**<br>522 x 184mm | 2 pieces | CWL-300 Excellent, CWL-400 Excellent | 16 69 013 | **28,70** |
| | | 50 pieces | | 16 69 027 | **389,-** |
| | **Filter service set class G4**<br>173 x 141mm | 2 pieces | CWL-F-150 Excellent | 16 69 163 | **28,70** |
| | **Filter service set class G4**<br>245 x 177mm | 2 pieces | CWL-F-300 Excellent | 16 69 046 | **28,70** |
| | **Filter service set class G4**<br>234 x 166mm | 2 pieces | CWL-T-300 Excellent | 16 69 200 | **42,-** |
| | **Filter service set class M6**<br>415 x 237mm | 2 pieces | CWL-300, CWL-400 | 16 68 497 | **112,-** |
| | **Filter service set class M6**<br>500 x 237mm | 2 pieces | CWL-300 B, CWL-400 B | 16 68 498 | **120,-** |
| | **Filter service set class F7**<br>295 x 140mm | 2 pieces | CWL-180, CWL-180 Excellent NEW | 16 69 258 | **120,-** |
| | **Filter service set 1 x class G4 and 1 x class F7**<br>522 x 184mm | | CWL-300 Excellent, CWL-400 Excellent | 16 69 014 | **62,-** |
| | **Filter service set 1 x class G4 and 1 x class F7**<br>164 x 132mm | | CWL-F-150 Excellent | 16 69 162 | **53,-** |
| | **Filter service set 1 x class G4 and 1 x class F7**<br>245 x 177mm | | CWL-F-300 Excellent | 16 69 047 | **53,-** |
| | **Filter service set 1 x class G4 and 1 x class F7**<br>234 x 166mm | | CWL-T-300 Excellent | 16 69 199 | **53,-** |

Energiesparen und Klimaschutz serienmäßig

# Flach-Wohnungs-Lüftung CWL-F Excellent

## Frische Luft, auch wenn es mal eng wird

# CGL Comfort large area ventilation units


| | |
|---|---|
| **Central ventilation units with heat recovery** | Page 118 |
| **Accessories CGL** | Page 119 |
| **Intake / discharge accessories CGL** | Page 120 |

**The Comfort large area ventilation unit from Wolf offers energy-saving and convenient ventilation all year. Suitable for classrooms, kindergartens, conference rooms, club premises, open-plan offices and restaurants. With the high-efficiency cross/counter-flow heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air. Casing: sheet steel, powder coated (traffic white RAL 9016)**

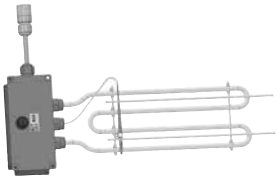
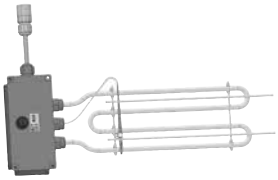
# CGL

| TYPE | | CGL li | CGL re |
|---|---|---|---|
| Max. air volume | m³/h | 1100<br>(with externally available duct pressure of approx. 100 Pa.) | 1100<br>(with externally available duct pressure of approx. 100 Pa.) |
| Recommended air volume | m³/h | 600<br>(with externally available duct pressure of approx. 550 Pa.) | 600<br>(with externally available duct pressure of approx. 550 Pa.) |
| Power consumption | | | |
| with an air volume of 500m³/h | W | 90 | 90 |
| with an air volume of 600m³/h | W | 135 | 135 |
| with an air volume of 800m³/h | W | 255 | 255 |
| Sound pressure level 1 m in front of the device | | | |
| with an air volume of 500m³/h | dB(A) | 37 | 37 |
| with an air volume of 600m³/h | dB(A) | 40 | 40 |
| with an air volume of 800m³/h | dB(A) | 45 | 45 |
| Dimensions | | | |
| Total width | mm | 1017 | 1017 |
| Total depth | mm | 508 | 508 |
| Total height | mm | 2137 | 2137 |
| Weight | kg | 250 | 250 |
| consisting of: | € | **on request** | |
| • compact, inherently stable, height-adjustable casing<br>• high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption<br>• High-performance counterflow heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation<br>• Microprocessor-controlled control system for fans, heat recovery and temperature, wired as standard<br>• Socket for BML ventilation operating module for CGL, mounted and wired in the device<br>• Flow-optimised splitter silencer for supply and extract air<br>• easily exchangeable compact panel filter: Supply air filter F7 (fine dust and pollen filter) Extract air filter F5 (fine dust filter) | | | |

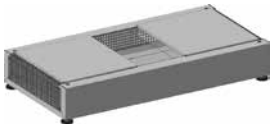
**Note:** Only possible in connection with BML ventilation control module for CGL.

| Functionally necessary accessories | Art. no. | € |
|---|---|---|
| **BML programming module for CGL**<br>• Only one BML ventilation control module for CGL is needed to actuate up to 7 CGL devices<br>• Mounted optionally in the CGL device or in the wall holder as a remote control | 68 00 152 | **364,-** |

# Accessories CGL

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Wall holder**<br>Wall holder for using the operating module BML as remote control | 27 44 275 | **27,70** |
| | **Condensate pump**<br>required if no free condensate drain is possible<br><br>consisting of:<br>Plug-in condensate pump, float switch, alarm generator and bracket,<br>up to 30 l/h and PVC hose 8mm (5m long) | 68 00 122 | **261,-** |
| | **CO2-sensor**<br>required for $CO_2$ dependent operation<br><br>Plug-in, as control variable for the $CO_2$-controlled control system | 68 00 124 | **488,-** |
| | **ISM 5 - LON-interface module**<br>to connect CGL<br>to a building management system applying<br>LON-standard network variables | 27 45 029 | **1.600,-** |
|  | **Filter pre-drying unit, 1000W**<br>recommended for an optimized unit operation,<br>plug-in electric heater including overheat safety cutout (STB) and temperature monitoring (TW) with bracket,<br>to protect the outdoor air filter from moisture penetration and to project heat recovery from frost | 68 00 120 | **219,-** |
|  | **Electric reheater. 1000W, modulating**<br>to rise the discharge temperature in case of low outside temperatures,<br>suitable for progressive re-heating of the supply air temperature, plug-in, with bracket | 68 00 121 | **219,-** |
| | **Tubular end damper DN250, with actuator (230V; open/closed)**<br>for connection on site | 25 76 453 | **488,-** |
| | **Tubular silencer DN250**<br><br>Length: 600mm<br>insulation circumferentially 50mm (attenuation 6dB / 250Hz) | 21 37 635 | **257,-** |

# Intake / discharge accessories CGL

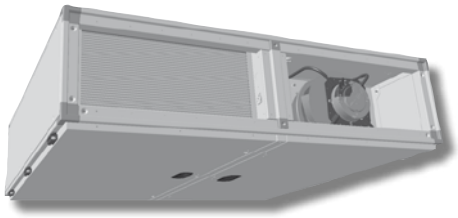
| | Accessories | | Art. no. | € |
|---|---|---|---|---|
|  | **Intake silencer**<br>to attenuate the noise by about 5dB with adjustable feet.<br>Reduction of the total sound level 1m in front of the CGL by up to 3dB.<br>Intake: left / right hand side, back | | 68 00 994 | **585,–** |
| | **Intake plenum universal**<br>with adjustable feet.<br>Intake:<br>left / right hand side, back Ø 250mm<br>left / right hand side 205 x 408mm<br>back 205 x 915mm | | 68 00 995 | **1.245,–** |
| | **Discharge plenum vertical with tubular dampers,**<br>with sound attenuating casing,<br>discharge louvre horizontally and vertically adjustable;<br>tubular damper connection Ø 250mm with actuators 230V open/closed 5Nm. | CGL li<br>CGL re | 68 01 000<br>68 02 067 | **1.770,–**<br>**1.770,–** |
| | **Discharge plenum verticall**<br>with sound attenuating casing,<br>discharge louvre horizontally and vertically adjustable;<br>terminal box (230V) for subsequent tubular end dampers;<br>tube connection Ø 250mm | CGL li<br>CGL re | 68 00 996<br>68 02 068 | **930,–**<br>**930,–** |
| | **Discharge plenum horizontal,**<br>with sound attenuating casing,<br>discharge louvre horizontally and vertically adjustable;<br>terminal box (230V) for possible subsequent tubular en dampers;<br>tube connection Ø 250mm | CGL li<br>CGL re | 68 00 997<br>68 02 069 | **1.020,–**<br>**1.020,–** |
| | **Lifting device**<br>for a subsequent installation of an intake silencer | | 68 00 952 | **164,–** |
| | **Compact panel filter M5**<br>particle filter<br>CGL: a 372, b 393, c 96 | | 16 68 664 | **156,–** |
| | **Compact panel filter F7**<br>particle and pollen filter<br>CGL: a 404, b 592, c 96 | | 16 68 665 | **174,–** |
| | **Commissioning of 1 basic device**<br>Appointment necessary<br>(at least 8 working days before actual commissioning) | Net price | 00 99 799 | **420,–** |
| | **Commissioning of further accessories**<br>Heating or cooling or multiple devices | | on request | **on request** |

# CFL Comfort flat ventilation unit


| | |
|---|---|
| Combined supply and extract air unit CFL-WRG | Page 122 |
| Supply and extract air unit CFL-EC | Page 123 |
| Device accessories CFL | Page 124 |
| Control systems WRS | Page 128 |
| Control accessories CFL | Page 129 |

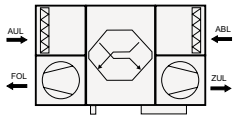
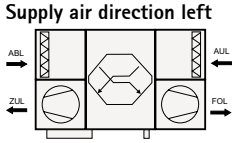
## CKL Compact comfort ventilation unit Page 131

## CRL Comfort rotary heat exchanger ventilation unit Page 143



**The Comfort flat ventilation unit from Wolf (ceiling-mounted device with operation from below) offers energy-saving and comfortable ventilation all year round. Suitable for conference rooms, club premises, open-plan offices, restaurants, kindergartens and classrooms. Casing: Galvanised sheet steel. Device according to VDI 6022**

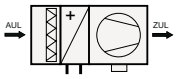
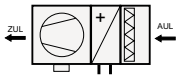
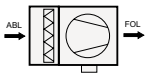
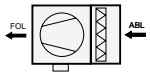
# CFL-WRG

| TYPE | | CFL 10-WRG | CFL 15-WRG | CFL 22-WRG | CFL 32-WRG |
|---|---|---|---|---|---|
| Air volume | m³/h | 1000 | 1500 | 2200 | 3200 |
| Dimensions | | | | | |
| Length | mm | 1322 | 1322 | 1525 | 1932 |
| Width | mm | 1017 | 1423 | 1830 | 1932 |
| Height | mm | 367 | 367 | 411 | 495 |
| Weight | kg | 130 | 160 | 240 | 340 |
| consisting of:<br>• high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, stepless controllable (0 - 10V) via latest EC motor technology with low energy consumption (1 x 230V)<br>• High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation<br>• compact panel filter F7 (supply air) / F5 (extract air)<br>• External sensor, supply air sensor, extract air sensor, icing sensor, 2 x differential pressure switches for filter monitoring as standard, wired and installed in the device<br>• $CO_2$ or air quality sensor can optionally be integrated in the device, electrically pluggable execution<br>• WRS-K controller attached to the outside and wired<br>• BMK air conditioning control module, enclosed loose<br>• Temperature control, integrated:<br>Supply air temperature control (Factory setting)<br>Extract air temperature control (adjustable on the control unit)<br>Room temperature control (adjustable on the control unit)<br>• 1 set of suspension brackets (4 pcs), enclosed loose | | High-efficiency HRS up to more than 90% | | | |
| **Versions for each connection side in supply air direction right / left:**<br>• **Combined supply and extract air unit CFL-WRG-PWW** incl. WRS-K control system for actuating an lphw booster heater bank as well as a ch.w. cooler or a direct expansion coil*<br>• **Combined supply and extract air unit CFL-WRG-E** incl. WRS-K control system for actuating an electric booster heater bank as well as a ch.w. cooler or a direct expansion coil* | | | | | |
| • **Connection side**<br>**Supply air direction right**<br>  <br>**Combined supply and extract air units CFL-WRG-PWW / CFL-WRG-E** | | **on request** | | | |
| • **Connectionseite**<br>**Supply air direction left**<br>  <br>**Combined supply and extract air units CFL-WRG-PWW / CFL-WRG-E** | | | | | |
| • **Access doors**<br> <br>**2 additional access doors for an easy filter service** | | ✓ | ✓ | ✓ | - |
| • **Transport sleigh**<br> <br>**fitted, for transport facilitation in case of low access openings** | | - | - | - | ✓ |

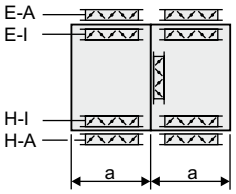
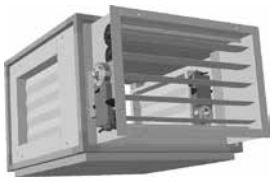
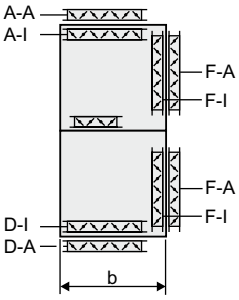
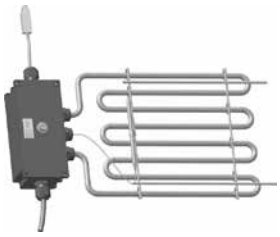
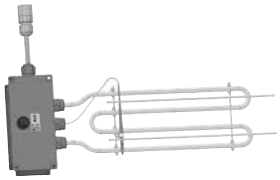
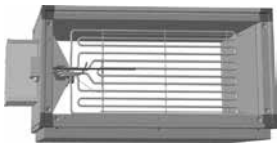
* see page 124 for booster heater banks, see page 125 for ch.w. cooling coil and dx-coil

**The Comfort flat ventilation unit from Wolf (ceiling-mounted device with operation from below) offers energy-saving and comfortable ventilation all year round. Suitable for conference rooms, club premises, open-plan offices, restaurants, kindergartens and classrooms.**
**Casing: Galvanised sheet steel.**
**Device according to VDI 6022**

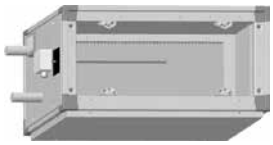
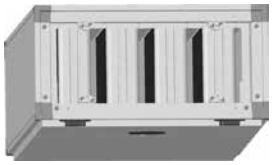
# CFL-EC

| TYPE | | CFL 10-EC | CFL 15-EC | CFL 22-EC | CFL 32-EC |
|---|---|---|---|---|---|
| Air volume | m³/h | 1300 | 1800 | 2600 | 3500 |
| Dimensions CFL-EC-ZUL | | | | | |
| Length | mm | 712 | 712 | 813 | 813 |
| Width | mm | 508 | 712 | 915 | 966 |
| Height | mm | 367 | 367 | 411 | 495 |
| Weight CFL-EC-ZUL | kg | 47 | 50 | 64 | 82 |
| Dimensions CFL-EC-ABL | | | | | |
| Length | mm | 508 | 508 | 610 | 610 |
| Width | mm | 508 | 712 | 915 | 966 |
| Height | mm | 367 | 367 | 411 | 495 |
| Weight CFL-EC-ABL | kg | 37 | 38 | 48 | 61 |
| consisting of:<br>• mcompact panel filter F7 (supply air unit) / F5 (extract air unit) with differential pressure switch for filter monitoring, mounted as standard<br>• Supply air unit CFL-ZUL with lphw heat exchanger incl. frost protection thermostat, mounted as standard<br>• high-efficiency, one-sided sucking, high-performance radial fan, stepless controllable (0 - 10V) via latest EC motor technology with low energy consumption (1 x 230V)<br>• EC fan on terminal box, pre-wired<br>• compact panel filter F7 (supply air) / F5 (extract air)<br>• 1 set of suspension brackets (4 pcs), enclosed loose | | | | | |
| • **Connection side Supply air direction right** | **Supply air unit CFL-EC-ZUL**   | **on request** | | | |
| • **Connection side Supply air direction left** | **Supply air unit CFL-EC-ZUL**   | | | | |
| • **Connection side Exhaust air direction right** | **Extract air unit CFL-EC-ABL**   | | | | |
| • **Connection side Exhaust air direction left** | **Extract air unit CFL-EC-ABL**   | | | | |

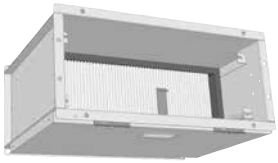
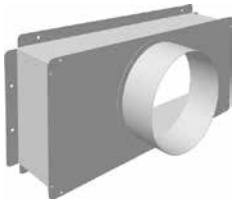
# Accessories for CFL comfort flat ventilation unit

| Accessories | for products | Art. no. | € |
|---|---|---|---|
| **Mixing/exhaust air section short** (MF-K)<br>Intake and discharge position („E" or „H") and option (external „A" or internal „I") are freely selctable<br>View:<br>  <br>CFL \| a<br>CFL 10-MF-K \| 347<br>CFL 15-MF-K \| 347<br>CFL 22-MF-K \| 391 | CFL 10, CFL 15, CFL 22 | on request | **on request** |
| **Actuator, 24V stepless for louvre damper**<br>rotating to left or right, incl. mounting bracket | CFL-MF-K | on request | **on request** |
|  **Mixing/exhaust air section long** (MF-L)<br>Intake and discharge position („A", „D" or „F") and option (external „A" or internal „I") are freely selctable<br>Exception:<br>AI and FI or DI and FI not possible due to limited space!<br>Plan view:<br>  <br>CFL \| b<br>CFL 10-MF-L \| 508<br>CFL 15-MF-L \| 712<br>CFL 22-MF-L \| 915 | CFL 10, CFL 15, CFL 22 | on request | **on request** |
| **Actuator, 24V stepless for louvre damper**<br>rotating to left or right, incl. mounting bracket | CFL-MF-L | on request | **on request** |
|  **Electric preheater bank 1 x 230V / 50Hz, single stage**<br>can be integrated into the unit as an option; electrical plug-in design | | | |
| Output: 1kW | CFL 10-WRG | 62 17 892 | **244,–** |
| Output: 2kW | CFL 15-WRG | 62 17 893 | **415,–** |
| Output: 2kW | CFL 22-WRG | 62 17 894 | **415,–** |
| Output: 4kW | CFL 32-WRG | 62 19 413 | **680,–** |
|  **Electric booster heater bank 1 x 230V / 50Hz, stepless (0–10V)**<br>can be integrated into the unit as an option; electrical plug-in design<br>Output: 1kW | CFL 10-WRG-E | 62 17 895 | **244,–** |
|  **Electric heater bank extension module, stepless (0–10V)**<br>can be fitted to the unit as an option<br>with supply air sensor<br>incl. 1 set of mounting brackets (2 items) | | | |
| Dimensions: 712 x 367 x 407mm (B x H x L)<br>Output max. 4kW | CFL 15-WRG-E connect.side SUP right<br>CFL 15-WRG-E connect.side SUP left | 62 17 896<br>62 18 659 | **1.320,–**<br>**1.320,–** |
| Dimensions: 915 x 411 x 407mm (B x H x L)<br>Output max. 6kW | CFL 22-WRG-E connect.side SUP right<br>CFL 22-WRG-E connect.side SUP left | 62 17 897<br>62 18 660 | **1.565,–**<br>**1.565,–** |
| Dimensions: 966 x 495 x 407mm (B x H x L)<br>Output max. 8kW | CFL 32-WRG-E connect.side SUP right<br>CFL 32-WRG-E connect.side SUP left | 62 19 414<br>62 19 415 | **2.260,–**<br>**2.260,–** |

# Accessories for CFL comfort flat ventilation unit

| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
|  | **lphw heater extension module** | | | |
| | can be fitted to the unit as an option | | | |
| | with supply air sensor and anti-frost thermostat | | | |
| | incl. 1 set of mounting brackets (2 items) | | | |
| | Dimensions: 508 x 367 x 407mm (B x H x L) | CFL 10-WRG-PWW con.side SUP right | 62 17 898 | **830,–** |
| | Output max. 15kW | CFL 10-WRG-PWW con.side SUP left | 62 18 661 | **830,–** |
| | Dimensions: 712 x 367 x 407mm (B x H x L) | CFL 15-WRG-PWW con.side SUP right | 62 17 899 | **915,–** |
| | Output max. 23kW | CFL 15-WRG-PWW con.side SUP left | 62 18 662 | **915,–** |
| | Dimensions: 915 x 411 x 407mm (B x H x L) | CFL 22-WRG-PWW con.side SUP right | 62 17 900 | **1.050,–** |
| | Output max. 33kW | CFL 22-WRG-PWW con.side SUP left | 62 18 663 | **1.050,–** |
| | Dimensions: 966 x 495 x 407mm (B x H x L) | CFL 32-WRG-PWW con.side SUP right | 62 19 416 | **1.285,–** |
| | Output max. 48kW | CFL 32-WRG-PWW con.side SUP left | 62 19 417 | **1.285,–** |
| | **Extension module cooling coil for ch.w. (chilled water)** | | | |
| | can be fitted to the unit as an option | | | |
| | with filter insert facility for compact panel filter | | | |
| | incl. 1 set of mounting brackets (2 items) | | | |
| | Dimensions: 508 x 367 x 712mm (B x H x L) | CFL 10 connection side SUP right | 62 18 750 | **1.130,–** |
| | Output max. 6kW | CFL 10 connection side SUP left | 62 18 753 | **1.130,–** |
| | Dimensions: 712 x 367 x 712mm (B x H x L) | CFL 15 connection side SUP right | 62 18 751 | **1.330,–** |
| | Output max. 10kW | CFL 15 connection side SUP left | 62 18 754 | **1.330,–** |
| | Dimensions: 915 x 411 x 712mm (B x H x L) | CFL 22 connection side SUP right | 62 18 752 | **1.565,–** |
| | Output max. 15kW | CFL 22 connection side SUP left | 62 18 755 | **1.565,–** |
| | Dimensions: 966 x 495 x 813mm (B x H x L) | CFL 32 connection side SUP right | 62 19 418 | **1.910,–** |
| | Output max. 21kW | CFL 32 connection side SUP left | 62 19 419 | **1.910,–** |
| | **Extension module cooling coil for dx-coil** | | | |
| | can be fitted to the unit as an option | | | |
| | with filter insert facility for compact panel filter | | | |
| | incl. 1 set of mounting brackets (2 items) | | | |
| | Dimensions: 508 x 367 x 712mm (B x H x L) | CFL 10 connection side SUP right | 62 18 756 | **1.115,–** |
| | Output max. 5kW | CFL 10 connection side SUP left | 62 18 759 | **1.115,–** |
| | Dimensions: 712 x 367 x 712mm (B x H x L) | CFL 15 connection side SUP right | 62 18 757 | **1.315,–** |
| | Output max. 9kW | CFL 15 connection side SUP left | 62 18 760 | **1.315,–** |
| | Dimensions: 915 x 411 x 712mm (B x H x L) | CFL 22 connection side SUP right | 62 18 758 | **1.535,–** |
| | Output max. 13kW | CFL 22 connection side SUP left | 62 18 761 | **1.535,–** |
| | Dimensions: 966 x 495 x 813mm (B x H x L) | CFL 32 connection side SUP right | 62 19 420 | **1.880,–** |
| | Output max. 18kW | CFL 32 connection side SUP left | 62 19 421 | **1.880,–** |
|  | **Silencer extension module** | | | |
| | can be fitted to the unit as an option | | | |
| | with filter insert facility for compact panel filter | | | |
| | incl. 1 set of mounting brackets (2 items) | | | |
| | Dimensions: 508 x 367 x 1017mm (B x H x L) | CFL 10 | 62 17 907 | **930,–** |
| | Dimensions: 712 x 367 x 1017mm (B x H x L) | CFL 15 | 62 17 908 | **1.055,–** |
| | Dimensions: 915 x 411 x 1017mm (B x H x L) | CFL 22 | 62 17 909 | **1.250,–** |
| | Dimensions: 966 x 495 x 1017mm (B x H x L) | CFL 32 | 62 19 422 | **1.530,–** |

# Accessories for CFL comfort flat ventilation unit

| Accessories | | for products | Art. no. | € |
|---|---|---|---|---|
| | | | | |
| **Louvre damper,** length 140mm | | | | |
| for duct | 409 x 256mm | CFL 10 | 62 17 919 | **125,–** |
| galvanised sheet steel | 612 x 256mm | CFL 15 | 62 17 920 | **141,–** |
| Tightness categories to DIN EN 1751 | 815 x 306mm | CFL 22 | 62 17 921 | **164,–** |
| | 866 x 370mm | CFL 32 | 62 19 423 | **201,–** |
| | | | | |
| **Filter section with integrated attenuating function,** length 215mm | | | | |
| for compact panel filter | | | | |
| | compact panel filter M5 | | | |
| | 409 x 247mm | CFL 10 | 62 19 093 | **750,–** |
| | 612 x 247mm | CFL 15 | 62 19 095 | **775,** |
| | 815 x 291mm | CFL 22 | 62 19 097 | **860,–** |
| | 866 x 361mm | CFL 32 | 62 19 427 | **1.055,–** |
| | compact panel filter F7 | | | |
| | 409 x 247mm | CFL 10 | 62 19 092 | **760,–** |
| | 612 x 247mm | CFL 15 | 62 19 094 | **775,–** |
| | 815 x 291mm | CFL 22 | 62 19 096 | **870,–** |
| | 866 x 361mm | CFL 32 | 62 19 428 | **1.065,–** |
| | compact panel filter F9 | | | |
| | 409 x 247mm | CFL 10 | 62 19 085 | **895,–** |
| | 612 x 247mm | CFL 15 | 62 19 086 | **925,–** |
| | 815 x 291mm | CFL 22 | 62 19 087 | **1.030,–** |
| | 866 x 361mm | CFL 32 | 62 19 429 | **1.260,–** |
|  | | | | |
| **HEPA filter section with integrated attenuating function,** length 508mm, | | NEW | | |
| HEPA filter H13 | 408 x 250mm | CFL 10 | 62 19 842 | **1.280,–** |
| | 612 x 250mm | CFL 15 | 62 19 843 | **1.450,–** |
| | 815 x 295mm | CFL 22 | 62 19 844 | **1.570,–** |
| | 866 x 359mm | CFL 32 | 62 19 845 | **1.615,–** |
| | | | | |
| **230 V servomotor for opening/closing louvre damper, loose** incl. mounting bracket | | CFL | 62 17 922 | **288,–** |
| | | | | |
| **Canvas flange, 4-hole profile frame,** length 130mm | | | | |
| for connection to duct | | | | |
| 405 x 243mm | | CFL 10 | 62 17 923 | **71,–** |
| 608 x 243mm | | CFL 15 | 62 17 924 | **73,–** |
| 811 x 287mm | | CFL 22 | 62 17 925 | **83,–** |
| 862 x 350mm | | CFL 32 | 62 19 424 | **101,–** |
|  | | | | |
| **Adaptor module,** length 130mm | | | | |
| for square to round connection | | | | |
| Connection diameter 250mm, length 130mm | | CFL 10 | 62 17 910 | **104,–** |
| Connection diameter 250mm, length 130mm | | CFL 15 | 62 17 911 | **113,–** |
| Connection diameter 315mm, length 130mm | | CFL 22 | 62 17 912 | **130,–** |
| Connection diameter 450mm, length 300mm | | CFL 32 | 62 19 425 | **158,–** |
| | | | | |
| **Insulating frame,** length 140mm | | | | |
| for connection to ductl | | | | |
| 409 x 247mm | | CFL 10 | 62 17 913 | **102,–** |
| 612 x 247mm | | CFL 15 | 62 17 914 | **105,–** |
| 815 x 291mm | | CFL 22 | 62 17 915 | **115,–** |
| 866 x 354mm | | CFL 32 | 62 19 426 | **141,–** |

# Accessories for CFL comfort flat ventilation unit

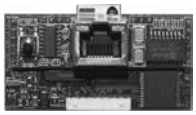
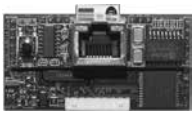
| | Accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Siphon with non-return device**<br>1¼", suitable for intake and pressure sides, supplied loose | CFL | 20 70 349 | **124,-** |
| | **Compact panel filter M5,** depth 48mm<br>particle filter | | | |
| | 389 x 287mm | CFL 10-WRG | 16 68 944 | **79,-** |
| | 592 x 287mm | CFL 15-WRG | 16 68 826 | **81,-** |
| | 795 x 333mm | CFL 22-WRG | 16 68 954 | **96,-** |
| | 842 x 406mm | CFL 32-WRG | 16 69 201 | **118,-** |
| | **Compact panel filter F7,** depth 48mm<br>particle and pollen filter | | | |
| | 389 x 287mm | CFL 10-WRG | 16 68 945 | **93,-** |
| | 592 x 287mm | CFL 15-WRG | 16 68 827 | **96,-** |
| | 795 x 333mm | CFL 22-WRG | 16 68 955 | **104,-** |
| | 842 x 406mm | CFL 32-WRG | 16 69 202 | **135,-** |
| | **Compact panel filter F9,** depth 48mm<br>particle and pollen filter | | | |
| | 389 x 287mm | CFL 10-WRG | 16 68 946 | **94,-** |
| | 592 x 287mm | CFL 15-WRG | 16 68 837 | **113,-** |
| | 795 x 333mm | CFL 22-WRG | 16 68 956 | **142,-** |
| | 842 x 406mm | CFL 32-WRG | 16 69 204 | **155,-** |
| | **Compact panel filter M5,** depth 96mm<br>particle filter | | | |
| | 389 x 287mm | CFL 10-EC-ABL | 16 69 005 | **87,-** |
| | 592 x 287mm | CFL 15-EC-ABL | 16 69 006 | **107,-** |
| | 795 x 333mm | CFL 22-EC-ABL | 16 69 007 | **217,-** |
| | 842 x 406mm | CFL 32-EC-ABL | 16 69 182 | **229,-** |
| | **Compact panel filter F7,** depth 96mm<br>particle and pollen filter | | | |
| | 389 x 287mm | CFL 10-EC-ZUL | 16 69 008 | **111,-** |
| | 592 x 287mm | CFL 15-EC-ZUL | 16 69 009 | **113,-** |
| | 795 x 333mm | CFL 22-EC-ZUL | 16 69 010 | **229,-** |
| | 842 x 406mm | CFL 32-EC-ZUL | 16 69 203 | **248,-** |
| | **Compact panel filter F9,** depth 96mm<br>particle and pollen filter | | | |
| | 389 x 287mm | CFL 10-EC-ZUL | 16 69 179 | **113,-** |
| | 592 x 287mm | CFL 15-EC-ZUL | 16 69 180 | **127,-** |
| | 795 x 333mm | CFL 22-EC-ZUL | 16 69 181 | **233,-** |
| | 842 x 406mm | CFL 32-EC-ZUL | 16 69 183 | **253,-** |
| | **HEPA filter H13,** depth 292mm | NEW | | |
| | 393 x 200mm | CFL 10 | 16 69 219 | **412,-** |
| | 597 x 200mm | CFL 15 | 16 69 220 | **535,-** |
| | 800 x 250mm | CFL 22 | 16 69 221 | **620,-** |
| | 851 x 314mm | CFL 32 | 16 69 222 | **665,-** |

# Accessories for CFL comfort flat ventilation unit

Changed art. no. are marked in red.

| | Control systems WRS | for products | Art. no. | € |
|---|---|---|---|---|
| | **Ventilation operating module BML**<br>• Room temperature-compensated temperature control<br>• Graphic display with backlight<br>• Simple menu navigation through plain text display<br>• Operation using rotary knob with push-function<br>• 4 function keys for frequently used functions information, temperature, speed setting, fresh air proportion)<br>• Mounted optionally in the ventilation module or in the wall holder as remote control<br>• Only one ventilation operating module BML is needed to operate up to 7 zones<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface | CFL-EC-ZUL | 27 44 634 | **364,–** |
| | **Wall holder**<br>• Wall holder for using the ventilation operating module BML as remote control | CFL-EC-ZUL | 27 44 275 | **27,70** |
| | **Ventilation module LM2**<br>• Ventilation module LM2 for controlling the room temperature by means of the rotation speed or the mixer control (lphw or ch.w.)<br>• Variable motor control in conjunction with EC motor<br>• Simple configuration of the controller by selecting predefined system diagrams<br>• Control of a boiler (lphw) and a chiller (ch.w.)<br>• Demand-optimised boiler water temperature demand via eBus<br>• eBus interface with automatic energy management<br>• Ventilation operating module BML can be clipped on<br>• Open / Close damper control<br>• Supply / Exhaust air unit, controllable | CFL-EC-ZUL | 27 44 604 | **390,–** |
| | **Wiring board**<br>Room temperature control via mixing valve control for lphw and ch.w.<br>Control of a boiler (lphw) and a chiller (ch.w.) | CFL-EC-ZUL | on request | **on request** |
| | **Outside, ceiling or room temperature sensor** | CFL-WRG, CFL-EC-ZUL | 27 92 021 99 | **28,70** |
| | **ISM 5 – LON-interface module**<br>to connect ventilation module LM2 to a building management system applying LON-standard network variables | CFL-EC-ZUL | 27 45 029 | **1.600,–** |

# Accessories for CFL comfort flat ventilation unit

| | Control accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **All-pole Isolator AR6, loose**<br>lockable **5,5kW** | CFL | 27 38 376 | **45,-** |
| | **for increased electrical power 18,5kW** | CFL | 27 38 382 | **129,-** |
| | **All-pole Isolator,**<br>in control wiring board fitted and wired | CFL 10-WRG, CFL 15-WRG, CFL 22-WRG | on request | **on request** |
| | **LON Interface module for WRS-K**<br>for fitting on the controller | CFL-WRG | 60 74 317 | **327,-** |
|  | **BacNet Interface module for WRS-K**<br>for fitting on the controller | CFL-WRG | 60 74 318 | **635,-** |
|  | **Ethernet Interface module for WRS-K**<br>for fitting on the controller | | 60 74 404 | **565,-** |
| | **Modbus Interface module WRS-K**<br>for fitting on the controller | CFL-WRG | 60 74 323 | **188,-** |
| | **KNX Interface module for WRS-K**<br>for fitting on the controller | CFL | on request | **on request** |
| | **Air quality sensor**<br>Mixed gas sensor for determining the air quality;<br>plug-in design | CFL-WRG | 62 18 390 | **464,-** |
| | **$CO_2$ sensor**<br>required for $CO_2$-controlled operation,<br>plug-in design | CFL-WRG | 62 18 389 | **488,-** |
| | **Supply/extract air temperature sensor, duct, loose** | CFL-EC-ZUL<br>CFL-EC-ABL<br>CFL-WRG in connection<br>with cooler extension module | 27 44 740 | **98,-** |
| | **Duct hygrostat, loose** with wall bracket | CFL NEW | 62 19 886 | **302,-** |
| | **Room hygrostat, loose** | CFL NEW | 27 44 996 | **124,-** |

# Accessories for CFL comfort flat ventilation unit

| | Control accessories | for products | Art. no. | € |
|---|---|---|---|---|
| | **Remote control BMK-F**<br>wall installation | CFL-WRG NEW | 27 44 751 | **227,–** |
| | **Touchpanel BMK-T10**<br>Operating possibility for several CFL units<br>front installation on site | | 27 45 362 | **2.890,–** |
| | **Mixing valve for lphw heat exchanger, loose**<br>type acc.to coil selection | CFL-WRG, CFL-EC-ZUL | | |
| | DN 10 KVS 0.63 | | 27 44 988 | **83,–** |
| | DN 10 KVS 1.0 | | 27 44 526 | **83,–** |
| | DN 10 KVS 1.6 | | 27 44 101 | **83,–** |
| | DN 15 KVS 2.5 | | 27 44 107 | **83,–** |
| | DN 20 KVS 4.0 | | 27 44 102 | **83,–** |
| | DN 25 KVS 6.3 | | 27 44 103 | **127,–** |
| | DN 25 KVS 10 | | 27 44 104 | **289,–** |
| | **Screwing kit for mixing valve for lphw heat exchanger**<br>consisting of:<br>3 union nuts, 3 inlay nuts<br>and 3 flat gaskets | | | |
| | ½" DN 10 KVS 0.63<br>DN 10 KVS 1.0<br>DN 10 KVS 1.6 | | 20 71 740 | **30,40** |
| | ¾" DN 15 KVS 2.5 | | 20 71 741 | **47,–** |
| | 1" DN 20 KVS 4.0 | | 20 71 742 | **21,80** |
| | 1¼" DN 25 KVS 6.3 | | 20 71 743 | **26,10** |
| | 1½" DN 25 KVS 10 | | 20 71 744 | **28,80** |
| | **Actuator for mixing valve, loose**<br>control signal 24V DC, 0-10V | CFL-WRG<br>CFL-EC-ZUL | 27 44 100 | **230,–** |
| | **Analogue time switch**<br>for setback mode with 7-day program | CFL-EC-ZUL<br>CFL-EC-ABL | 27 36 251 | **150,–** |
| | **Variable speed controller, loose**<br>for continuous operation of one or<br>several unit heaters with EC-motors (0 - 10V) | CFL-EC-ZUL<br>CFL-EC-ABL | 27 45 100 | **197,–** |
| | **Air flow control** | CFL 10, 15, 22 NEW | 62 19 879 | **520,–** |
| | | CFL 32 | 62 19 880 | **520,–** |
| | **Constant pressure control** | CFL 10, 15, 22 NEW | 62 19 881 | **520,–** |
| | | CFL 32 | 62 19 882 | **520,–** |
| | **Commissioning of 1 basic device**<br>Appointment necessary<br>(at least 8 working days before actual commissioning) | Net price | 00 99 797 | **680,–** |
| | **Commissioning of further accessorie**<br>Heating or cooling or multiple devices | | on request | **on request** |

# CKL Compact comfort ventilation unit


| | |
|---|---|
| **Internal unit with vertical duct connection CKL-iV** | Page 132 |
| **Internal unit with horizontal duct connection CKL-iH** | Page 133 |
| **External unit with horizontal duct connection CKL-A** | Page 134 |
| **Device accessories CKL** | Page 136 |
| **Control accessories CKL** | Page 140 |
| **Special unit designs CKL** | Page 141 |

**Das Comfort-Kompakt-Lüftungsgerät von Wolf bietet ganzjährig energiesparendes und komfortables Lüften. Geeignet for Unterrichtsräume, Konferenzräume, Großraumbüros und Gaststätten, usw. Mit dem hocheffizienten Gegenstrom-Plattenwärmetauscher aus Aluminium wird der Abluft die enthaltene Wärme entzogen und an die frische Zuluft übertragen Gehäuse: Stahlblech gepulvert (verkehrsweiß RAL 9016), Zwischensteg (silber RAL 9006) CKL-iV Lüftungsgerät for Innenaufstellung mit Kanalanschluss vertikal**

**Rebate group:**
CKL = 28

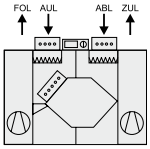
# CKL-iV

| TYPE | | CKL-iV-1300 | CKL-iV-2200 | CKL-iV-3000 | CKL-iV-4400 | CKL-iV-5800 |
|---|---|---|---|---|---|---|
| Max. air volume | m³/h | 1300 (with externally available pressure of approx. 300 Pa.) | 2200 (with externally available pressure of approx. 400 Pa.) | 3000 (with externally available pressure of approx. 250 Pa.) | 4400 (with externally available pressure of approx. 600 Pa.) | 5800 (with externally available pressure of approx. 600 Pa.) |
| Electrical nominal power of the two fans | kW | 0,9 | 2,0 | 2,0 | 6,0 | 6,0 |
| Mains voltage (50/60Hz) | V / AC | 1 x 230 | 3 x 400 | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | | | |
| Length | mm | 1525 | 2033 | 2033 | 2237 | 2237 |
| Width (incl. lock) | mm | 750 | 750 | 950 | 1360 | 1665 |
| Height (incl. damper, feet) | mm | 1315 | 1721 | 1721 | 1745 | 1745 |
| Weight | kg | 250 | 360 | 450 | 645 | 725 |

Device properties:

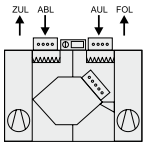
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation
- Temperature control with control unit, integrated:
  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Supply air / extract air / outdoor air / icing sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- Outdoor- and extract air external damper, standard
- easily exchangeable compact panel filter:
  Outdoor air filter F7 (fine dust and pollen filter)
  Extract air filter M5 (fine dust filter)
- Stainless steel condensate pans EHA/SUP standard, condensate connecting piece directed downwards
- CKL-iV-4400 and CKL-iV-5800 may be split widthways, control pivoting, for an easier transport

- **Operator side**
  **Supply air direction right**




incl. control system for actuating electric booster heater bank*
or LPHW reheater as well as ch.w. cooling coil or dx-coil

- **Operator side**
  **Supply air direction left**




incl. control system for actuating electric booster heater bank*
or LPHW reheater as well as ch.w. cooling coil or dx-coil

**on request**

* see page 136 for booster heater banks

**The Comfort compact ventilation unit from Wolf offers energy-saving and comfortable ventilation all year round. Suitable for classrooms, conference rooms, open-plan offices and restaurants, etc.**
**With the high-efficiency counter-flow plate heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air**
**Casing: sheet steel, powder-coated (traffic white RAL 9016), intermediate bar (silver RAL 9006)**
**CKL-iH ventilation unit for indoor installation with horizontal duct connection**

**Rebate group:**
CKL = 28

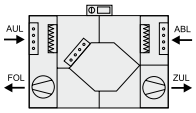
# CKL-iH

| TYPE | | CKL-iH-1300 | CKL-iH-2200 | CKL-iH-3000 | CKL-iH-4400 | CKL-iH-5800 |
|---|---|---|---|---|---|---|
| Max. air volume | m³/h | 1300 (with externally available pressure of approx. 300 Pa.) | 2200 (with externally available pressure of approx. 400 Pa.) | 3000 (with externally available pressure of approx. 250 Pa.) | 4400 (with externally available pressure of approx. 600 Pa.) | 5800 (with externally available pressure of approx. 600 Pa.) |
| Electrical nominal power of the two fans | kW | 0,9 | 2,0 | 2,0 | 6,0 | 6,0 |
| Mains voltage (50/60Hz) | V / AC | 1 x 230 | 3 x 400 | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | | | |
| Length | mm | 1525 | 2033 | 2033 | 2237 | 2237 |
| Width (incl. lock) | mm | 750 | 750 | 950 | 1360 | 1665 |
| Height (incl. control, feet) | mm | 1305 | 1711 | 1711 | 1711 | 1711 |
| Weight | kg | 250 | 360 | 450 | 630 | 725 |

Device properties:

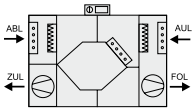
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation
- Temperature control with control unit, integrated:
  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Supply air / extract air / outdoor air / icing sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- Outdoor- and extract air external damper, standard
- easily exchangeable compact panel filter:
  Outdoor air filter F7 (fine dust and pollen filter)
  Extract air filter M5 (fine dust filter)
- Stainless steel condensate pans EHA/SUP standard, condensate connecting piece directed downwards
- CKL-iH-4400 and CKL-iH-5800 may be split widthways, control pivoting, for an easier transport

- **Operator side**
  **Supply air direction right**




incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil

- **Operator side**
  **Supply air direction left**




incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil

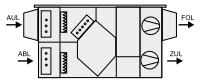
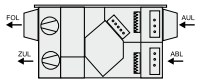
**on request**

* see page 136 for booster heater banks

**The Comfort compact ventilation unit from Wolf offers energy-saving and comfortable ventilation all year round. Suitable for classrooms, conference rooms, open-plan offices and restaurants, etc. With the high-efficiency counter-flow plate heat exchanger made of aluminium, the heat contained in the extract air is removed and transferred to the fresh supply air.**
**Casing: Steel sheet, powder coated (traffic white RAL 9016), Intermediate bar, roof, intake hood, discharge hood (silver RAL 9006)**
**CKL-A outdoor device, weatherproof with horizontal duct connection**

**Rebate group:**
CKL = 28

# CKL-A

| TYPE | | CKL-A-1300 | CKL-A-2200 | CKL-A-3000 | CKL-A-4400 | CKL-A-5800 |
|---|---|---|---|---|---|---|
| Max. air volume | m³/h | 1300 (with externally available pressure of approx. 280 Pa.) | 2200 (with externally available pressure of approx. 380 Pa.) | 3000 (with externally available pressure of approx. 230 Pa.) | 4400 (with externally available pressure of approx. 600 Pa.) | 5800 (with externally available pressure of approx. 600 Pa.) |
| Electrical nominal power of the two fans | kW | 0,9 | 2,0 | 2,0 | 6,0 | 6,0 |
| Mains voltage (50/60Hz) | V / AC | 1 x 230 | 3 x 400 | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | | | |
| Length | mm | 1728 | 2237 | 2237 | 2237 | 2237 |
| Length (incl. hoods) | mm | 2111 | 2780 | 2780 | 2780 | 2780 |
| Width (incl. roof) | mm | 812 | 812 | 1015 | 1422 | 2237 |
| Height | mm | 1322 | 1728 | 1728 | 1728 | 1728 |
| Height (without base frame, without roof) | mm | 1017 | 1423 | 1423 | 1423 | 1423 |
| Weight | kg | 315 | 460 | 555 | 715 | 800 |
| Device properties:<br>• compact, inherently stable casing<br>• weatherproof base frame, mounted, standard<br>• lifting lugs mounted, standard<br>• intake hood with droplet eliminator and stainless steel condensate pan mounted, standard discharge hood mounted, standard<br>• high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption<br>• High performance counter-flow plate heat exchanger made of aluminium for heat recovery with integrated bypass for summer operation<br>• BMK air conditioning control module, enclosed loose<br>• Temperature control, integrated: Supply air temperature control (supply air sensor integrated) -<br>• factory setting Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit<br>• Supply air / extract air / outdoor air / icing sensors, integrated<br>• Filter pressure monitor, standard for outdoor and extract air filter<br>• Internal outdoor and extract air damper, standard<br>• easily exchangeable compact panel filter: Outdoor air filter F7 (fine dust and pollen filter) Extract air filter M5 (fine dust filter)<br>• Stainless steel condensate pans EHA/SUP standard, condensate<br>• connecting piece directed downwards | | | | | | |
| • **Operator side Supply air direction right**  incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil | | **on request** | | | | |
| • **Operator side Supply air direction left**  incl. control system for actuating electric booster heater bank* or LPHW reheater as well as ch.w. cooling coil or dx-coil | | | | | | |

* see page 136 for booster heater banks

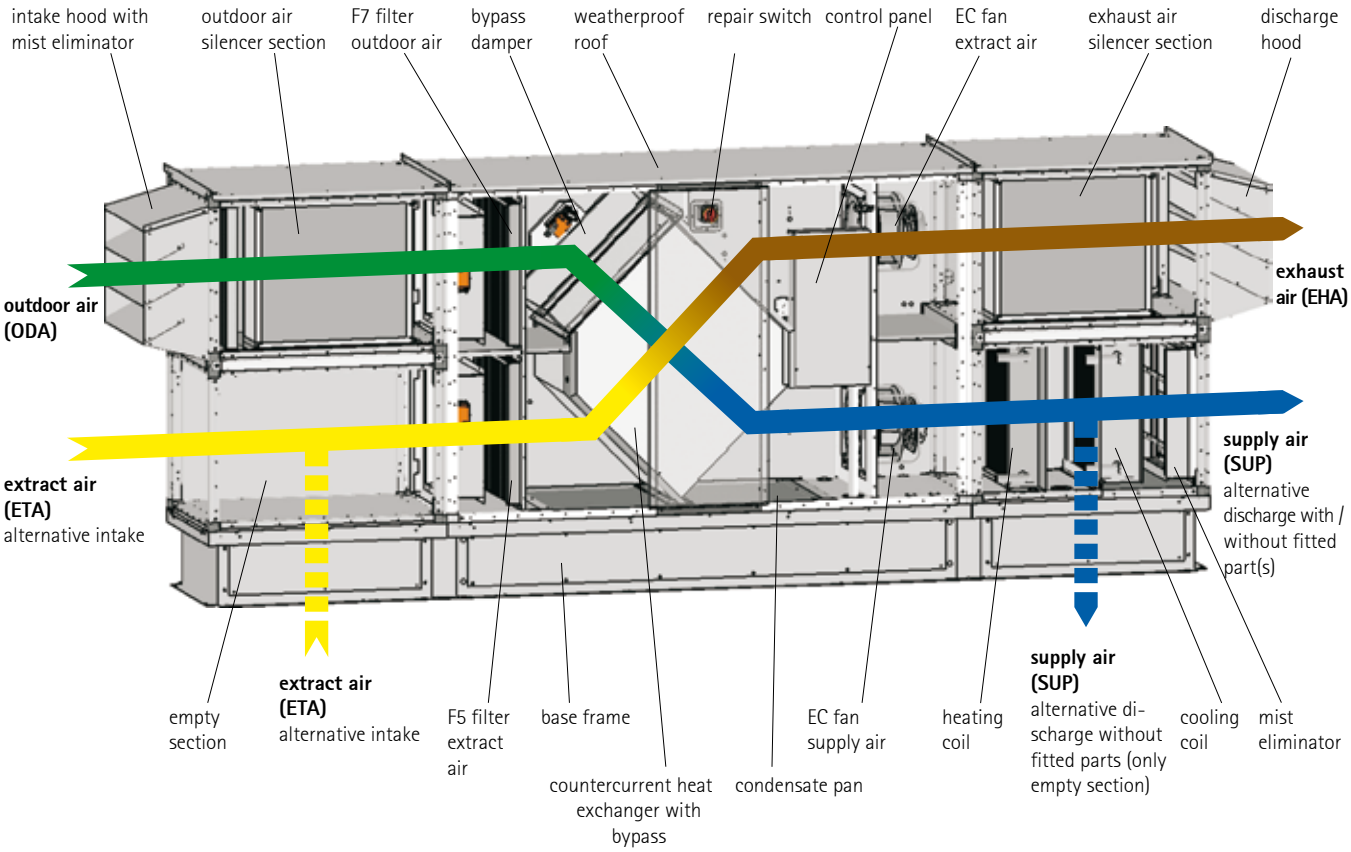
# Possible unit design versions CKL-A/-iH

**Possible unit design versions CKL-A/-iH**

**CKL-A/-iH**
External unit, weatherproof, with optional duct connection horizontal / vertical depending on unit version and installation situation.

Depending on different thermodynamical (heating, cooling) and acoustical (sound) requirements, our self-developped design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).

**Example:** Maximum view of possible unit design versions.




**Note only for CKL-A:** Extract air intake and supply air outlet can be arranged as required, horizontally or vertically. Please note that a horizontal arrangement of the supply air outlet is only possible when there are fitted parts like heating or cooling coil and mist eliminator downstream the supply air fan. To direct the supply air outlet downwards (despite fitted parts) a supplementary empty section can be added.

# Device accessories CKL

**Rebate group:**
CKL = 28

| Accessories | | Art. no. | € |
|---|---|---|---|
| | | | |
| **Electric pre-heater bank; single stage for pre-drying filter**<br>Recommended for the optimal operation of the device | | | |
| 1000W; 1x230V/50Hz | for CKL-iV/iH/A-1300 | 68 02 213 | **650,–** |
| 2000W; 1x230V/50Hz | for CKL-iV-2200, 3000 | 68 02 215 | **1.140,–** |
| | for CKL-iH/A-2200, 3000 | 68 02 216 | **1.140,–** |
| 4000W; 2x230V/50Hz | for CKL-iV-4400, 5800 | 68 02 536 | **1.155,–** |
| | for CKL-iH/A-4400, 5800 | 68 02 221 | **1.155,–** |
| plug-in electric heater bank with high limit thermostat, frost monitoring and bracket for the protection of the outdoor air filter against moisture penetration or as frost protection for the heat recovery | | | |
| | | | |
| **Electric booster heater bank**<br>for increasing the supply air temperature in case of low outside temperatures;<br>built-in and wired; | | | |
| 1000W; 1x230V/50Hz | for CKL-iH-1300 | 68 02 230 | **710,–** |
| | for CKL-iV/A-1300 | 68 02 214 | **710,–** |
| 4000W; 3x400V/50Hz | for CKL-iV-2200 | 68 02 217 | **910,–** |
| | for CKL-iH/A-2200 | 68 02 218 | **910,–** |
| 6000W; 3x400V/50Hz | for CKL-iV-3000 | 68 02 219 | **1.000,–** |
| | for CKL-iH/A-3000 | 68 02 220 | **1.000,–** |
| | | | |
| **Heat exchanger lphw (low pressure hot water)**<br>CO/AL heat exchanger with frost protection thermostat, wired | for CKL-iV-1300 | 68 00 458 | **585,–** |
| | for CKL-iH/A-1300 | 68 00 501 | **585,–** |
| | for CKL-iV-2200 | 68 01 159 | **665,–** |
| | for CKL-iH/A-2200 | 68 01 160 | **665,–** |
| | for CKL-iV-3000 | 68 00 491 | **755,–** |
| | for CKL-iH/A-3000 | 68 00 676 | **755,–** |
| | for CKL-A-4400 | 68 01 481 | **1.035,–** |
| | for CKL-iV-4400 | 68 02 644 | **1.035,–** |
| | for CKL-iV-5800 | 68 02 645 | **1.140,–** |
| | for CKL-A-5800 | 68 01 482 | **1.140,–** |
| **Note:** Extension module (HCDE-section) required for CKL CKL-iH-4400, 5800! | | | |
| | | | |
| **Siphon with non-return valve (set = 2 items)**<br>1¼", intake side, supplied loose<br>(fitted as standard in CKL .. CKL-iH-4400, 5800) | for CKL-iV/A<br>for CKL-iH-1300, 2200, 3000 | 20 71 436 | **272,–** |
| | | | |
| **Insulating frame** | | | |
| 596 x 205mm | for CKL-iV-1300 (set = 4 items) | 68 01 043 | **252,–** |
| 596 x 307mm | for CKL-iV-2200 (set = 4 items) | 68 01 145 | **284,–** |
| 799 x 307mm | for CKL-iV-3000 (set = 4 items) | 68 01 044 | **296,–** |
| 1222 x 358mm | for CKL-iV-4400 (set = 4 items) | 68 02 548 | **576,–** |
| 1527 x 358mm | for CKL-iV-5800 (set = 4 items) | 68 02 621 | **660,–** |
| 612 x 409mm | for CKL-A-1300 (set = 2 items) | 68 01 045 | **148,–** |
| 612 x 612mm | for CKL-A-2200 (set = 2 items) | 68 01 146 | **170,–** |
| 815 x 612mm | for CKL-A-3000 (set = 2 items) | 68 01 046 | **192,–** |
| 1222 x 612mm | for CKL-A-4400 (set = 2 items) | 68 01 485 | **238,–** |
| 1527 x 612mm | for CKL-A-5800 (set = 2 items) | 68 01 634 | **274,–** |
| 612 x 409mm | for CKL-iH-1300 (set = 4 items) | 68 01 047 | **296,–** |
| 612 x 612mm | for CKL-iH-2200 (set = 4 items) | 68 01 147 | **340,–** |
| 815 x 612mm | for CKL-iH-3000 (set = 4 items) | 68 01 048 | **384,–** |
| 1222 x 612mm | for CKL-iH-4400 (set = 4 items) | 68 02 554 | **476,–** |
| 1527 x 612mm | for CKL-iH-5800 (set = 4 items) | 68 02 555 | **548,–** |

# Device accessories CKL

**Rebate group:**
CKL = 28

| Accessories | | Art. no. | € |
|---|---|---|---|
| | | | |
| **Felxible connection** | | | |
| 592 x 201mm | for CKL-iV-1300 (set = 4 items) | 68 00 360 | **252,-** |
| 592 x 303mm | for CKL-iV-2200 (set = 4 items) | 68 01 153 | **284,-** |
| 795 x 303mm | for CKL-iV-3000 (set = 4 items) | 68 00 361 | **296,-** |
| 1218 x 354mm | for CKL-iV-4400 (set = 4 items) | 68 02 567 | **432,-** |
| 1523 x 354mm | for CKL-iV-5800 (set = 4 items) | 68 02 568 | **484,-** |
| 608 x 405mm | for CKL-A-1300 (set = 2 items) | 68 00 362 | **126,-** |
| 608 x 608mm | for CKL-A-2200 (set = 2 items) | 68 01 154 | **144,-** |
| 811 x 608mm | for CKL-A-3000 (set = 2 items) | 68 00 363 | **148,-** |
| 1218 x 608mm | for CKL-A-4400 (set = 2 items) | 68 01 486 | **230,-** |
| 1523 x 608mm | for CKL-A-5800 (set = 2 items) | 68 01 635 | **260,-** |
| 608 x 405mm | for CKL-iH-1300 (set = 4 items) | 68 00 623 | **252,-** |
| 608 x 608mm | for CKL-iH-2200 (set = 4 items) | 68 01 155 | **288,-** |
| 811 x 608mm | for CKL-iH-3000 (set = 4 items) | 68 00 624 | **296,-** |
| 1218 x 608mm | for CKL-iH-4400 (set = 4 items) | 68 02 556 | **460,-** |
| 1523 x 608mm | for CKL-iH-5800 (set = 4 items) | 68 02 557 | **520,-** |
| | | | |
| **Adaptor box rectangular to round for vertical air direction (set = 2 items)** | | | |
| Diameter 315mm | for CKL-iV-1300 | 68 00 480 | **904,-** |
| Diameter 400mm | for CKL-iV-2200 | 68 01 178 | **940,-** |
| Diameter 450mm | for CKL-iV-3000 | 68 00 481 | **966,-** |
| Diameter 560mm | for CKL-iV-4400 | 68 02 609 | **1.900,-** |
| (Insulating frame obligatory) | for CKL-iV-5800 | 68 02 659 | **2.010,-** |
| | | | |
| **Insulating adaptor cone from rectangular to round for horizontal air direction** | | | |
| Diameter 315mm | for CKL-A-1300 (set = 2 items) | 68 00 482 | **376,-** |
| Diameter 400mm | for CKL-A-2200 (set = 2 items) | 68 01 169 | **430,-** |
| Diameter 450mm | for CKL-A-3000 (set = 2 items) | 68 00 483 | **482,-** |
| Diameter 560mm | for CKL-A-4400 (set = 2 items) | 68 01 488 | **566,-** |
| | for CKL-A-5800 (set = 2 items) | 68 01 637 | **982,-** |
| Diameter 315mm | for CKL-iH-1300 (set = 4 items) | 68 00 625 | **752,-** |
| Diameter 400mm | for CKL-iH-2200 (set = 4 items) | 68 01 170 | **860,-** |
| Diameter 450mm | for CKL-iH-3000 (set = 4 items) | 68 00 626 | **964,-** |
| Diameter 560mm | for CKL-iH-4400 (set = 4 items) | 68 02 558 | **1.132,-** |
| | for CKL-iH-5800 (set = 4 items) | 68 02 559 | **1.964,-** |
| | | | |
| **Silencer, length 600mm**<br>all-round insulation 90mm | | | |
| Diameter 315mm (Attenuation 8dB / 250Hz) | for CKL-1300 | 21 37 865 | **405,-** |
| Diameter 400mm (Attenuation 6dB / 250Hz) | for CKL-2200 | 21 37 964 | **435,-** |
| Diameter 450mm (Attenuation 6dB / 250Hz) | for CKL-3000 | 21 37 866 | **464,-** |
| Diameter 560mm (Attenuation 5dB / 250Hz) | for CKL-4400, 5800 | 21 37 983 | **555,-** |
| | | | |
| **Frost protection heating**<br>for siphon | for CKL-A | 27 45 272 | **830,-** |

# Device accessories CKL

NEW

**Rebate group:**
CKL = 28

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Outdoor air silencer section**<br>horizontal air flow<br>incl. tray and outdoor air filter F7 (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |
| | **Extract air silencer section**<br>horizontal air flow<br>incl. outdoor air filter F7 (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |
| | **Supply air/Exhaust air silencer section**<br>for horizontal air flow (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |
| | **Heating coil - Cooling coil - DE section (HCCCDE)**<br>horizontal air flow for supply air bottom (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |
| | **Empty section**<br>for horizontal air flow (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |
| | **Empty section**<br>for horizontal air flow bottom (L x T x H)<br>1017 x 750 x 508mm — for CKL-iH/A-1300<br>1017 x 750 x 712mm — for CKL-iH/A-2200<br>1017 x 955 x 712mm — for CKL-iH/A-3000<br>1017 x 1360 x 712mm — for CKL-iH/A-4400<br>1017 x 1665 x 712mm — for CKL-iH/A-5800 | on request | **on request** |

# Device accessories CKL

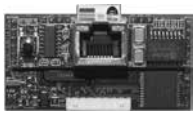
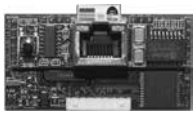
NEW

**Rebate group:**
CKL = 28

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Cooling coil section**<br>for horizontal air flow only -iH- (L x T x H)<br>611 x 750 x 508mm — for CKL-iH-1300<br>611 x 750 x 712mm — for CKL-iH-2200<br>611 x 955 x 712mm — for CKL-iH-3000<br>611 x 1360 x 712mm — for CKL-iH-4400<br>611 x 1665 x 712mm — for CKL-iH-5800 | on request | **on request** |
| | **DX-coil section**<br>for horizontal air flow only -iH- (L x T x H)<br>611 x 750 x 508mm — for CKL-iH-1300<br>611 x 750 x 712mm — for CKL-iH-2200<br>611 x 955 x 712mm — for CKL-iH-3000<br>611 x 1360 x 712mm — for CKL-iH-4400<br>611 x 1665 x 712mm — for CKL-iH-5800 | on request | **on request** |
| | **Heating coil section**<br>for horizontal air flow only -iH- (L x T x H)<br>611 x 750 x 508mm — for CKL-iH-1300<br>611 x 750 x 712mm — for CKL-iH-2200<br>611 x 955 x 712mm — for CKL-iH-3000<br>611 x 1360 x 712mm — for CKL-iH-4400<br>611 x 1665 x 712mm — for CKL-iH-5800 | on request | **on request** |

# Control accessories CKL

**Rebate group:**
CKL = 28
Changed art. no. are marked in red.

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Air quality sensor**<br>Mixed gas sensor for determining the air quality;<br>plug-in design | 68 00 484 | **464,–** |
| | **$CO_2$ sensor**<br>required for $CO_2$-controlled operation,<br>plug-in design | 68 00 485 | **488,–** |
| | **Outside or room temperature sensor** | 27 92 021 99 | **28,70** |
| | **Outside or room temperature sensor, loose** with wall bracket NEW | 62 19 886 | **302,–** |
| | **Room hygrostat, loose** NEW | 27 44 996 | **124,–** |
| | **Remote control BMK-F** for CKL-iV<br>wall installation | 27 44 751 | **227,–** |
| | **LON Interface module for WRS-K**<br>for fitting on the controller | 60 74 317 | **327,–** |
|  | **BacNet Interface module for WRS-K**<br>for fitting on the controller | 60 74 318 | **635,–** |
|  | **Ethernet Interface module for WRS-K**<br>for fitting on the controller | 60 74 404 | **565,–** |
| | **Modbus Interface module for WRS-K**<br>for fitting on the controller | 60 74 323 | **188,–** |
| | **KNX Interface module for WRS-K**<br>for fitting on the controller | on request | **on request** |

# Special unit design options CKL

**Rebate group:**
CKL = 28

| | Control systems | for products | Art. no. | € |
|---|---|---|---|---|
| | **Touchpanel BMK-T10**<br>Operating possibility for several CKL units<br>front installation on site | | 27 45 362 | **2.890,-** |
| | **Air flow control** | for CKL-1300, 2200, 3000 | 68 00 486 | **520,-** |
| | | for CKL-4400, 5800 | 68 00 487 | **520,-** |
| | **Constant pressure control** | for CKL-1300, 2200, 3000 | 68 00 488 | **520,-** |
| | | for CKL-4400, 5800 | 68 00 489 | **520,-** |
| | **Accessories** | | Art. no. | € |
| | **Compact panel filter M5,** depth 48mm<br>particle filter | | | |
| | 592 x 287mm | for CKL-1300 | 16 68 826 | **81,-** |
| | 592 x 592mm | for CKL-2200 | 16 69 012 | **105,-** |
| | 592 x 404mm | for CKL-3000 (set = 2 items) | 68 01 312 | **187,-** |
| | 592 x 592mm | for CKL-4400 (set = 2 items) | 68 01 489 | **210,-** |
| | 592 x 592mm (2 items)<br>592 x 287mm (1 items) | for CKL-5800 (set = 3 items) | 68 01 643 | **291,-** |
| | **Compact panel filter F7,** depth 48mm<br>particle and pollen filter | | | |
| | 592 x 287mm | for CKL-1300 | 16 68 827 | **96,-** |
| | 592 x 592mm | for CKL-2200 | 16 68 998 | **115,-** |
| | 592 x 404mm | for CKL-3000 (set = 2 items) | 68 01 313 | **212,-** |
| | 592 x 592mm | for CKL-4400 (set = 2 items) | 68 01 490 | **230,-** |
| | 592 x 592mm (2 items)<br>592 x 287mm (1 items) | for CKL-5800 (set = 3 items) | 68 01 644 | **326,-** |
| | **Commissioning of 1 basic device**<br>Appointment necessary<br>(at least 8 working days before actual commissioning) | **Net price** | 00 99 798 | **645,-** |
| | **Commissioning of further accessories**<br>Heating or cooling or multiple devices | | on request | **on request** |

Energiesparen und Klimaschutz serienmäßig

# Das neue Comfort-Schwimmbadgerät CKL-Pool

## Hält die Feuchte dort, wo sie sein soll NEW

## Die Vorteile im Überblick

- Innengerät, speziell für die Be- und Entlüftung sowie die Entfeuchtung von kleinen geschlossenen Schwimmhallen konzipiert
- Luftmenge: 1.500-3.000 $m^3/h$
- Hocheffiziente Wärmerückgewinnungssysteme und mögliche Wärmepumpenfunktion (je nach Betriebsart)
- Als Freiläufer ausgeführte, stufenlos regelbare EC-Ventilatoren
- Die außen und innen beschichteten Geräte sind, wie generell bei der Comfort-Klasse, intern anschlussfertig verrohrt und verdrahtet und erlauben somit eine einfache und schnelle Inbetriebnahme
- Werkseitig montierte und integrierte Regelung

Für weitere Informationen wenden Sie sich ganz einfach an Ihren zuständigen Wolf-Verkaufsberater.

# CRL Comfort rotary heat exchanger ventilation unit


| | | |
|---|---|---|
| **Comfort rotary heat exchanger ventilation unit** | **CRL-iD** | Page 144 |
| | **CRL-iH** | Page 146 |
| | **CRL-A** | Page 148 |
| | **CRL-iDH** | Page 150 |
| **Device accessories CKL** | | Page 152 |
| **Control CRL** | | Page 156 |
| **Special unit design** | | Page 157 |

**Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.**
**High efficiency rotary heat wheel heat exchanger of aluminium**
**Casing: sheet steel, powder-coated (traffic white RAL 9016),**
**Access door rotary heat exchanger (silver RAL 9006)**
**CRL-iD ventilation unit for indoor installation with vertical/horizontal duct connection**
**heat recovery up to 90% and humidity recovery up to over 90%**

**Rebate groups:**
CRL = 28

# CRL-iD

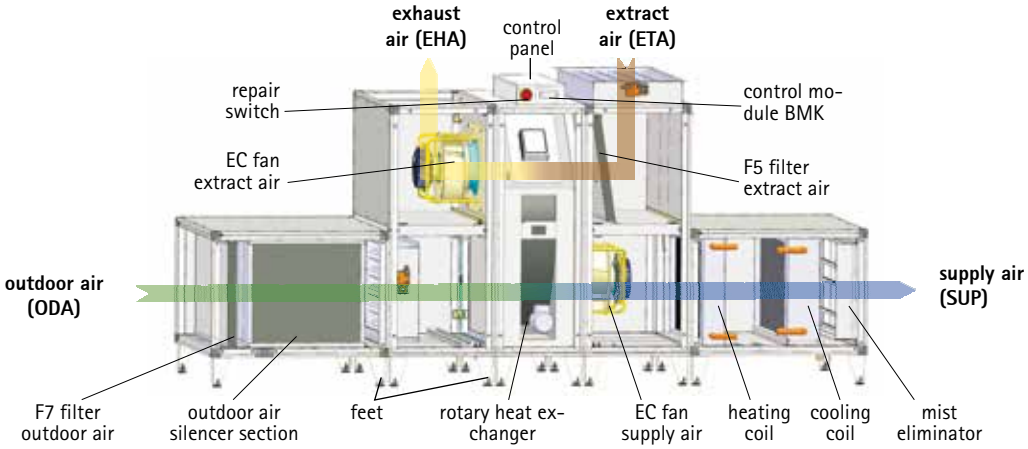
| TYPE | | CRL-iD-4800 | CRL-iD-6200 | CRL-iD-9000 |
|---|---|---|---|---|
| Max. air volume | m³/h | 4800 (with externally available pressure of approx. 450 Pa.) | 6200 (with externally available pressure of approx. 680 Pa.) | 9000 (with externally available pressure of approx. 800 Pa.) |
| Max electrical nominal power of the two fans | kW | 3,4 | 6,0 | 10,8 |
| max. current consumption of both fans | A | 5,2 | 9,2 | 17 |
| Mains voltage (50/60Hz) | V | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | |
| Length | mm | 1728 | 1932 | 2136 |
| Width (incl. lock) | mm | 1360 | 1665 | 2070 |
| Height (incl. control, feet) | mm | 1722 | 1722 | 1925 |
| Weight | kg | 590 (180 + 230 + 180) | 715 (220 + 275 + 220) | 845 (275 + 295 + 275) |
| **Condensation rotor** | | **on request** | | |
| **Enthalpy rotor** | | | | |
| **Sorption rotor** | | | | |

Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- Temperature control with control unit, integrated:
  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- External and internal outdoor air and extract air damper, standard
- easily exchangeable compact panel filter
  Outdoor air filter F7 (fine dust and pollen filter)
  Extract air filter M5 (fine dust filter)
- Compact three-part casing construction for optimized bringing-in splitting

* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

**Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).**
**Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections**

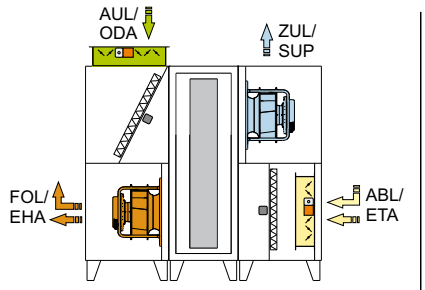


# possible unit design versions CRL-iD

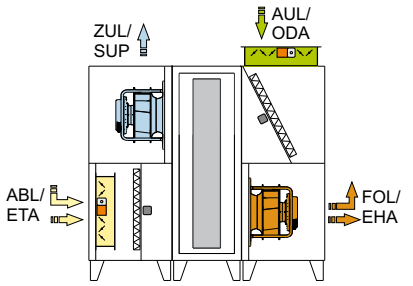
Access side in supply air direction, right

Access side in supply air direction, left

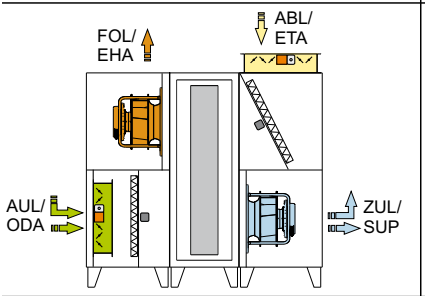
-R1



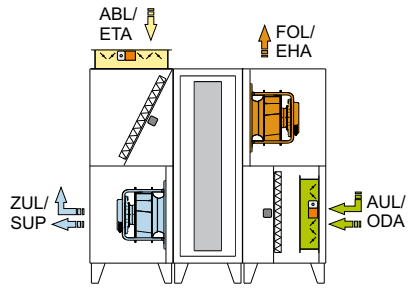

-L1



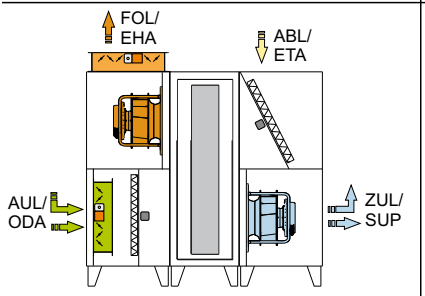

-R2



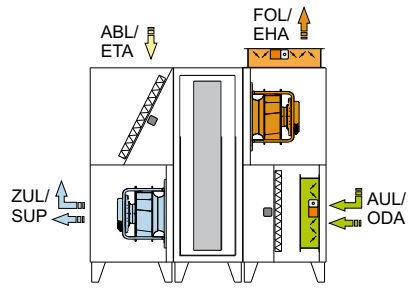

-L2



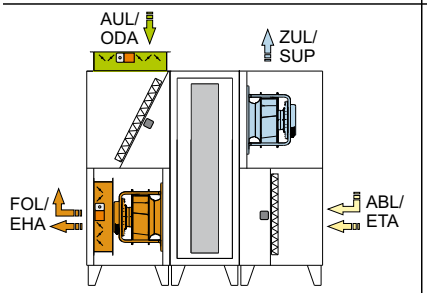

-R3



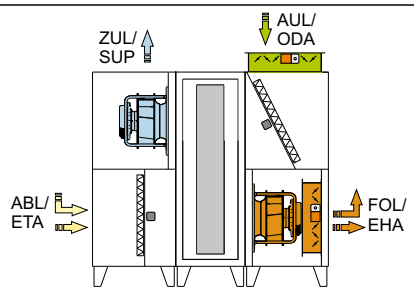

-L3



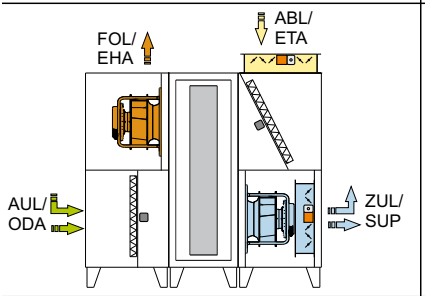

-R4



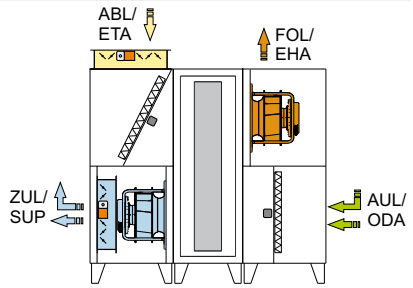

-L4



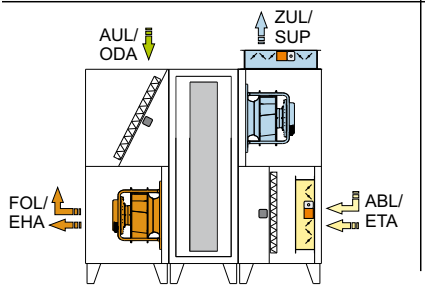

-R5



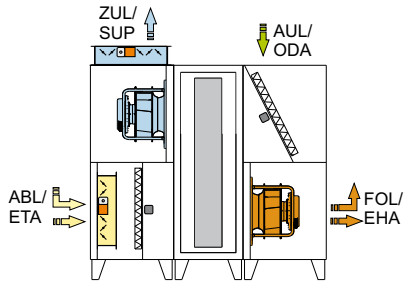

-L5




-R6




-L6



**Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.**
**High efficiency rotary heat wheel heat exchanger of aluminium**
**Casing: sheet steel, powder-coated (traffic white RAL 9016),**
**Access door rotary heat exchanger (silver RAL 9006)**
**CRL-iH ventilation unit for indoor installation with horizontal duct connection**
**heat recovery up to 90% and humidity recovery up to over 90%**

**Rebate groups:**
CRL = 28

# CRL-iH

| TYPE | | CRL-iH-4800 | CRL-iH-6200 | CRL-iH-9000 |
|---|---|---|---|---|
| Max. air volume | m³/h | 4800 (with externally available pressure of approx. 450 Pa.) | 6200 (with externally available pressure of approx. 680 Pa.) | 9000 (with externally available pressure of approx. 800 Pa.) |
| Max electrical nominal power of the two fans | kW | 3,4 | 6,0 | 10,8 |
| max. current consumption of both fans | A | 5,2 | 9,2 | 17 |
| Mains voltage (50/60Hz) | V | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | |
| Length | mm | 1728 | 1932 | 2136 |
| Width (incl. lock) | mm | 1360 | 1665 | 2070 |
| Height (incl. control, feet) | mm | 1716 | 1716 | 1919 |
| Weight | kg | 590 (180 + 230 + 180) | 715 (220 + 275 + 220) | 845 (275 + 295 + 275) |
| **Condensation rotor** | **€** | **on request** | | |
| **Enthalpy rotor** | **€** | | | |
| **Sorption rotor** | **€** | | | |

Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
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  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature
- sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
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- easily exchangeable compact panel filter
  Outdoor air filter F7 (fine dust and pollen filter)
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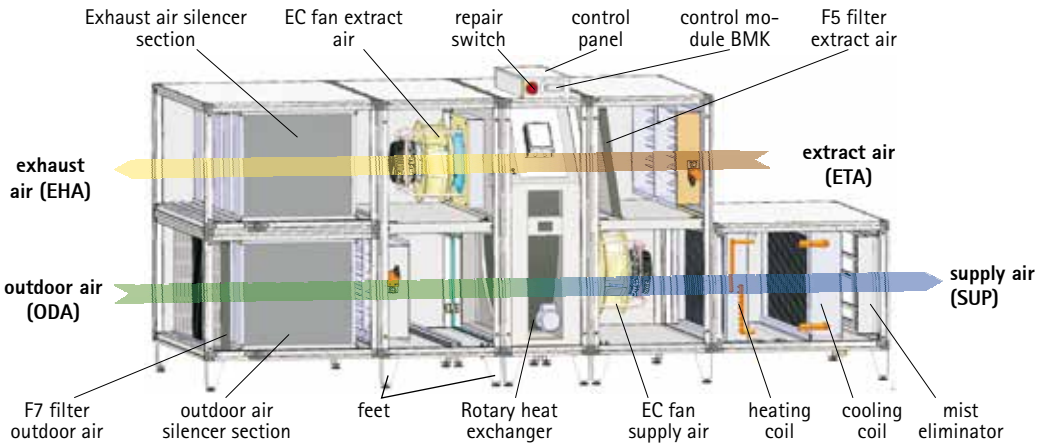
- Compact three-part casing construction for optimized bringing-in splitting

* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

**Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).**
**Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections**

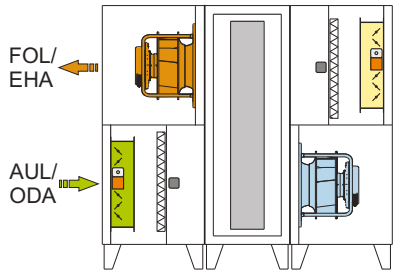


# possible unit design versions CRL-iH

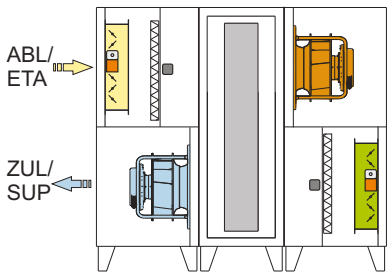
Access side in supply air direction, right

Access side in supply air direction, left

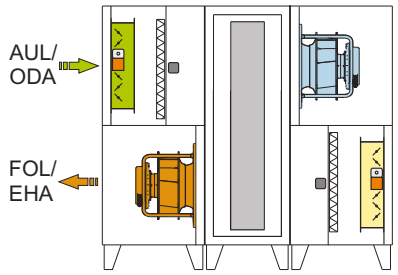
-R1



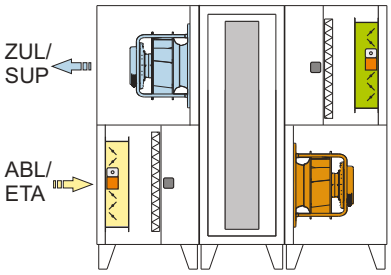

-L1



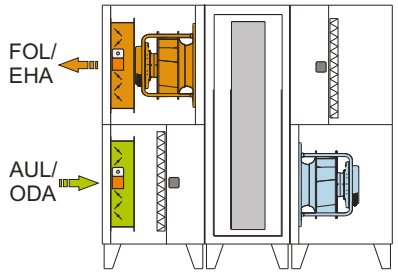

-R2



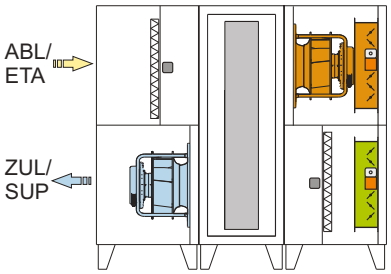

-L2



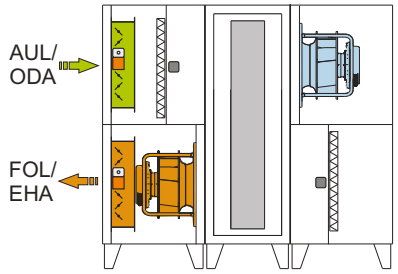

-R3



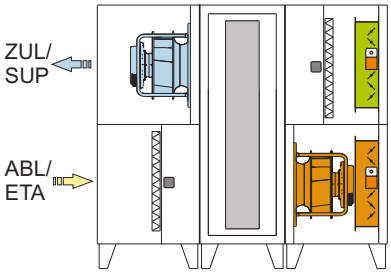

-L3



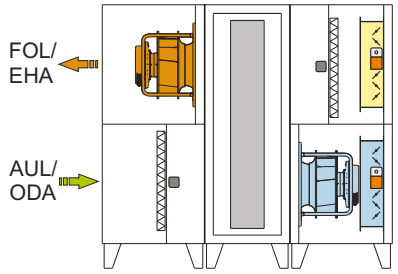

-R4



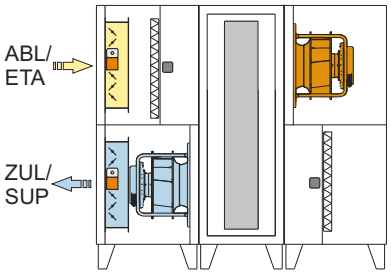

-L4



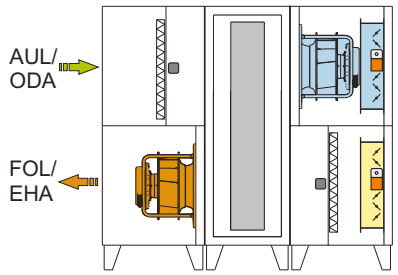

-R5



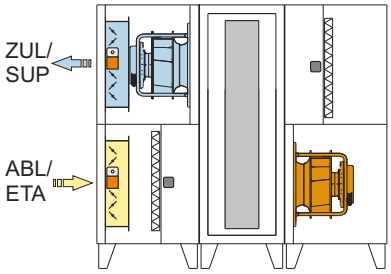

-L5




-R6




-L6



**Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.**
**High efficiency rotary heat wheel heat exchanger of aluminium**
**Casing: sheet steel, powder-coated (traffic white RAL 9016),**
**Access door rotary heat exchanger (silver RAL 9006)**
**CRL-A ventilation unit for indoor installation with horizontal duct connection**
**heat recovery up to 90% and humidity recovery up to over 90%**

**Rebate groups:**
CRL = 28

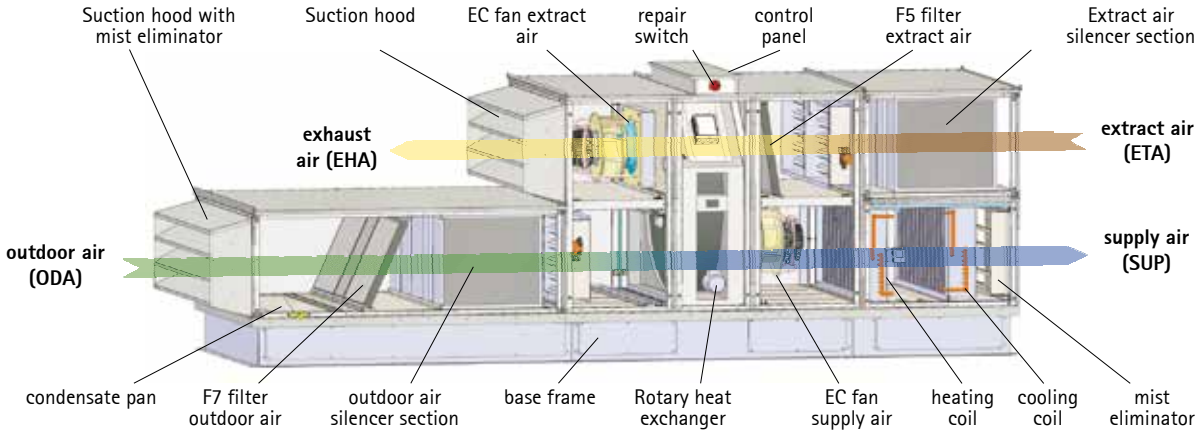
# CRL-A

| TYPE | | CRL-A-4800 | CRL-A-6200 | CRL-A-9000 |
|---|---|---|---|---|
| Max. air volume | m³/h | 4800 (with externally available pressure of approx. 450 Pa.) | 6200 (with externally available pressure of approx. 680 Pa.) | 9000 (with externally available pressure of approx. 1000 Pa.) |
| Max electrical nominal power of the two fans | kW | 3,4 | 6,0 | 11,0 |
| max. current consumption of both fans | A | 5,2 | 9,2 | 17 |
| Mains voltage (50/60Hz) | V | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | |
| Length | mm | 1728 | 1932 | 2136 |
| Width (incl. lock) | mm | 1422 | 1726 | 2134 |
| Height (incl. control, feet) | mm | 1864 | 1864 | 2067 |
| Weight | kg | 660 | 800 | 960 |
| **Condensation rotor** | **€** | **on request** | | |
| **Enthalpy rotor** | **€** | | | |
| **Sorption rotor** | **€** | | | |

Device properties:
- Optional access side in supply air direction right or left
- compact, inherently stable casing
- weatherproof base frame, mounted, standard
- lifting lugs mounted, standard
- high-efficiency, one-sided sucking, high-performance radial fans for supply and extract air, continuously variable via latest EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- BMK air conditioning control module, enclosed loose
- Temperaturregelung integriert:
  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature
- sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- Internal outdoor air and extract air damper, standard
- easily exchangeable compact panel filter
  Outdoor air filter F7 (fine dust and pollen filter)
  Extract air filter M5 (fine dust filter)

* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

**Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).**
**Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections**

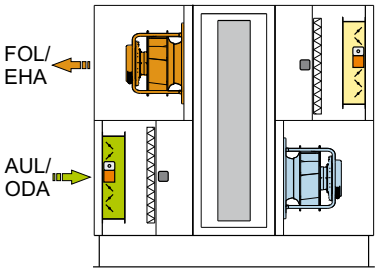


# possible unit design versions CRL-A

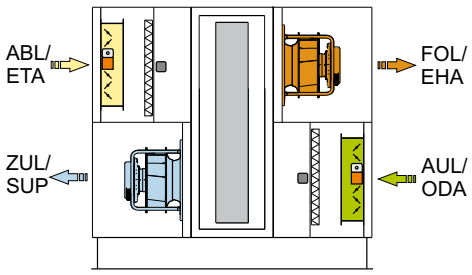
Access side in supply air direction, right

Access side in supply air direction, left

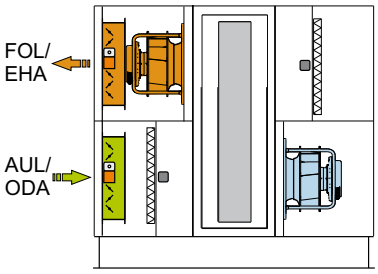
-R1



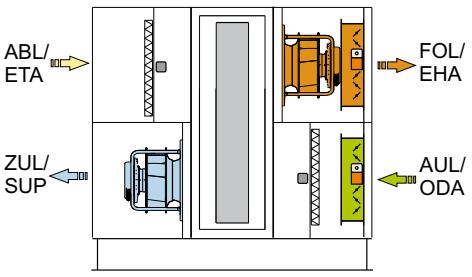

-L1



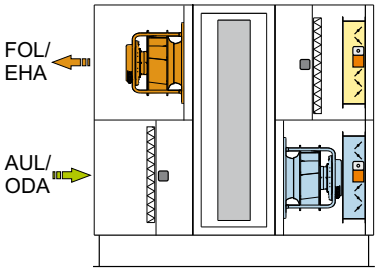

-R2



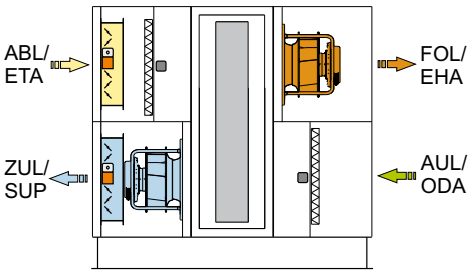

-L2




-R3




-L3



**Comfort rotary heat exchanger ventilation unit for energy-saving and comfortable ventilation.**
**High efficiency rotary heat wheel heat exchanger of aluminium**
**Casing: sheet steel, powder-coated (traffic white RAL 9016),**
**Access door rotary heat exchanger (silver RAL 9006)**
**CRL-iDH ventilation unit for indoor installation with horizontal/vertical/horizontal duct connection**
**heat recovery up to 90% and humidity recovery up to over 90%**

**Rebate groups:**
CRL = 28

# CRL-iDH

NEW

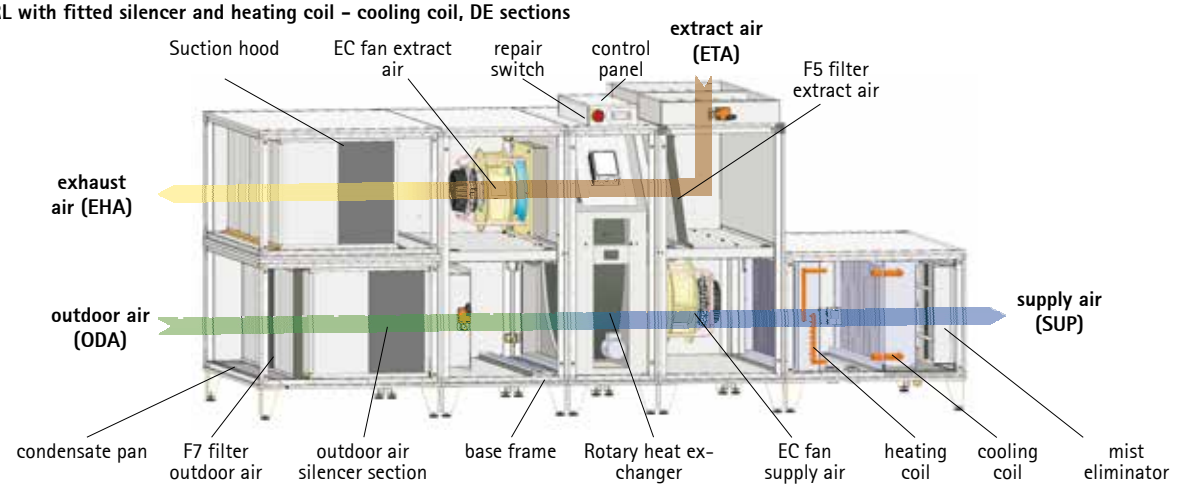
| TYPE | | CRL-iDH-4800 | CRL-iDH-6200 | CRL-iDH-9000 |
|---|---|---|---|---|
| Max. air volume | m³/h | 4800 (with externally available pressure of approx. 450 Pa.) | 6200 (with externally available pressure of approx. 680 Pa.) | 9000 (with externally available pressure of approx. 1000 Pa.) |
| Max electrical nominal power of the two fans | kW | 3,4 | 6,0 | 11,0 |
| max. current consumption of both fans | A | 5,2 | 9,2 | 17 |
| Mains voltage (50/60Hz) | V | 3 x 400 | 3 x 400 | 3 x 400 |
| Dimensions | | | | |
| Length | mm | 1728 | 1932 | 2136 |
| Width (incl. lock) | mm | 1360 | 1665 | 2070 |
| Height (incl. control, feet) | mm | 1722 | 1722 | 1925 |
| Weight | kg | 590 | 715 | 845 |
| **Condensation rotor** | **€** | **on request** | | |
| **Enthalpy rotor** | **€** | | | |
| **Sorption rotor** | **€** | | | |

Device properties:

- Optional access side in supply air direction right or left
- compact, inherently stable, height-adjustable casing
- high-efficiency, one-sided sucking, high-performance radial
- fans for supply and extract air, continuously variable via latest
- EC motor technology with low energy consumption
- High efficiency rotary heat wheel heat exchanger of aluminium for heat recovery, furnished with new Wolf sealing system providing leakage rates below 2%. Optionally equipped with condensation rotor, enthalpy rotor or sorption rotor
- Temperature control with control unit, integrated:
  Supply air temperature control (supply air sensor integrated) - factory setting
  Extract air temperature controller (extract air temperature
- sensor integrated) - adjustable on the control unit
  Room temperature control (see accessories for room temperature sensor) - adjustable on the control unit
- Control system for actuating electric booster heater bank or LPHW reheater as well as ch.w. cooling coil or dx-coil *
- Supply air / extract air / outdoor air sensors, integrated
- Filter pressure monitor, standard for outdoor and extract air filter
- External and internal outdoor and extract air damper, standard
- easily exchangeable compact panel filter
  Outdoor air filter F7 (fine dust and pollen filter)
  Extract air filter M5 (fine dust filter)
- Compact three-part casing construction for optimized bringing-in splitting

* see page 152 for booster heater banks, see page 154 for ch.w. cooling coil and dx-coil

**Depending on different thermodynamical (heating, cooling) and acoustical (soand) requirements, our self-developped CRL design program offers the opportunity of an individual configuration (technical data, delivery time and price on request).**
**Sample: CRL with fitted silencer and heating coil - cooling coil, DE sections**

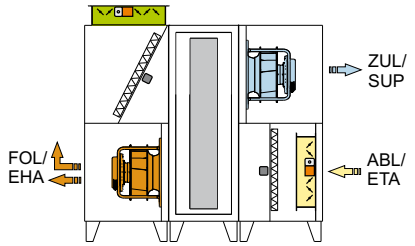


# possible unit design versions CRL-iDH

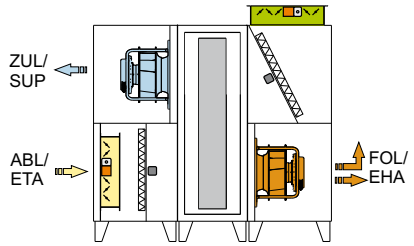
Access side in supply air direction, right

Access side in supply air direction, left

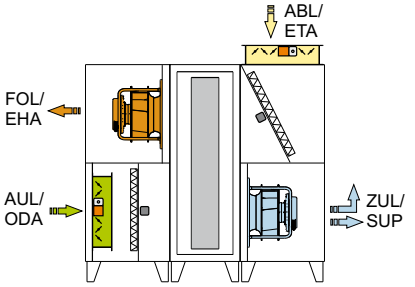
-R1



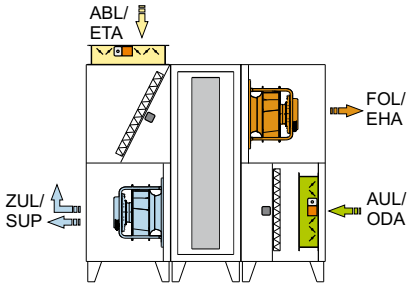

-L1



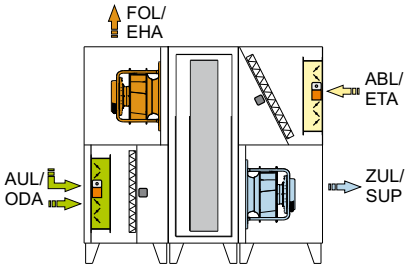

-R2



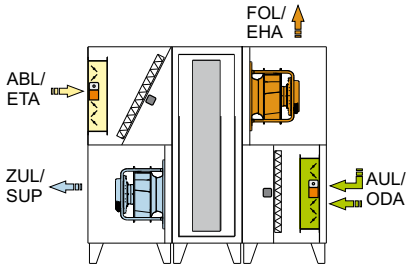

-L2



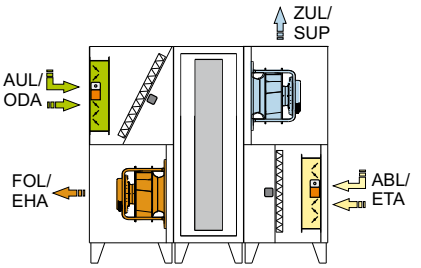

-R3



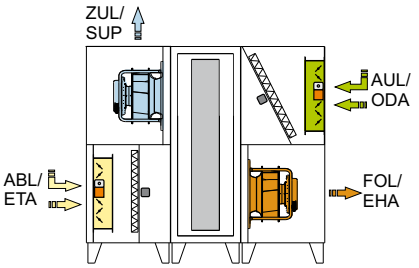

-L3



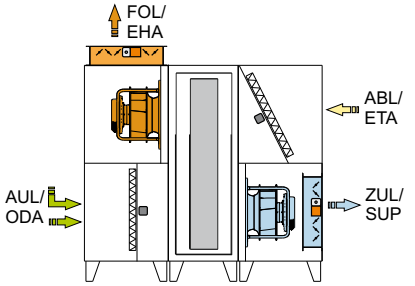

-R4



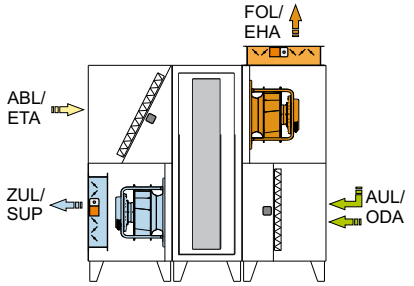

-L4



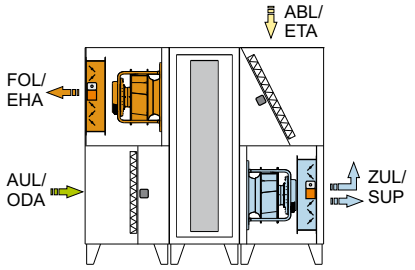

-R5



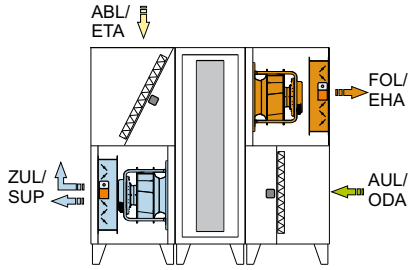

-L5




-R6




-L6




Further design options possible, see Wolf selection program.

# Device accessories CRL

**Rebate groups:**
CRL = 28

| Accessories | | | | Art. no. | € |
|---|---|---|---|---|---|
| **Electric pre-heater bank; single stage for pre-drying filter**<br>recommended for an optimized unit operation | | | | | |
| 4000W; 2x230V/50Hz | ODA vertical air direction | for CRL-iD/iDH-4800 | | 68 03 123 | **1.155,-** |
| | ODA horizontal air direction | for CRL-iD/iH/A/iDH-4800 | | 68 02 221 | **1.155,-** |
| 6000W; 3x400V/50Hz | ODA vertical air direction | for CRL-iD/iDH-6200 | | 68 03 124 | **1.210,-** |
| | ODA horizontal air direction | for CRL-iD/iH/A/iDH-6200 | | 68 02 940 | **1.210,-** |
| | ODA horizontal air direction | für SD-Teil CRL-iD/iH/A | NEW | 68 03 829 | **1.390-** |
| 8000W; 3x400V/50Hz | ODA vertical air direction | for CRL-iD/iDH-9000 | | 68 03 125 | **1.570,-** |
| | ODA horizontal air direction | for CRL-iD/iH/A/iDH-9000 | | 68 02 941 | **1.570,-** |
| | ODA horizontal air direction | für SD-Teil CRL-iD/iH/A | NEW | 68 03 685 | **1.765-** |
| plug-in electric heater bank with high limit thermostat, frost monitoring and bracket for the protection of the outdoor air filter against moisture penetration or as frost protection for the heat recovery | | | | | |
| **Heat exchanger lphw (low pressure hot water),**<br>horizontal air flow for supply air bottom<br>CO/AL heat exchanger with frost protection thermostat, wired, | | for CRL-4800 | | 68 03 126 | **1.040,-** |
| | | for CRL-6200 | | 68 03 127 | **1.140,-** |
| | | for CRL-9000 | | 68 03 128 | **1.500,-** |
| **Insulating frame** | | | | | |
| 1222 x 510mm and 1222 x 612mm | | for CRL-iD-4800 (set = 4 items) | | 68 03 122 | **476,-** |
| 1527 x 612mm | | for CRL-iD-6200 (set = 4 items) | | 68 02 555 | **548,-** |
| 1934 x 714mm | | for CRL-iD-9000 (set = 4 items) | | 68 02 885 | **836,-** |
| 1222 x 612mm | | for CRL-iH-4800 (set = 4 items) | | 68 02 554 | **476,-** |
| 1527 x 612mm | | for CRL-iH-6200 (set = 4 items) | | 68 02 555 | **548,-** |
| 1934 x 714mm | | for CRL-iH-9000 (set = 4 items) | | 68 02 885 | **836,-** |
| 1222 x 612mm | | for CRL-A-4800 (set = 2 items) | | 68 01 485 | **238,-** |
| 1527 x 612mm | | for CRL-A-6200 (set = 2 items) | NEW | 68 01 634 | **274,-** |
| 1934 x 714mm | | for CRL-A-9000 (set = 2 items) | | 68 03 374 | **418,-** |
| 1222 x 510mm and 1222 x 612mm | | for CRL-iDH-4800 (set = 4 items) | | 68 04 147 | **476,-** |
| 1527 x 612mm | | for CRL-iDH-6200 (set = 4 items) | NEW | 68 02 555 | **548,-** |
| 1934 x 714mm | | for CRL-iDH-9000 (set = 4 items) | | 68 02 885 | **836,-** |
| **Felxible connection** | | | | | |
| 1218 x 506mm and 1218 x 608mm | | for CRL-iD-4800 (set = 4 items) | | 68 03 130 | **460,-** |
| 1523 x 608mm | | for CRL-iD-6200 (set = 4 items) | | 68 02 557 | **520,-** |
| 1930 x 710mm | | for CRL-iD-9000 (set = 4 items) | | 68 03 131 | **576,-** |
| 1218 x 608mm | | for CRL-iH-4800 (set = 4 items) | | 68 02 556 | **460,-** |
| 1523 x 608mm | | for CRL-iH-6200 (set = 4 items) | | 68 02 557 | **520,-** |
| 1930 x 710mm | | for CRL-iH-9000 (set = 4 items) | | 68 03 131 | **576,-** |
| 1218 x 608mm | | for CRL-A-4800 (set = 2 items) | | 68 01 486 | **230,-** |
| 1523 x 608mm | | for CRL-A-6200 (set = 2 items) | NEW | 68 01 635 | **260,-** |
| 1930 x 710mm | | for CRL-A-9000 (set = 2 items) | | 68 03 377 | **288,-** |
| 1218 x 506mm and 1218 x 608mm | | for CRL-iDH-4800 (set = 4 items) | | 68 04 148 | **460,-** |
| 1523 x 608mm | | for CRL-iDH-6200 (set = 4 items) | NEW | 68 02 557 | **520,-** |
| 1930 x 710mm | | for CRL-iDH-9000 (set = 4 items) | | 68 03 131 | **576,-** |

# Device accessories CRL

**Rebate groups:**
CRL = 28

| Accessories | | Art. no. | € |
|---|---|---|---|
| | **Insulating adaptor cone from rectangular to round** | | |
| Diameter 560mm | for CRL-iD-4800 (set = 4 items) | 68 03 134 | **1.132,-** |
| | for CRL-iD-6200 (set = 4 items) | 68 02 559 | **1.964,-** |
| Diameter 560mm | for CRL-iH-4800 (set = 4 items) | 68 02 558 | **1.132,-** |
| | for CRL-iH-6200 (set = 4 items) | 68 02 559 | **1.964,-** |
| Diameter 560mm | for CRL-A-4800 (set = 2 items) NEW | 68 01 488 | **566,-** |
| | for CRL-A-6200 (set = 2 items) | 68 01 637 | **982,-** |
| Diameter 560mm | for CRL-iDH-4800 (set = 4 items) NEW | 68 04 149 | **1.132,-** |
| | for CRL-iDH-6200 (set = 4 items) | 68 02 559 | **1.964,-** |
| | **Silencer, length 600mm**<br>all-round insulation 90mm | | |
| Diameter 560mm (Attenuation 5dB / 250Hz) | for CRL-4800/6200 | 21 37 983 | **555,-** |

| Control accessories | | Art. no. | € |
|---|---|---|---|
| | **Mixing valve for lphw heat exchanger, loose**<br>type acc.to coil selection | | |
| DN 10 KVS 0.63 | | 27 44 988 | **83,-** |
| DN 10 KVS 1.0 | | 27 44 526 | **83,-** |
| DN 10 KVS 1.6 | | 27 44 101 | **83,-** |
| DN 15 KVS 2.5 | | 27 44 107 | **83,-** |
| DN 20 KVS 4.0 | | 27 44 102 | **83,-** |
| DN 25 KVS 6.3 | | 27 44 103 | **127,-** |
| | **Actuator for mixing valve, loose**<br>control signal 24V DC, 0-10V | 27 44 100 | **230,-** |
| | **Screwing kit for mixing valve for lphw heat exchanger**<br>consisting of:<br>3 union nuts, 3 inlay nuts<br>and 3 flat gaskets | | |
| ½" | DN 10 KVS 0.63<br>DN 10 KVS 1.0<br>DN 10 KVS 1.6 | 20 71 740 | **30,40** |
| ¾" | DN 15 KVS 2.5 | 20 71 741 | **47,-** |
| 1" | DN 20 KVS 4.0 | 20 71 742 | **21,80** |
| 1¼" | DN 25 KVS 6.3 | 20 71 743 | **26,10** |

# Device accessories CRL

NEW

**Rebate groups:**
CRL = 28

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Outdoor air silencer section**<br>horizontal air flow<br>incl. tray and outdoor air filter F7 (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1322 x 2070 x 814mm — for CRL-9000 | on request | **on request** |
| | **Extract air silencer section**<br>horizontal air flow<br>incl. outdoor air filter F7 (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1322 x 2070 x 814mm — for CRL-9000 | on request | **on request** |
| | **Supply air/Exhaust air silencer section**<br>for horizontal air flow (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1017 x 2070 x 814mm — for CRL-9000 | on request | **on request** |
| | **Heating coil – Cooling coil – DE section (HCCCDE)**<br>horizontal air flow for supply air bottom (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1017 x 2070 x 814mm — for CRL-9000 | on request | **on request** |
| | **Empty section**<br>for horizontal air flow (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1017 x 2070 x 814mm — for CRL-9000<br>1322 x 2070 x 814mm — for CRL-9000 | on request | **on request** |
| | **Empty section**<br>for horizontal air flow bottom (L x T x H)<br>1017 x 1360 x 712mm — for CRL-4800<br>1017 x 1665 x 712mm — for CRL-6200<br>1017 x 2070 x 814mm — for CRL-9000<br>1322 x 2070 x 814mm — for CRL-9000 | on request | **on request** |

# Device accessories CRL

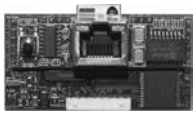
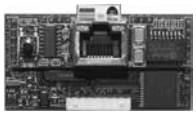
NEW

**Rebate groups:**
CRL = 28

| | Accessories | | Art. no. | € |
|---|---|---|---|---|
| | **Cooling coil section**<br>for horizontal air flow (L x T x H)<br>611 x 1322 x 712mm<br>611 x 1627 x 712mm<br>611 x 2070 x 814mm | <br><br>for CRL-iD/iH/iDH-4800<br>for CRL-iD/iH/iDH-6200<br>for CRL-iD/iH/iDH-9000 | on request | **on request** |
| | **DX-coil section**<br>for horizontal air flow (L x T x H)<br>611 x 1322 x 712mm<br>611 x 1627 x 712mm<br>611 x 2070 x 814mm | <br><br>for CRL-iD/iH/iDH-4800<br>for CRL-iD/iH/iDH-6200<br>for CRL-iD/iH/iDH-9000 | on request | **on request** |
| | **Heating coil section**<br>for horizontal air flow (L x T x H)<br>305 x 1322 x 712mm<br>305 x 1627 x 712mm<br>305 x 2070 x 814mm | <br><br>for CRL-iD/iH/iDH-4800<br>for CRL-iD/iH/iDH-6200<br>for CRL-iD/iH/iDH-9000 | on request | **on request** |

# Control accessories CRL

**Rebate groups:**
CRL = 28
Changed art. no. are marked in red.

| | Accessories | Art. no. | € |
|---|---|---|---|
| | **Air quality sensor**<br>Mixed gas sensor for determining the air quality;<br>plug-in design | 68 00 484 | **464,–** |
| | **$CO_2$ sensor**<br>required for $CO_2$-controlled operation,<br>plug-in design | 68 00 485 | **488,–** |
| | **Outside or room temperature sensor** | 27 92 021 99 | **28,70** |
| | **Outside or room temperature sensor, loose** with wall bracket NEW | 62 19 886 | **302,–** |
| | **Room hygrostat, loose** | 27 44 996 | **124,–** |
| | **Remote control BMK-F** for CKL-iV<br>wall installation | 27 44 751 | **227,–** |
| | **LON Interface module for WRS-K**<br>for fitting on the controller | 60 74 317 | **327,–** |
|  | **BacNet Interface module for WRS-K**<br>for fitting on the controller | 60 74 318 | **635,–** |
|  | **Ethernet Interface module for WRS-K**<br>for fitting on the controller | 60 74 404 | **565,–** |
| | **Modbus Interface module for WRS-K**<br>for fitting on the controller | 60 74 323 | **188,–** |
| | **KNX Interface module for WRS-K**<br>for fitting on the controller | on request | **on request** |

# Special unit design options CRL

**Rebate groups:**
CRL = 28

| | Regelung | for products | Art. no. | € |
|---|---|---|---|---|
| | **Touchpanel BMK-T10**<br>Operating possibility for several CKL units<br>front installation on site | | 27 45 362 | **2.890,-** |
| | **Air flow control** | for CRL-4800, 6200, 9000 | 68 00 487 | **520,-** |
| | **Constant pressure control** | for CRL-4800, 6200, 9000 | 68 00 489 | **520,-** |
| | **Accessories** | | Art. no. | € |
| | **Compact panel filter M5,** depth 48mm<br>particle filter | | | |
| | 592 x 592mm | for CRL-4800 (set = 2 items) | 68 01 489 | **210,-** |
| | 592 x 592mm (2 items)<br>592 x 287mm (1 items) | for CRL-6200 (set = 3 items) | 68 01 643 | **291,-** |
| | 592 x 490mm (3 items)<br>592 x 287mm (3 items) | for CRL-9000 (set = 6 items) | 68 03 120 | **530,-** |
| | **Compact panel filter F7,** depth 48mm<br>particle and pollen filter | | | |
| | 592 x 592mm | for CRL-4800 (set = 2 items) | 68 01 490 | **230,-** |
| | 592 x 592mm (2 items)<br>592 x 287mm (1 items) | for CRL-6200 (set = 3 items) | 68 01 644 | **326,-** |
| | 592 x 490mm (3 items)<br>592 x 287mm (3 items) | for CRL-9000 (set = 6 items) | 68 03 121 | **603,-** |
| | **Commissioning of 1 basic device**<br>Appointment necessary<br>(at least 8 working days before actual commissioning) | **Net price** | 00 99 745 | **645,-** |
| | **Commissioning of further accessories**<br>Heating or cooling or multiple devices | | on request | **on request** |

Energiesparen und Klimaschutz serienmäßig

# Comfort-Kompaktlüftungsgeräte CKL / CRL

## Hinstellen, anschließen, fertig

CKL-iH zur Innenaufstellung

CRL-iH

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# International Conditions of Sale for Customers not Resident in Germany (as of 01/11)

### I. Application of the International Conditions of Sale

1. These International Conditions of Sale apply to all customers of Wolf GmbH - hereinafter referred to as Wolf - whose relevant place of business is not in Germany. For customers whose place of business is in Germany, the General Conditions of Sale of Wolf apply, which will be forwarded on request. In each case, the relevant place of business is the one which concludes the contract in its own name.
2. These International Conditions of Sale apply to the present and all subsequent contracts whose preponderant object is the supply of goods to the customer. Additional obligations assumed by Wolf do not affect the application of these International Conditions of Sale.
3. Conflicting or differing terms of business of the customer do not bind Wolf, even if Wolf does not explicitly object or even if Wolf renders performance or accepts the customer`s performance without reservation irrespective conflicting or differing terms of business of the customer. The provisions of this paragraph equally apply insofar as the terms of business of the customer, irrespective of the contents of these International Conditions of Sale, deviate from legal provisions.

### II. Formation of the Contract of Sale

1. The customer is under an obligation to give written notice to Wolf prior to the formation of a contract if the goods ordered are to be fit not only for normal use or will be used in circumstances which are unusual or which present a particular risk to health, safety or the environment, or which require more demanding use.
2. Orders of the customer are to be put in writing. If the customer's order deviates from the proposal or the tender submitted by Wolf, the customer will emphasize the differences as such.
3. All orders, in particular also those received by employees of Wolf, will only have effect if followed by a written acknowledgement of the order by Wolf. The delivery in fact of the goods ordered, any other conduct of Wolf or silence does not allow the customer to assume the formation of the contract of sale. Wolf can dispatch such written acknowledgement of the order up to and including 14 calendar days after the customer's order has been received by Wolf. Until this time, the customer's order is irrevocable.
4. The written acknowledgement of the order has been received in time, if it is received by the customer within 14 calendar days after its date of printing. The customer will inform Wolf without delay, if the written acknowledgement of the order is received delayed.
5. The written acknowledgement of the order by Wolf determines the entire contents of the contract and effects a conclusion of the contract even if - except for the purchase price and the quantity to be delivered - the written acknowledgement deviates in any other way, especially with respect to the exclusive application of these International Conditions of Sale, from the declarations of the customer. Particular wishes of the customer, namely warranties or guarantees with respect to the goods or the performance of the contract therefore require express written confirmation in every case. Regardless of the nature and extent of the deviations, the contract will only fail to come into existence if the customer objects to the deviations in writing and the objection is received by Wolf within a short time, at the latest seven calendar days after receipt of the written acknowledgement of the order by the customer.
6. Wolf´s employees, commercial agents or other sales intermediaries are not authorized to dispense with the requirement for written acknowledgement of the order or to make promises which differ from its content or guarantees. Changes to the concluded contract likewise require written confirmation by Wolf.

### III. Obligations of Wolf

1. Subject to an exemption according to section VII.-1. b) Wolf must deliver the goods specified in the written acknowledgement of the order. Wolf is not obliged to perform obligations not stated in the written acknowledgment of the order or in these International Conditions of Sale, in particular Wolf is under no obligation to deliver accessories not listed explicitly, to instal additional safety devices, to carry out assemblies, to render planning-services or to advise the customer.
2. Third parties not involved in the conclusion of the contract, in particular the customer´s clients, are not entitled to request delivery to be made to them. The customer`s responsibility to take delivery continues to exist even if he assigns claims to third parties.
3. Wolf undertakes to deliver goods of average kind and quality taking account of the tolerances customary in trade as in kind, quantity, quality and packaging. If the goods cannot be delivered in the condition as offered at the time of the formation of the contract because technical improvements to goods of series production were made, Wolf is entitled to deliver the goods with the technical improvements. Wolf is entitled to make part deliveries.
4. If further specification is required in relation to the goods to be delivered, Wolf will carry this out having regard to its own and the identifiable and legitimate interests of the customer. A request to the customer to specify the goods, or to participate in the specification, is not required. Wolf does not undertake to inform the customer of the specification it has made or to give the customer the option of a differing specification.
5. Wolf undertakes to place the goods at disposal for collection by the customer at the agreed time of delivery at the place of delivery indicated in the written acknowledgement of the order or by way of precaution at its premises in Mainburg/Germany. Previous separation or marking of the goods or notification to the customer of the goods being placed at disposal is not required. However, Wolf is entitled to initiate the shipment of the goods at the customer´s risk and expense in order to obtain the document in proof of tax-free-delivery.
6. Agreed delivery time periods or delivery dates are subject to the customer's procuring any required documents, releases, permits, approvals, licences or any other authorizations or consents in sufficient time, opening letters of credit and making down-payments as agreed and performing all other obligations incumbent upon him properly and in good time. Moreover, agreed delivery time-periods begin on the date of the written acknowledgement of the order by Wolf. Wolf is entitled to deliver earlier than at the agreed delivery time.
7. Without prejudice to its continuing legal rights, Wolf is entitled to fulfil its obligations after the delivery time agreed upon, if it informs the customer of exceeding the delivery time limit and of the time period for late performance. The customer can object to late performance within a reasonable time period, if the late performance is unreasonable. An objection is only effective, if it is received by Wolf before commencing late performance. Wolf will reimburse necessary additional expenditure, proven and incurred by the customer as a result of exceeding the delivery time to the extent that Wolf is liable for this under the provisions laid down in section VII.
8. Risk as to price and performance even of goods not being clearly identifiable to the contract and without being necessary a notice given by Wolf, passes to the customer at the latest as soon as loading of the goods has begun or as soon as the customer does not take delivery in accordance with the contract or title of the goods has passed to the customer. The loading of the goods is part of the customer`s obligations. The agreement of INCOTERMS in Group F or Group C or of clauses such as „delivery free....." or such like merely involves a variation of the provisions as to transportation costs; besides, the provisions laid down in these International Conditions of Sale including those referring to the passing of risk continue to apply.
9. Wolf is not obliged to obtain any licences, authorizations, certificates, formalities or other documents necessary for the export, transit or import. However, Wolf renders at the customer´s request, risk and expense every assistance in obtaining the documents that the customer has required in writing.
10. Including where INCOTERMS in Group F are agreed, Wolf is in particular not obliged to arrange for shipment of the goods, to insure the goods, to procure certificates or documents not expressly agreed, to procure customs clearance, to bear levies, duties and charges accruing outside Mainburg/Germany, to comply with weight and measuring systems, packaging, labelling or marking requirements applicable outside Mainburg/Germany, to inform the customer of the delivery or to take back packaging material from the customer. Irrespective of any legal provision, the customer shall at its own cost take care of renewed utilization, material recycling or otherwise prescribed waste-disposal. The foregoing provision applies irrespective of whether the packaging material is invoiced separately or not to the customer.
11. Without prejudice to its continuing legal rights, Wolf is entitled to suspend the performance of its obligations so long as, in the opinion of Wolf, there are grounds for concern that the customer will wholly or partly fail to fulfil its obligations in accordance with the contract. In particular, the right to suspend arises if the customer insufficiently performs its obligations to enable payment to Wolf or a third party or pays late. Wolf is not required to continue with performance of its obligations, if an assurance given by the customer to avoid the suspension does not provide adequate security or could be challenged pursuant to an applicable law.
12. Except as provided in section III.-7., Wolf is only obliged to inform the customer of delay or non-performance as soon as these are certain.

### IV. Price, Payment and Acceptance of the Goods

1. Irrespective of continuing obligations of the customer to guarantee or to enable payment, the customer undertakes to pay the agreed price in the currency specified in the written acknowledgement of the order transfering it without deduction and free of expenses and costs to the financial institution designated by Wolf. To the extent that a price has not been agreed, the contract has nevertheless been validly concluded; in such a case the price which is at the agreed time of delivery Wolf's usual price will apply. Wolf´s employees, commercial agents or other sales intermediaries are not authorized to accept payments.
2. The payment to be made by the customer is in any event due for payment at the time specified in the written acknowledgement of the order. The due time for payment arises without any further pre-condition and, in particular, does not depend on whether the customer has already taken delivery of the goods and/or the documents and/or has had an opportunity to examine the goods. The periods granted for payment will cease to apply and outstanding accounts will be due for immediate payment, if insolvency proceedings relating to the assets of the customer are applied for, if the customer without providing a justifiable reason does not meet fundamental obligations due towards Wolf or towards third parties or if the customer has provided not accurate information regarding his credit standing.
3. The customer warrants that all legal requirements for delivery free of German value added tax will be fulfilled. To the extent that Wolf does not receive the document in proof of tax-free-export-delivery or Wolf is called upon to pay value added tax as a result of the terms of delivery or of circumstances allocable to the customer, the customer will indemnify Wolf in all and every respect without prejudice to any continuing claim by Wolf. The indemnity is granted by the customer waiving any further requirements or other defences, in particular waiving the defence of limitation or prescription and also includes the reimbursement of the expenses incurred by Wolf.
4. Regardless of currency and regardless of the jurisdiction of any court, Wolf is entitled at its own discretion to set off incoming payments against claims existing against the customer by virtue of its own or assigned rights at the time of payment.
5. Any rights of the customer to set-off against claims of Wolf are excluded, except where the corresponding claim of the customer is in the same currency, is founded in the customer's own right and has either been finally judicially determined or is undisputed or acknowledged by Wolf in writing.
6. Any rights of the customer to suspend payment and to raise defences are excluded, except where despite written warning Wolf has committed a fundamental breach of its obligations arising out of the same contractual relationship, and has not offered any adequate assurance.
7. The customer undertakes to take delivery of the goods at the delivery time without taking any additional period of time and at the place of delivery indicated in the written acknowledgement of the order or by way of precaution at the premises of Wolf in Mainburg/Germany. The customer is only entitled to refuse to take delivery if it exercises - in accordance with the rules in section VI.-1. - its rights to avoid the contract.

### V. Delivery of non-conforming Goods or Goods with Defective Title

1. Delivery does not conform with the contract if, taking into account the terms in section III., at the time the risk passes the packaging, quantity, quality or the description of the goods is significantly different to the specifications laid down in the written acknowledgement of the order, or in the absence of agreed specifications, the goods are not fit for the purpose which is usual in Mainburg/Germany. Irrespective of the legal requirements applicable in Mainburg/Germany, the delivery conforms with the contract, to the extent that the legal requirements applicable at the place of business of the customer do not impede the usual use of the goods. Second-hand goods are delivered without any liability for their conformity.

2. To the extent that the written acknowledgement of the order does not contain an explicit statement to the contrary, Wolf is in particular not liable for the goods being fit for the purpose to which the customer intends to put them or for possessing the qualities of a sample or a model or for their compliance with the legal requirements existing outside of Mainburg/Germany, for instance in the customer's country. Wolf also shall not be liable for any non-conformity with the contract occurring after the time the risk has passed. To the extent that the customer, either himself or through third parties, initiates the removal of non-conformities without the prior consent of Wolf, Wolf will be released from its liability.
3. The customer must examine the goods as required by law and in so doing check every single delivery in every respect for any discoverable or typical lack of conformity with the contract.
4. The goods delivered have a deficiency in title if they are not free from enforceable rights or claims of third parties at the time risk passes. Without prejudice to further legal requirements, third parties rights or claims founded on industrial or other intellectual property constitute a deficiency in title only to the extent that the rights are registered and made public in Germany. Irrespective of the legal requirements applicable in Germany, the goods are not with defective title, to the extent that the legal requirements applicable at the place of business of the customer do not impede the usual use of the goods.
5. The customer shall give notice as required by law to Wolf of any lack of conformity with the contract or of any deficiency in title, and in any event directly and in writing. Wolf´s employees, commercial agents or other sales intermediaries are not authorised to accept notices or to make any statements concerning lack of conformity with the contract or of title and its consequences.
6. Following due notice according to section V.-5., the customer can rely on the remedies provided for by these International Conditions of Sale. The customer has no other rights or claims whatsoever. The customer's claims for a deficiency in title will be time-barred according to the same rules as the claims for delivery of non-conforming goods. In the event of notice not having been properly given, the customer may only rely on remedies if Wolf has fraudulently concealed the lack of conformity with the contract or the deficiency in title. Statements by Wolf as to the lack of conformity with the contract or as to the deficiency in title are for the purpose of explaining the factual position only, but do not entail any waiver by Wolf of the requirement of proper notice.
7. In accordance with the terms of the UN Sales Convention, the customer is entitled to demand delivery of substitute goods or repair or to reduce the purchase price. Further claims for performance are not available to the customer. Irrespective of the customer's remedies, Wolf is always entitled in accordance with the provision in section III.-7. to repair goods which do not conform with the contract or to supply substitute goods.

**VI. Termination of contract**

1. Without prejudice to compliance with the respective applicable legal requirements, the customer is only entitled to declare the contract avoided after he has threatened Wolf with avoidance of the contract in writing and an additional period of time of reasonable length for performance fixed in writing has expired to no avail. If the customer claims delivery of substitute goods, repair or other performance, he is bound for a reasonable period of time to the chosen remedy, without being able to exercise the right of declaring the contract avoided. In any event, the customer must give notice of avoidance of the contract within a reasonable time in writing and to Wolf directly.
2. Without prejudice to its continuing legal rights, Wolf is entitled to avoid the contract in whole or in part without compensation if the customer objects the application of these International Conditions of Sale, if the written acknowledgement of the order is received by the customer more than 14 calendar days after its date of printing, if insolvency proceedings relating to the assets of the customer are applied for or commenced, if the customer without providing a justifiable reason does not meet fundamental obligations due towards Wolf or towards third parties, if the customer has provided not accurate information regarding his credit standing, if Wolf through no fault of its own does not receive supplies properly or on time, or if for other reasons Wolf can not be expected to fulfil its obligations by means which taking into consideration its own interests and that of the customer as far as ascertainable and legitimate at the time of formation of the contract, are unreasonable in particular in relation to the agreed counterperformance.

**VII. Damages**

1. Apart from liability for damage to natural persons, Wolf is only obliged to pay damages pursuant to this contract or extra contractually if the following provisions in a) to f) are fulfilled :
   a) The customer is required in the first instance to rely on other remedies and can only claim damages in the event of a continuing deficiency. The customer cannot claim damages as an alternative to other remedies.
   b) Wolf is not liable for the conduct of suppliers or subcontractors or for damages to which the customer has contributed. Wolf is also not liable for impediments which occur, as a consequence of natural or political events, acts of state, industrial disputes, sabotage, accidents, biological, physical or chemical processes or similar circumstances and which cannot be controlled by Wolf with reasonable means. Besides, Wolf is only liable if it negligently breaches fundamental or deliberately or in circumstances amounting to gross negligence breaches other obligations owed to the Customer.
   c) In the event of liability Wolf will compensate within the limits of lit. d) the proven loss of the customer to the extent that it was unavoidable for the customer and foreseeable to Wolf, at the time of the formation of the contract with respect to the occurrence of the loss and its amount. The customer must advise Wolf in writing before formation of the contract of particular risks, atypical possibilities for damages and unusual amounts of loss. Moreover, the customer is required to mitigate his loss as soon as a breach of contract is or ought to be known.
   d) Wolf is not liable for loss of profit, non-pecuniary losses or other indirect damages. Besides, the amount of damages for late delivery is limited to 0,5 % for each full week of delay, up to a maximum of 5 %, and for other breaches of obligations is limited up to 200 % of the respective delivery value. However, this subparagraph does not apply in case of gross negligence by the executive bodies or the management.
   e) For the limitation of time, the general regulations of the German Civil Code are valid. To the extent that the claim is not time-barred earlier, a six-month preclusive limitation of time for bringing an action for damages applies, starting with the rejection of the claim for damages.
   f) The foregoing provisions relating to Wolf´s liability also apply to the personal liability of Wolf´s employees, servants, members of staff, representatives and those employed by Wolf in the performance of its obligations.
2. Irrespective of continuing legal or contractual claims of Wolf and subject to the customer providing proof that damages have not occured at all or clearly do not reach this extent, the customer is obliged towards Wolf to pay liquidated damages as follows without Wolf having to provide proof of the amount:
   a) In the event of delay in payment the customer will pay the costs of judicial and extra-judicial means and proceedings, usual and accruing within the country and abroad, as well as interest at the rate applicable in Mainburg/Germany for unsecured short-term loans in the agreed currency.
   b) In the case of the customer not taking delivery on the due date or not at all, Wolf is entitled to claim damages in the amount of 15 % of the respective delivery value.

**VIII. Other Provisions**

1. Title of the goods which have been delivered remains with Wolf until settlement of all claims by Wolf existing against the customer. The allocation of risk as to price and performance in section III.-8. is not affected by the reservation of title.
2. Without prejudice to Wolf's continuing claims, the customer will indemnify Wolf without limit against all claims of third parties which are brought against Wolf on the grounds of product liability or similar provisions, to the extent that the liability is based on circumstances which - such as, for example, the presentation of the product - were caused after risk passed, by the customer or other third parties without express written consent of Wolf. In particular, the indemnification also includes compensation for expenses incurred by Wolf and is granted by the customer waiving further conditions or other objections, in particular without requiring compliance with control and recall obligations, and waiving any defence of limitation.
3. In relation to pictures, drawings, calculations and other documents as well as computer-software, Wolf reserves all proprietary rights, copyrights, other industrial property rights as well as know-how rights.
4. All communications, declarations, notices etc. are to be drawn up exclusively in the German or English language. Communications by means of fax or e-mail fulfil the requirement of being in writing.

**IX. General Basis of Contracts**

1. The place of performance and payment for all obligations arising from the legal relationship between Wolf and the customer is Mainburg/Germany. In particular, this provision also applies if Wolf assumes the costs of money remittance, renders performance for the customer somewhere else or payment is to be made in exchange for documents or goods or in the case of restitution of performances already rendered. The agreement of INCOTERMS in Group F or Group C or agreements as to how costs are to be borne do not entail any change of the above rule as to place of performance. Wolf is entitled to require payment also at the place of business of the customer.
2. The United Nations Convention of 11 April 1980 on Contracts for the International Sale of Goods (UN Sales Convention / CISG) in the English version as well as the usage in force in Mainburg/Germany govern the legal relationship with the customer. The UN Sales Convention applies, above and beyond its own area of application, and regardless of reservations adopted by other states, to all contracts to which these International Conditions of Sale are to be applied according to the provisions of section I. Where standard terms of business are used, the INCOTERMS ® 2010 of the International Chamber of Commerce apply taking into account the provisions stipulated in these International Conditions of Sale.
3. The formation of contract, including agreements as to jurisdiction and the inclusion of these International Conditions of Sale, and the rights and obligations of the parties, also including precontractual and collateral obligations, as well as the interpretation are exclusively governed by the UN Sales Convention together with these International Conditions of Sale. Outside the application of the UN Sales Convention, the contractual and non-contractual legal relationship between the parties is governed by the non-uniform German law, namely by the BGB/HGB (German Civil and Commercial Code).
4. All contractual and extra-contractual disputes arising out of or in connection with contracts to which these International Conditions of Sale apply, shall be finally settled by arbitration according to the Rules of the German Institution for Arbitration (DIS) without recourse to the ordinary courts of law. The tribunal shall consist of three arbitrators. The place of the arbitration shall be Munich, the languages to be used in the arbitral proceedings shall be German and English. In individual cases, however, Wolf is entitled also to bring an action before the national Courts at the customer's place of business, or other national Courts having jurisdiction according to domestic or foreign law.
5. If provisions of these International Conditions of Sale should be or become partly or wholly void, the remaining arrangements will besides continue to apply. The parties are bound to replace the void arrangement by a legally valid arrangement, which comes as close as possible to the commercial meaning and purpose of the void arrangement.

# Notes

# Notes

# DATANORM – Ventilation systems Match Code List Dated: 01.03.2016

| | Rebate group | Product group |
|---|---|---|
| **Unit heaters** | Rebate: | |
| TLHK-EC / TLHK TopWing Unit heaters | 20 | LH |
| TLH-EC / TLH TopWing Unit heaters | 20 | LH |
| TLHD-EC / TLHD-K-EC / TLHD / TLHD-K TopWing Unit heaters | 20 | LH |
| Air heater basic device with CU/AL, galvanised steel heater bank, or electric heater bank | 20 | LH |
| Unit heater without heat exchanger | 20 | LH |
| Electrical accessories for unit heaters | 20 | LH |
| Ceiling unit heater | 20 | LH |
| **Warm air curtain units** | Rebate: | |
| TL-2 | 24 | TL |
| Accessories for warm air curtain unit TL-2 | 24 | TL |
| **Ceiling fans** | Rebate: | |
| LD 15 | 20 | LD |
| **Warm air heaters** | Rebate: | |
| Warm air heaters basic unit | 21 | WS |
| Accessories for warm air heaters | 21 | WS |
| Warm air heater drives, control panels and electrical accessories | 21 | WS |
| **Smoke extract fans** | Rebate: | |
| ER | 25 | ER |
| Accessories for smoke extract fans ER | 25 | ER |
| **Roof extract fans** | Rebate: | |
| Basic unit DV-2 | 26 | DV |
| Accessories for DV-2 | 26 | DV |
| **Comfort ventilation systems** | Rebate: | |
| Comfort home ventilation system CWL / Accessories | 22 | CWL |
| Comfort large area ventilation unit CGL / Accessories | 23 | CGL |
| Comfort flat ventilation unit CFL / Accessories | 29 | CFL |
| Compact comfort ventilation unit CKL / Accessories | 28 | CKL |
| Comfort rotary heat exchanger ventilation unit CRL / Accessories | 28 | CRL |

# Your conditions

Unit heaters

Warm air curtain units

Ceiling fans

Warm air heaters

Smoke extract fans

Roof extract fans

Comfort home ventilation system

Comfort large area ventilation unit

Comfort flat ventilation unit

Compact comfort ventilation unit

Comfort rotary heat exchanger ventilation unit CRL

Energiesparen und Klimaschutz serienmäßig

# Neuester Stand in Sachen Öl-Brennwerttechnik
# Öl-Brennwertgerät TOB/TOB-TS

QUALITÄT • SICHERHEIT • ZUKUNFT

MADE IN GERMANY BY WOLF

# Notes

Our only production site is in the town of Mainburg in Hallertau, Bavaria. Wolf relies on its strengths, and believes in the value of a German location. The company wants to continue its „Made in Germany" future here too.

The „craftsman's brand" logo is applied by manufacturers of plumbing and heating products which, working together with the authorised specialist firm, offer greater safety, benefit and quality when acquiring or modernising a heating system.

Subject to technical modifications

Part no. 4800719

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