






-  Ambient on request
-  Water heated (W)
-  Electrically heated (E)

Lengths 1, 1.5, 2, 2.5 and 3 metres



Comfortline Classic

The maintenance-free air curtain system for mounting heights up to 3,5 metres

Application

Comfortline Classic air curtain systems are intended for exclusive shop entrances. Easy installation with Plug and Play-function. Standard model for horizontal mounting. Vertical mounting also possible. For large openings several units can be combined and controlled with one controller.

Comfort

The air outlet construction creates a directed air stream with low turbulence. The highest speed is at the outside edge of the outlet therefore providing the highest screening efficiency. The elaborate construction lowers the emission of fan noise increases the comfort experienced and enables the best possible energy savings when operating the air curtain system.

Operation and economy

Simple mounting fixtures, installation-friendly water connections as well as prewired connections, ensure quick installation and commissioning. The unit is ready for immediate operation via the connected power supply cord.

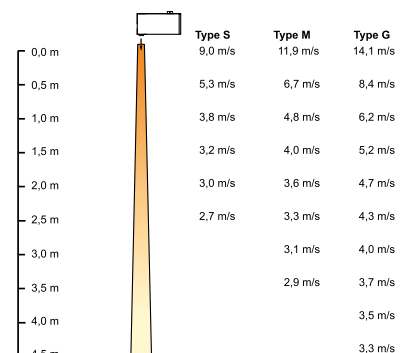
Design

Comfortline Classic air curtain systems do not require intake grilles – the interior air suction is carried out aerodynamically behind a stylish front panel, which transforms a technical unit into a design feature for the entrance. For a small surcharge, the front panel can be designed specifically in regard to colour and with different finishing strips.

Product specifications

- Maintenance-free operation in accordance with VDI 6022*1.
- Plug and Play. Immediate operation of water heated units due to pre-wired control panel.
- Special solutions for vertical and false ceiling mounting available.
- BMS-control option included. Other controls like IR-Remote and manual-automatic are available as accessory.
- Corrosion proof housing made of hot zinc-plated and powder coated steel panels. Colour: RAL 9016. Possibility to customize with different finishing strips. Standard colour finishing strip: RAL 7006 silver metallic.

Air velocity profile*2



*1) VDI 6022 Explanation

With the latest VDI guideline air filters for air curtains are no longer prescribed. Instead it must be ensured that no harmful deposits are built up on the heat exchangers. Comfortline Classic air curtains are equipped with heat exchangers with a fin distance of 4mm, which ensure a maintenance free operation.

*2) Mean values core air stream. Measurements made according to AMCA 220 "Test methods for Air Curtain Units".

Design and specifications are subject to change without notice.

Comfortline Classic

Technical specifications | Comfortline Classic W with water heating

Type	Heat output 80/60°C [kW]	Pressure drop 80/60°C [kPa]	Heat output 60/40°C [kW]	Pressure drop 60/40°C [kPa]	Airflow* ¹ [m ³ /h]	Sound pressure* ² [dB(A)]	Sound power [dB(A)]	Voltage* ³ Amperage (control)	Power* ³ (control) [kW]	Length (L) [mm]	Weight [kg]
S1000W	6,9	2,8	6,1	2,4	1200	33/50	49/66	230 V~/1,7 A	0,4	1000	55
S1500W	10,3	4,3	9,1	3,6	1800	35/52	51/68	230 V~/2,5 A	0,6	1500	88
S2000W	13,7	5,6	11,3	4,2	2400	36/53	52/69	230 V~/3,4 A	0,8	2000	116
S2500W	17,2	6,9	15,2	5,8	3300	37/54	53/70	230 V~/4,2 A	1,0	2500	145
S3000W	20,6	6,6	18,2	5,5	3600	38/55	54/71	230 V~/5,0 A	1,2	3000	174
M1000W	10,3	5,7	8,5	4,2	1800	36/53	52/69	230 V~/2,2 A	0,4	1000	57
M1500W	15,5	8,8	13,5	6,8	2500	36/53	52/69	230 V~/3,4 A	0,7	1500	88
M2000W	20,6	11,6	18,4	9,0	3600	38/55	54/71	230 V~/4,5 A	0,9	2000	118
M2500W	25,8	14,4	23,3	11,0	4400	39/56	55/72	230 V~/5,6 A	1,1	2500	150
M3000W	30,9	14,1	27,3	11,6	5000	40/57	55/72	230 V~/6,7 A	1,3	3000	182
G1000W	15,5	11,8	11,0	6,5	2700	40/58	56/74	230 V~/3,4 A	0,7	1000	60
G1500W	20,6	14,8	16,2	9,3	3600	41/59	57/75	230 V~/4,5 A	0,9	1500	90
G2000W	29,8	21,8	23,8	14,2	5400	43/61	59/77	230 V~/6,7 A	1,4	2000	120
G2500W	33,9	24,0	29,0	16,3	6300	43/62	59/77	230 V~/7,8 A	1,6	2500	152
G3000W	41,2	24,2	33,8	13,9	7200	44/62	60/78	230 V~/9,0 A	1,8	3000	184

*¹) Max airflow, out of 5 steps.

*²) At lowest/highest airflow. Conditions: Distance to the unit 5 metres. Directional factor:2. Equivalent absorption area: 200 m².

*³) Rated capacity data.

Protection class Comfortline Classic water heated: (IP44) splash-proof design.

CE compliant.

Technical specifications | Comfortline Classic E with electrical heating

Type	Output steps [kW]	Airflow* ¹ [m ³ /h]	Δt * ² [°C]	Sound pressure* ³ [dB(A)]	Sound power [dB(A)]	Voltage* ⁴ Amperage (control)	Power* ⁴ (control) [kW]	Voltage Amperage (heat)	Length (L) [mm]	Weight [kg]
S1000E09	3/6/9	1200	23	33/50	49/66	230V~/1,7A	0,4	400 V3~/13 A	1000	55
S1500E12	4/8/12	1800	20	35/52	51/68	230V~/2,5A	0,6	400 V3~/17,5 A	1500	88
S2000E18	6/12/18	2400	23	36/53	52/69	230V~/3,4A	0,8	400 V3~/26 A	2000	116
S2500E18	6/12/18	3300	16	37/54	53/70	230V~/4,2A	1,0	400 V3~/26 A	2500	145
S3000E24	8/16/24	3600	20	38/55	54/71	230V~/5,0A	1,2	400 V3~/35 A	3000	174
M1000E09	3/6/9	1800	15	36/53	52/69	230V~/2,2A	0,4	400 V3~/13 A	1000	57
M1500E12	4/8/12	2500	14	36/53	52/69	230V~/3,4A	0,7	400 V3~/17,5 A	1500	88
M2000E18	6/12/18	3600	15	38/55	54/71	230V~/4,5A	0,9	400 V3~/26 A	2000	118
M2500E18	6/12/18	4400	12	39/56	55/72	230V~/5,6A	1,1	400 V3~/26 A	2500	150
M3000E24	8/16/24	5000	14	40/57	55/72	230V~/6,7A	1,3	400 V3~/35 A	3000	182
G1000E15	5/10/15	2700	17	40/58	56/74	230V~/3,4A	0,7	400 V3~/22 A	1000	60
G1500E23	7,5/15/22,5	3600	19	41/59	57/75	230V~/4,5A	0,9	400 V3~/32,5 A	1500	90
G2000E30	10/20/30	5400	17	43/61	59/77	230V~/6,7A	1,4	400 V3~/43,5 A	2000	120
G2500E36	12/24/36	6300	17	43/62	59/77	230V~/7,8A	1,6	400 V3~/52 A	2500	152
G3000E45	15/30/45	7200	19	44/62	60/78	230V~/9,0A	1,8	400 V3~/65 A	3000	184

*¹) Max airflow, out of 3 steps.

*²) Δt = temperature rise of passing air at maximum heat output and highest airflow.

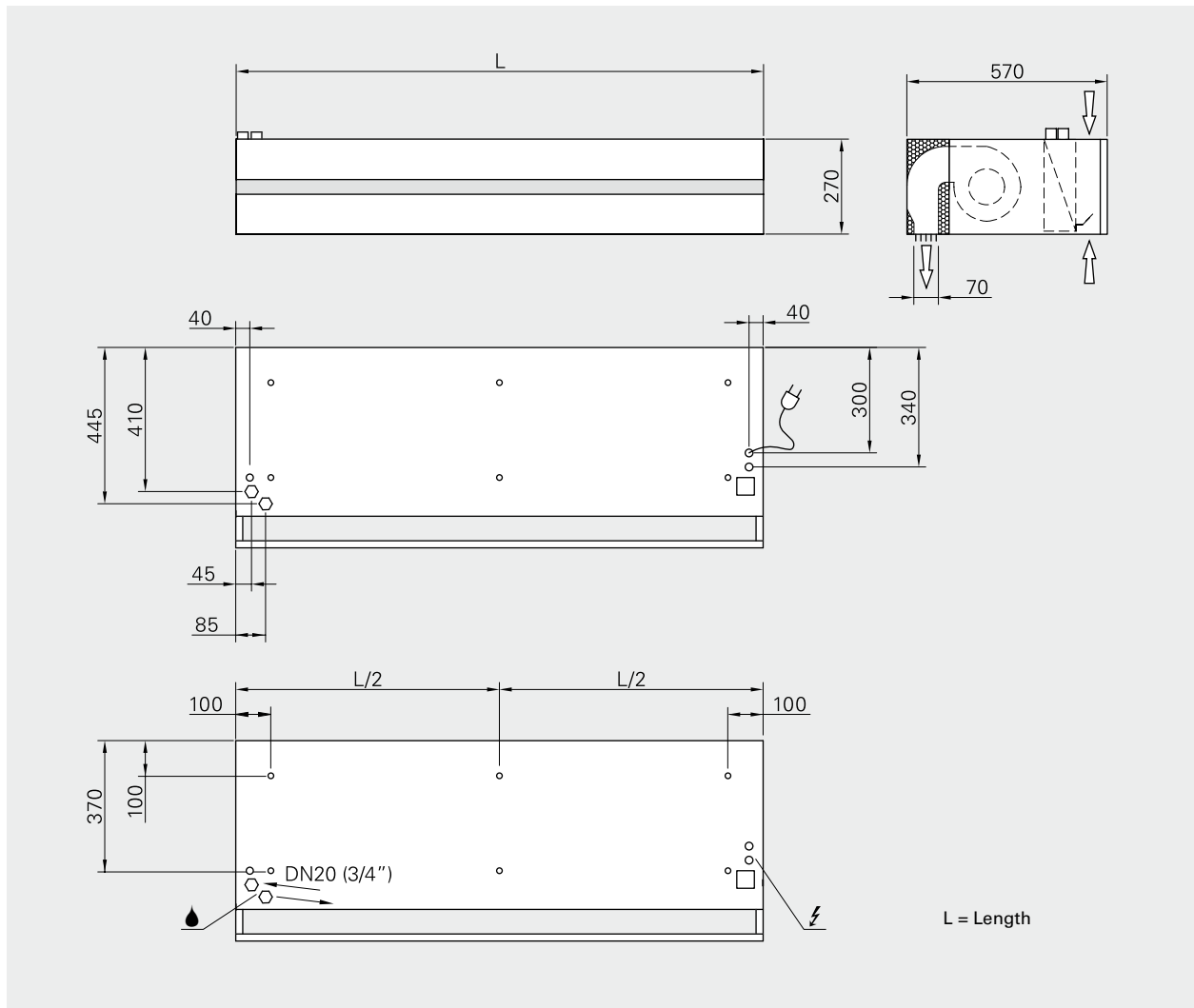
*³) At lowest/highest airflow. Conditions: Distance to the unit 5 metres. Directional factor:2. Equivalent absorption area: 200 m².

*⁴) Rated capacity data.

Protection class Comfortline Classic electrically heated: (IP21) drip-proof design.

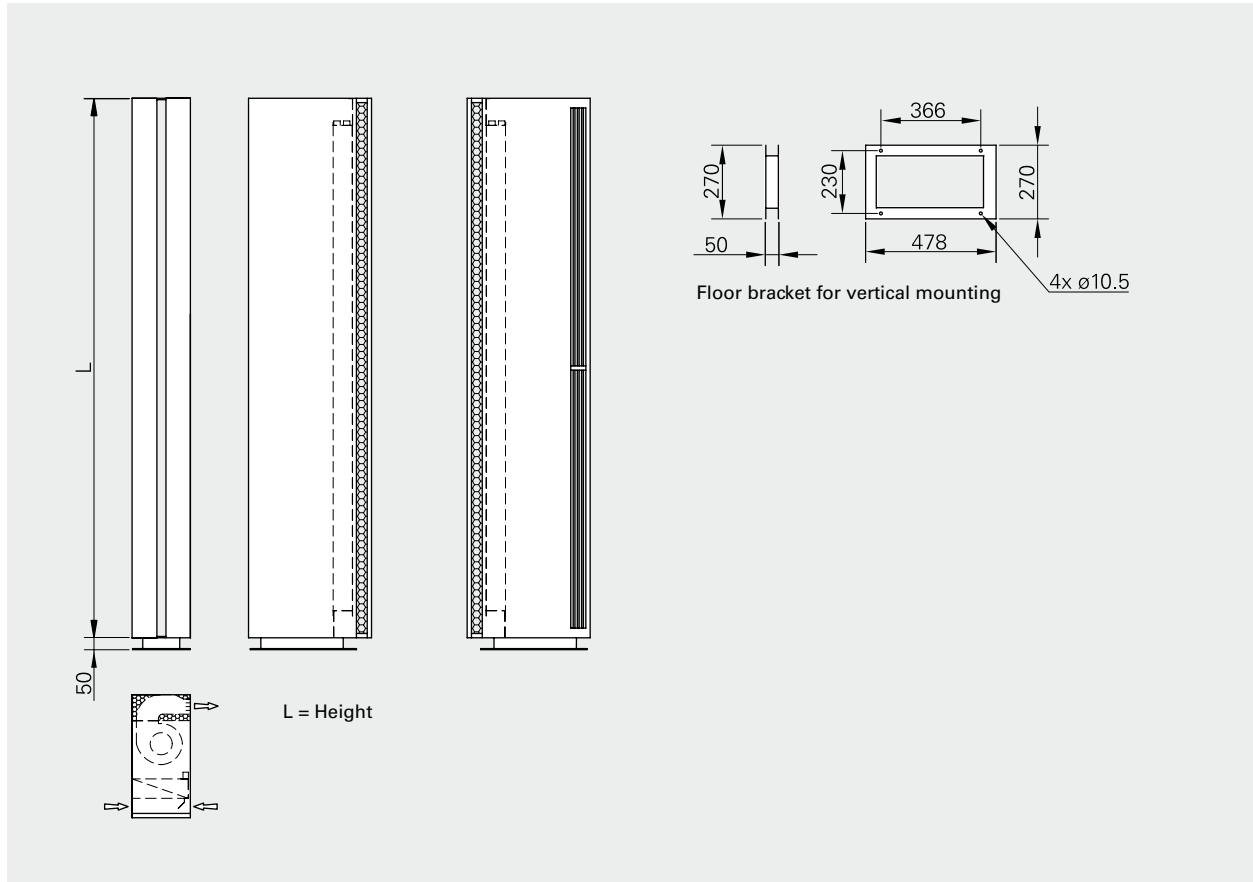
CE compliant.

Dimensions

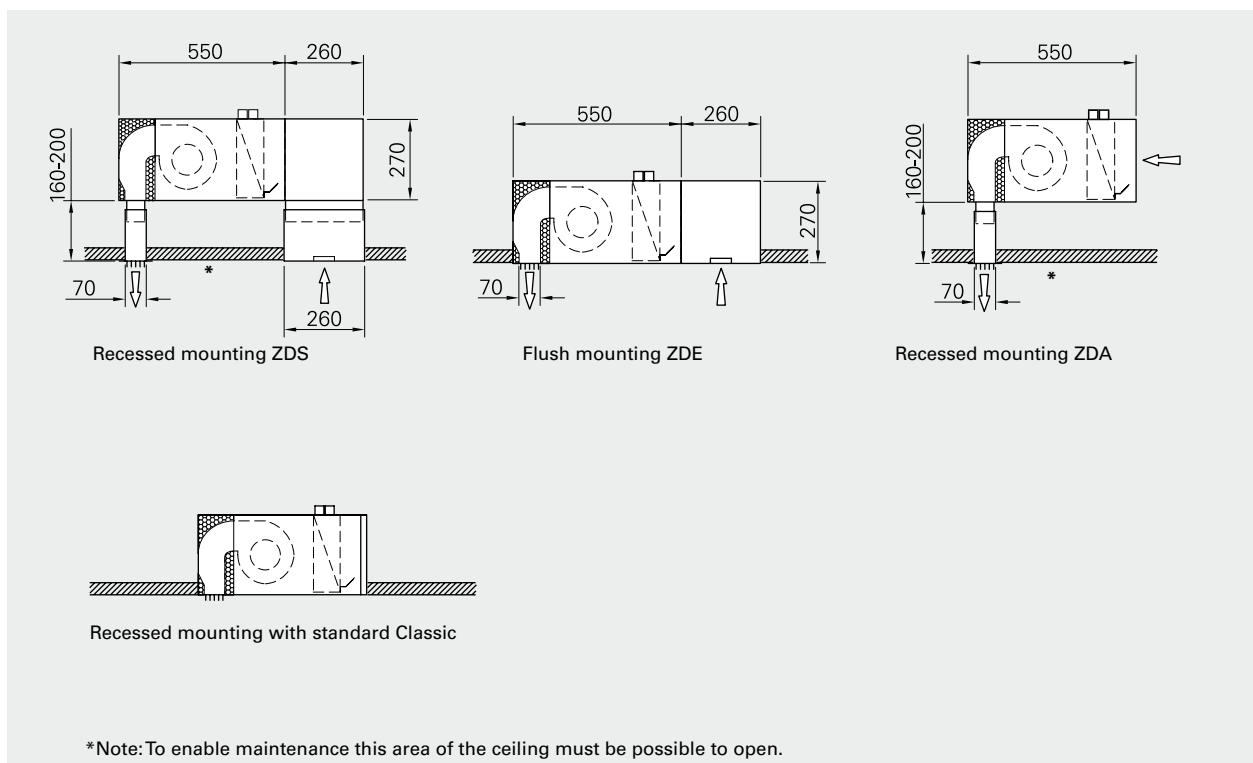


Other mounting possibilities

Vertical mounting



Recessed mounting



Positioning, mounting and installation

Positioning

The Comfortline Classic is available for horizontal as well as vertical and recessed mounting. Horizontally, the air curtain is positioned hanging visibly above the door. Vertically, it is standing next to the door on either the left or the right side. Recessed, the air curtain is mounted hidden in the ceiling as either ZDS (recessed), ZDE (flush mounted) or ZDA (recessed). In all cases the outlet of the air curtain should be positioned as close to the door as possible.

Mounting

Recessed or horizontal mounting is carried out using M8 threaded rods for ceiling support. Wall brackets for horizontal mounting are available as an accessory. A vertical unit is mounted standing on the accompanying floor bracket that is bolted to the floor and must be secured to a wall or the ceiling to prevent it from falling over.

Connection Comfortline Classic with water heating

The air curtain is delivered with 2,5 m cord and plug to the right on top of the unit for easy connection of the 230V~ supply. The supply should be carried out with a service switch and with fuse according to technical data.

The control panel is delivered connected with 1 m RJ45 cable and mounted on the bottom side of the unit. For more connection possibilities please see wiring diagrams.

Heating coil is equipped with DN20 (3/4") inner thread connections. The pipe connections are protected against over twisting damage and are located at the top on the left side of the unit.

Connection Comfortline Classic with electrical heating

The air curtain is pre-wired with 1,5 m cables for 230V~ supply, 400V3~ supply and control. Each supply should be carried out with a service switch and with fuse according to technical data.

For more connection possibilities please see wiring diagrams.

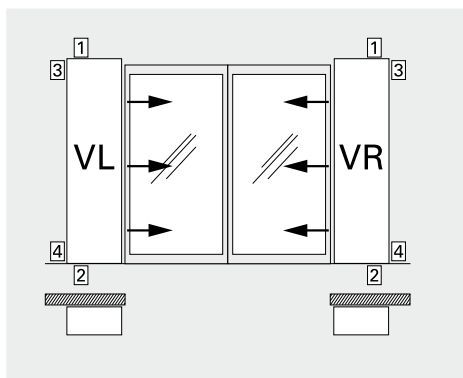
Ordering

Ordering key

Model name - Performance - Length - Heat medium - Unit shape - Electrical Connections position - Water Connections position

Model name	Comfortline Classic
Performance	S, M or G type performance
Length	1000, 1500, 2000, 2500 or 3000
Heat medium	W (water) or E (electrical). Ambient on request.
Unit shape	H (Horizontal), VL (Vertical Left), VR (Vertical Right), ZDS (recessed), ZDE (flush mounted) or ZDA.
Electrical connections position	Choice only available for vertical units. 1, 2, 3 or 4. See below.
Water connections position	Choice only available for vertical units. 1, 2, 3 or 4. See below.

Connections position



Ordering example

To order a Comfortline Classic, with M performance, in 2,5 m length, with electrical heating, standing to the left of the door as seen from the inside and with connections from below, the order line should look like this:

Comfortline Classic - M - 2500 - E18 - VL - 2 - 2

Complete control kits

Water 💧

Standard control

With the standard control panel D705IR the fan speed is selected in five steps. With the summer/winter switch the heating is turned on/off. The control panel is configured for dual functionality which is switched with an external contact, i.e. a door contact or a room thermostat, that may be connected to the control panel.

With a DIP-switch inside the control panel it is decided whether the external contact switches the air curtain on/off (Position ON) or if it switches between high and low speed (Position OFF). High speed is chosen freely among the five fan speeds available. The high speed is set on the controller when the contact is open.

To save the motors of the air curtain an over-run time between 15 and 75 seconds can be set on the controller.

Up to 12 units can be controlled simultaneously.

Basic wiring for supply (with plug) and control (RJ45-type) is prewired from factory.

BMS control

The water heated air curtain is prepared for BMS-control via the 0-10V terminals on the internal PC-board. The valve must then be controlled via an external room thermostat.

Electric ⚡

Standard control

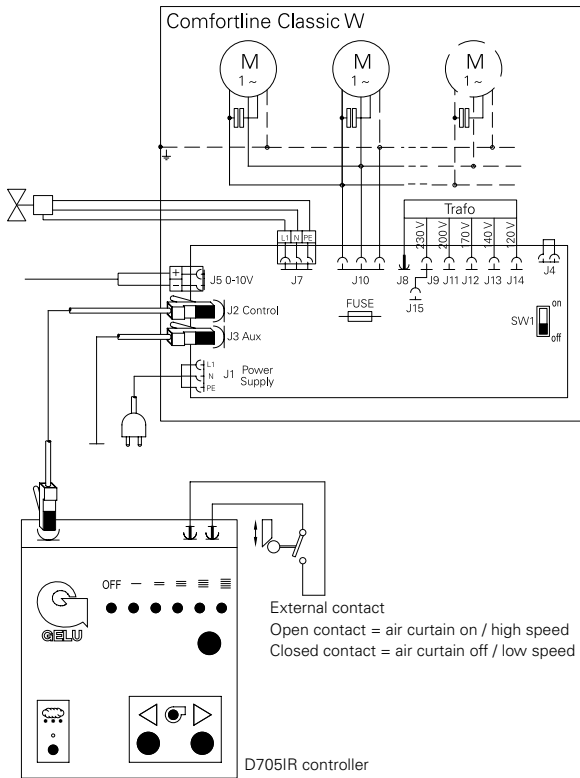
The standard control panel D700e controls the fan speed and the heating in three steps respectively. The heating steps are coordinated with the selected fan speed to prevent risk of overheating. A room thermostat can be connected to the controller to automatically switch heating and fans on and off.

The controller also has an over-run function which may start the fan after switch-off to remove excess heat. When the unit has cooled down the fans are shut off. The memory function (DIP-switch inside= ON) remembers which fan speed and heating step are used so that they are turned back on after a power failure.

Up to 4 units can be controlled simultaneously.

Basic wiring for the air curtain unit is prewired from factory.

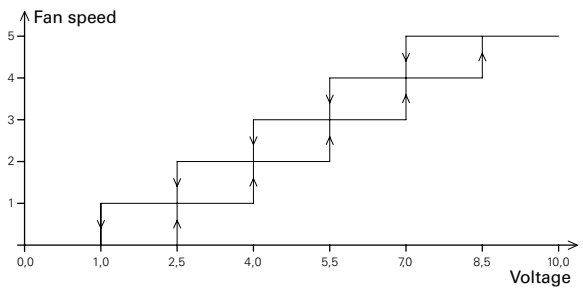
Wiring diagrams Comfortline Classic W



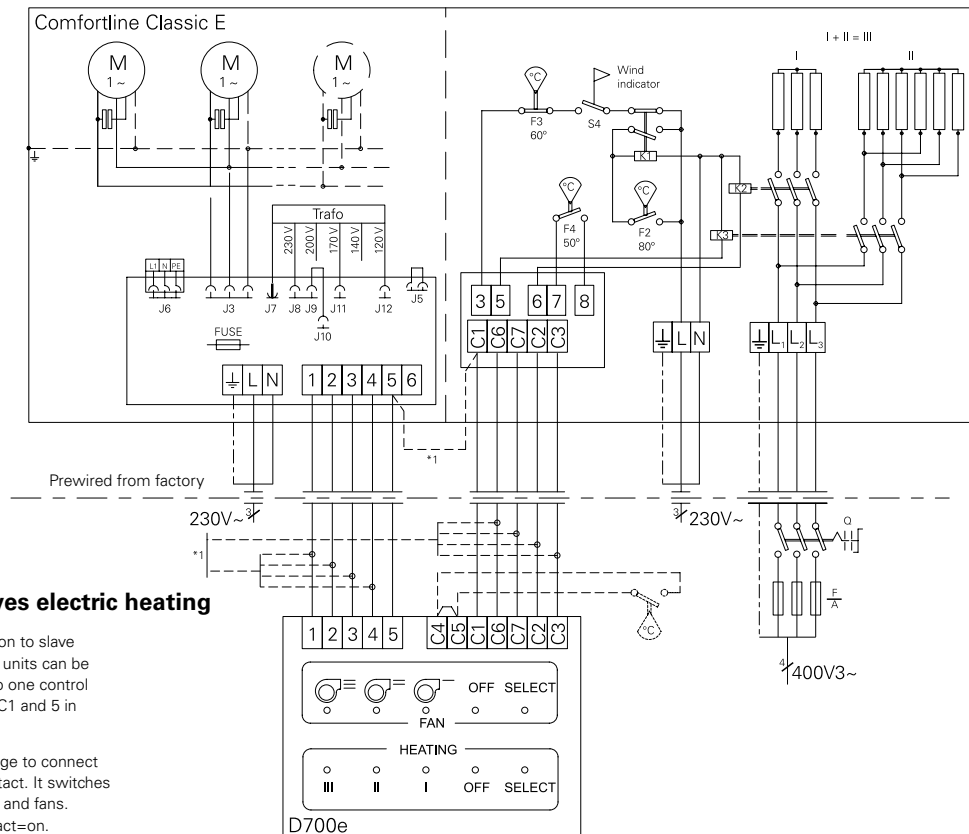
Control alternatives water heating

- J1 Prewired with plug for 230 V~ connection.
- J2 RJ45 cable for connection to controller.
- J3 For connection to slave unit. Up to 12 units can be connected to one control unit. For 0-10 V control use J5 on all units.
- J4 Remove bridge for start/stop through BMS system. Open contact = off.
- J5 0-10 V control via BMS system. See SW1.
- J7 Magnetic valve connection. Activated by summer/winter switch on control unit.
- SW1 For 0-10 V BMS control put switch in position ON. For normal function set switch in position OFF.
- External contact Connect external contact to terminals in controller for on/off function.

0-10 V Input signal (for BMS control)



Wiring diagrams Comfortline Classic E



Control alternatives electric heating

- *1 For connection to slave unit. Up to 4 units can be connected to one control unit. Bridge C1 and 5 in all units.
- C4-C5 Remove bridge to connect external contact. It switches both heating and fans. Closed contact=on.
- J5,J6 Not used.

For more information regarding control alternatives please contact Gelu-Frico.

Accessories

Controllers

D705IR	Standard controller for water heated and ambient air curtains (included in delivery).
IR01	Infrared remote controller for use with D705IR.
D700E	Standard controller for electrically heated air curtains (included in delivery).
D715M	Programmable manual/automatic controller for water heated units. Enables control with room thermostat and door contact.

Door contacts

GLS	Mechanical position limit switch.
MDC	Magnetic door contact with 3 alternating contacts and time delay function.

Thermostats

TBK10	Mechanical bimetal thermostat with gas-filled membrane. Alternating contact. External dial.
T10	Electronic thermostat. Internal dial. Max 10 A.
TK10	Electronic thermostat. External dial. Max 10 A.
TKS16	Electronic thermostat. Alternating contact. External dial. Max 16 A.

Valves and water regulations

VR20	Valve set containing AV20 stop valve, JVF20 adjustment valve, TRV20 3-way valve, SD20 electronic actuator and BPV10 by-pass valve.
VR25	Valve set containing AV25 stop valve, JVF25 adjustment valve, TRV25 3-way valve, SD20 electronic actuator and BPV10 by-pass valve.
SD10	Electrothermal actuator for summer/winter function. For use with GTVV and GTRV valves.
SD20	Electronic on/off actuator. For use with TVV-valves.
GCT02	Temperature controller for constant outblow temperature control. For use with GTVV and GTRV valves. 2 m capillary.
GTVV20	2-way valve DN20 (3/4").
GTVV25	2-way valve DN25 (1").
TVV20	2-way valve DN20 (3/4").
TVV25	2-way valve DN25 (1").

GTRV20	3-way mixing valve DN20 (3/4"). Incl. threaded nozzles (3 pcs).
GTRV25	3-way mixing valve DN25 (1"). Incl. threaded nozzles (3 pcs).
GMV15	2-way magnetic valve DN25 (1/2").
GMV20	2-way magnetic valve DN20 (3/4").
GMV25	2-way magnetic valve DN25 (1").
AFT06	Anti-freeze thermostat with 6 m capillary for mounting on the heating coil.
FH0820	Flexible hose DN20, length 0,8 m.
FH0525	Flexible hose DN25, length 0,5 m.
FH1025	Flexible hose DN25, length 1 m.

Cables

GMC10	10 m RJ45 cable for connection of D705IR.
GMC20	20 m RJ45 cable for connection of D705IR.
GMC30	30 m RJ45 cable for connection of D705IR.
GMC40	40 m RJ45 cable for connection of D705IR.

Air curtain customization

CCF	Comfortline Classic front panel customization. State RAL code.
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Mounting kits

GWB560	Wall bracket 560 mm. For S/M/G size units.
GP0810	Threaded bars 1000 mm. Size M8. Set of 2 pcs.
GP0810S	Threaded bars 1000 mm with vibration damper. Size M8. Set of 2 pcs.
GCP	Covers for threaded bars. Set of 2 pcs.
GCS	Square shape cover for suspension, cables and pipes.
GCO	Oval shape cover for suspension, cables and pipes.

Selecting mounting kits:

Unit length	No of mounting kits needed per air curtain
1000 mm	2
1500 mm	2
2000 mm	3
2500 mm	3
3000 mm	4

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