



## AGI

Robust air curtain for large industrial doors

- Horizontal and vertical mounting
- Lengths: 1,2, 1,8, 2,4 and 3 m

- ❄ Ambient, no heat
- 💧 Water heat WL

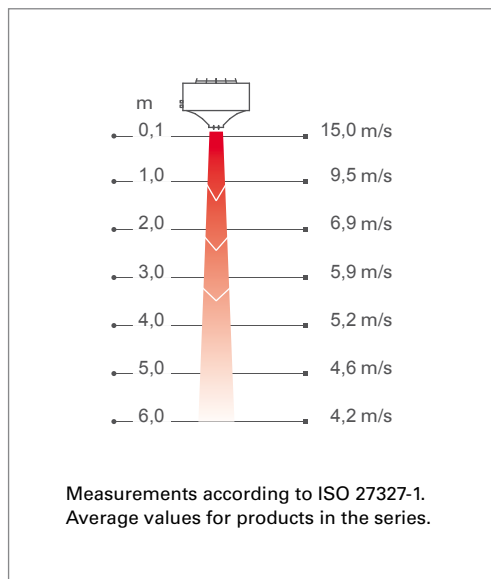
### Application

AGI is a robust air curtain intended for vertical or horizontal installation in large doorways. With its powerful fans and high enclosure classification it is specially suitable for industrial environments.

### Design

AGI has a stable and simple design. It is available in four different lengths of up to 3 metres, which makes it easy to create a continuous air curtain for large doors. In vertical installation two units can be put on top of each other.

### Air velocity profile



### Product specifications

- Simple suspension using fixing nuts on the upper side for installation with threaded rod.
- Available for horizontal or vertical mounting.
- Adjustable outlet grille makes it possible to direct the air for optimum air curtain effect.
- High protection class, IP54.
- Model with water coil WH for high water temperatures is available for special order.
- Corrosion proof housing made of hot zinc-plate and powder enamelled steel panels. Colour: grey, RAL9006.

## Technical specifications

### Horizontal mounting

#### 🌀 Ambient, no heat - AGI A

Type	Output [kW]	Airflow [m <sup>3</sup> /h]	Sound level* <sup>1</sup> [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
AGIH2A	0	7000	69	400V3~	2,4	1200	51
AGIH3A	0	10500	71	400V3~	3,5	1800	75
AGIH4A	0	14000	72	400V3~	4,7	2400	97
AGIH5A	0	17500	73	400V3~	5,9	3000	120

#### 💧 Water heat - AGI WL, coil for low water temperature (≤80 °C)

Type	Output* <sup>3</sup> [kW]	Airflow [m <sup>3</sup> /h]	Δt* <sup>2,3</sup> [°C]	Water volume [l]	Sound level* <sup>1</sup> [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
AGIH2WL	33	7000	21/14	6,6	69	400V3~	2,4	1200	82
AGIH3WL	48	10500	20/13	10,1	71	400V3~	3,5	1800	125
AGIH4WL	64	14000	20/14	14,0	72	400V3~	4,7	2400	165
AGIH5WL	81	17500	20/14	17,6	73	400V3~	5,9	3000	205

\*<sup>1</sup>) Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m<sup>2</sup>.

\*<sup>2</sup>) Δt = temperature rise of passing air at maximum heat output and highest airflow.

\*<sup>3</sup>) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

### Vertical mounting

#### 🌀 Ambient, no heat - AGI A

Type	Output [kW]	Airflow [m <sup>3</sup> /h]	Sound level* <sup>1</sup> [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
AGIV2A	0	7000	69	400V3~	2,4	1200	51
AGIV3A	0	10500	71	400V3~	3,5	1800	75
AGIV4A	0	14000	72	400V3~	4,7	2400	97
AGIV5A	0	17500	73	400V3~	5,9	3000	120

#### 💧 Water heat - AGI WL, coil for low water temperature (≤80 °C)

Type	Output* <sup>3</sup> [kW]	Airflow [m <sup>3</sup> /h]	Δt* <sup>2,3</sup> [°C]	Water volume [l]	Sound level* <sup>1</sup> [dB(A)]	Voltage motor [V]	Amperage motor [A]	Length [mm]	Weight [kg]
AGIV2WL	33	7000	21/14	6,6	69	400V3~	2,4	1200	82
AGIV3WL	48	10500	20/13	10,1	71	400V3~	3,5	1800	125
AGIV4WL	64	14000	20/14	14,0	72	400V3~	4,7	2400	165
AGIV5WL	81	17500	20/14	17,6	73	400V3~	5,9	3000	205

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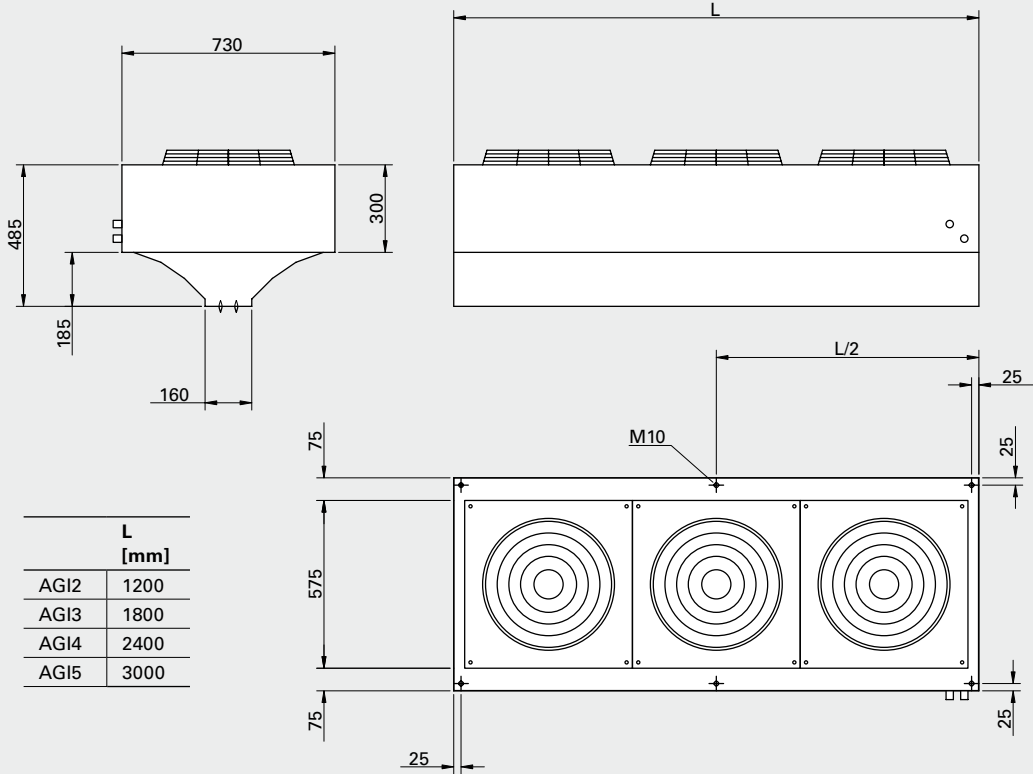
\*<sup>3</sup>) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Protection class: IP54.

CE compliant.

Dimensions

Horizontal mounting



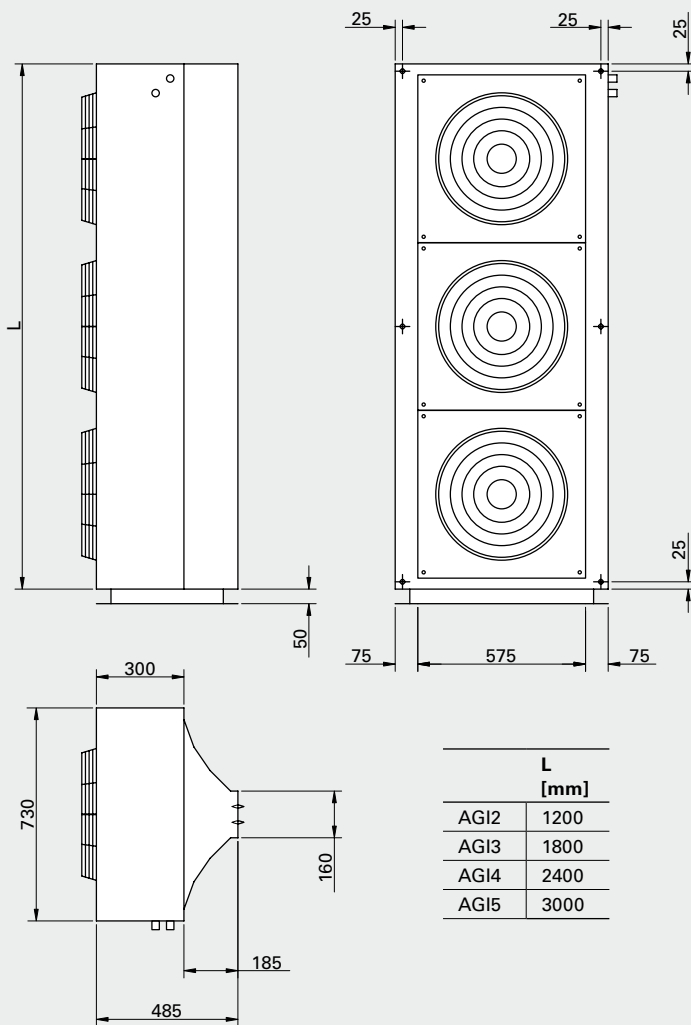
	L [mm]
AGI2	1200
AGI3	1800
AGI4	2400
AGI5	3000

Connection dimensions,  
inside thread

∅	1" DN25	1 1/4" DN32
AGI2	X	
AGI3	X	
AGI4	X	
AGI5		X

Dimensions

Vertical mounting



	L [mm]
AGI2	1200
AGI3	1800
AGI4	2400
AGI5	3000

Connection dimensions, inside thread

Ø	1"	1 1/4"
	DN25	DN32
AGI2	X	
AGI3	X	
AGI4	X	
AGI5		X

## Mounting and connection

### Mounting

The air curtain range includes variants for horizontal and vertical installation.

#### *Horizontal mounting*

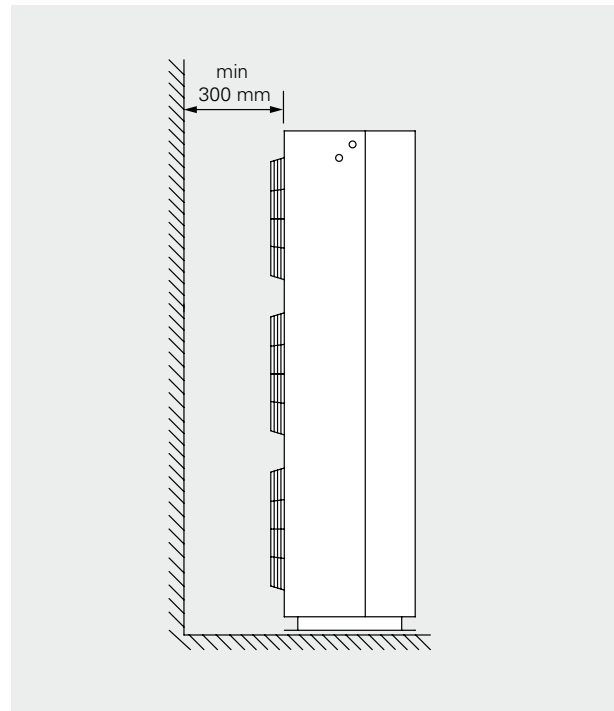
The air curtain is installed horizontally with the supply air grille facing downwards as close to the door as possible. The unit is suspended from the ceiling by threaded rods. For the protection of wider doorways, several units can be mounted next to each other.

#### *Vertical mounting*

The air curtain is mounted vertically as close as possible to the door. For the best effect air curtains should be placed on both sides of the opening.

The unit can be turned and positioned on either side of the door. Two units can be mounted directly on top of each other.

The air curtain is mounted on a floor frame which is included. The edging is attached horizontal to the floor using fasteners appropriate for the surface. The air curtain must always be secured at the top.



Minimum distances

### Connection

#### *Unit without heating*

Control (400V3~) is connected to the terminal block in the junction box on the side of the unit.

#### *Unit with water heating*

Control (400V3~) is connected to the terminal block in the junction box on the side of the unit.

The water coil is connected via connections with dimensions as given in the table (see diagram) on the side of the unit.

## Accessories

### GP1010, threaded bar

Threaded bar for mounting in ceilings. Length 1 m. M10. Four are needed for 1.2 metre units and six are needed for other units.

Type	Description
GP1010	Threaded bar, 1 m



## Control options

### ✿ Unit without heating

#### Level 1

Airflow is set manually. The position limit switch regulates the airflow on/off.

#### Control kit:

- RTRD7, RTRD14, 5-step fan speed control
- AGB304, position limit switch.



### ♠ Unit with water heating

#### Level 1

Airflow is set manually. The position limit switch regulates the airflow on/off. Room thermostat controls the heat output via actuator/valve on/off.

#### Control kit:

- RTRD7, RTRD14, 5-step fan speed control
- AGB304, position limit switch.
- T10, room thermostat IP30.

Note! A valve set VR25 (option: TVV25 with SD20) should be added for a complete control kit.

#### Level 2

Airflow and heat output are controlled automatically based on the opening of the door and the room temperature. When the door is open the fan runs at high speed, when the door closes the fan will continue to run at high speed for the desired time (2s–10 min.) set on MDC. When the door is closed the fan runs at low speed if there is a need for heating, if not the fan is switched off.

The room thermostat controls the heat output on/off.

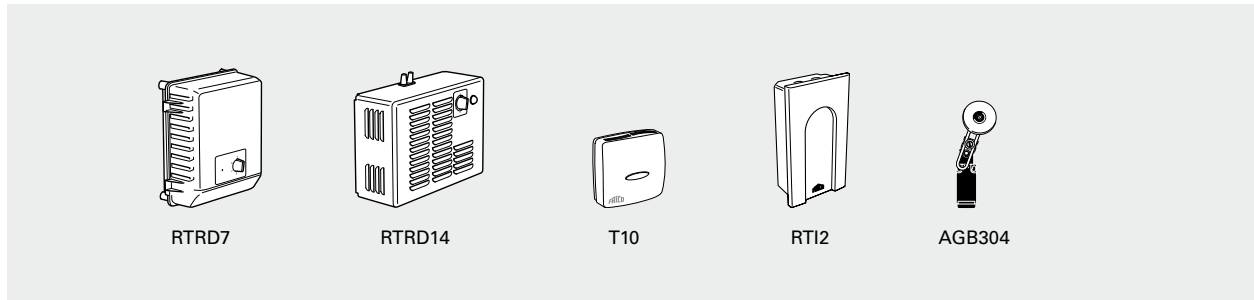
E.g. the thermostat is set on 23 °C and the difference between the steps 4 °C. The thermostat will activate below 19 °C when the door is closed. When the door opens, the thermostat will activate below 23 °C and normally the heat is switched on.

#### Control kit:

- RTRDU, 5-step fan speed control, high/low speed.
- MDC, magnetic door contact with a time relay.
- RTI2, electronic 2-step thermostat

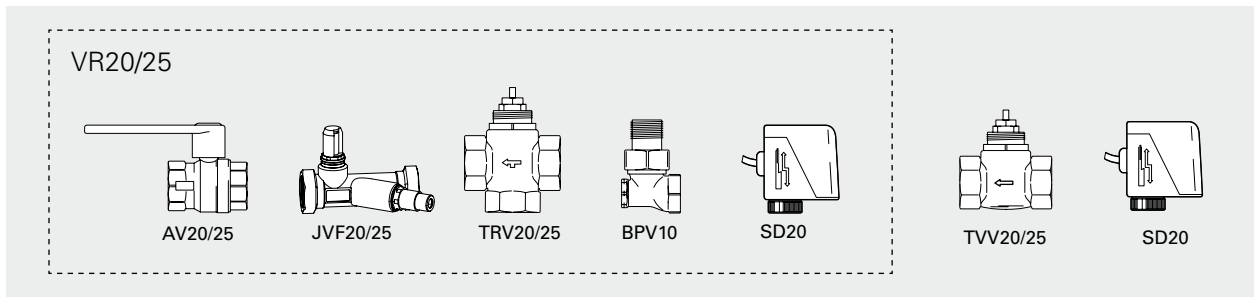
Note! A valve set VR25 (option: TVV25 with SD20) should be added for a complete control kit.

Controls



Type	Description	HxWxD [mm]
RTRD7	5-step fan speed control, 7 A	309x262x160
RTRD14	5-step fan speed control, 14 A	290x400x166
T10	Electronic thermostat, IP30	80x80x31
RTI2	Electronic 2-step room thermostat, IP44	155x87x43
AGB304	Position limit switch, IP44	

Water control



Type	Description
VR20	Valve set DN 20 mm
VR25	Valve set DN 25 mm
TVV20	2-way control valve, DN 20 mm
TVV25	2-way control valve, DN 25 mm
SD20	Actuator 230V~

For further information and options, see the "Controls" section.

## Output charts water

			Supply water temperature: 80 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 80/60 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPA]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPA]
AGI2WL	max	7000	41,0	39,0	0,24	6,4	56,0	42,0	0,69	40,0
	min	2500	15,0	28,0	0,07	0,7	28,0	52,0	0,35	12,0
AGI3WL	max	10500	59,7	41,0	0,37	2,9	81,0	40,9	0,99	17,2
	min	3800	21,7	34,3	0,12	0,4	41,6	50,5	0,51	5,0
AGI4WL	max	14000	79,7	40,0	0,49	3,5	110,2	41,4	1,35	23,0
	min	5000	28,3	34,0	0,15	0,4	55,7	51,1	0,68	6,4
AGI5WL	max	17500	100,0	40,0	0,61	2,6	138,8	41,6	1,70	16,7
	min	6300	35,9	35,4	0,19	0,3	70,3	51,2	0,86	4,8

			Supply water temperature: 70 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 70/50 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPA]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPA]
AGI2WL	max	7000	40,0	43,0	0,36	13,0	45,0	37,0	0,55	27,0
	min	2500	14,0	29,0	0,08	1,1	23,0	45,0	0,28	8,0
AGI3WL	max	10500	60,0	46,0	0,61	7,2	64,5	36,2	0,78	11,5
	min	3800	21,7	34,3	0,15	0,6	33,3	44,0	0,41	3,4
AGI4WL	max	14000	80,2	45,0	0,78	8,5	87,7	36,6	1,07	15,1
	min	5000	28,5	34,0	0,19	0,7	44,5	44,4	0,54	4,3
AGI5WL	max	17500	100,9	45,0	0,98	6,3	110,4	36,7	1,34	11,1
	min	6300	36,1	34,9	0,25	0,5	56,1	44,4	0,68	3,2

			Supply water temperature: 60 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 60/40 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPA]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPA]
AGI2WL	max	7000	40,0	50,0	0,98	78,0	33,0	32,0	0,40	17,0
	min	2500	14,0	32,0	0,13	2,1	17,0	39,0	0,21	5,0
AGI3WL	max	10500	59,5	52,0	1,81	54,3	47,5	31,4	0,58	6,7
	min	3800	21,6	35,0	0,21	1,1	24,9	37,5	0,30	2,1
AGI4WL	max	14000	78,7	49,7	1,85	43,3	64,6	31,7	0,78	8,7
	min	5000	29,2	35,0	0,28	1,4	33,6	38,0	0,41	2,6
AGI5WL	max	17500	99,6	50,0	2,42	33,6	81,3	31,8	0,98	6,5
	min	6300	35,9	35,0	0,35	1,0	42,3	38,0	0,51	2,0

			Supply water temperature: 55 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 55/35 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPA]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPA]
AGI2WL	max	7000	–	–	0,64	–	28,0	30,0	0,33	12,0
	min	2500	14,0	35,0	0,17	4,0	14,0	35,0	0,17	4,0
AGI3WL	max	10500	49,8	–	1,21	–	38,8	29,0	0,47	4,7
	min	3800	21,7	37,0	0,29	2,0	20,6	34,1	0,25	1,5
AGI4WL	max	14000	–	–	1,46	–	53,1	29,3	0,64	6,1
	min	5000	28,4	36	0,36	2,1	27,8	34,5	0,34	1,9
AGI5WL	max	17500	81,8	–	1,65	–	66,7	29,3	0,81	4,6
	min	6300	35,8	36,0	0,46	1,6	34,6	34,3	0,42	1,4

– = at the current water temperatures and airflows, the air outlet temperature will be less than 35 °C.

\*1) Recommended outlet air temperature for good comfort and optimized output.

\*2) Nominal output at given supply and return water temperature.

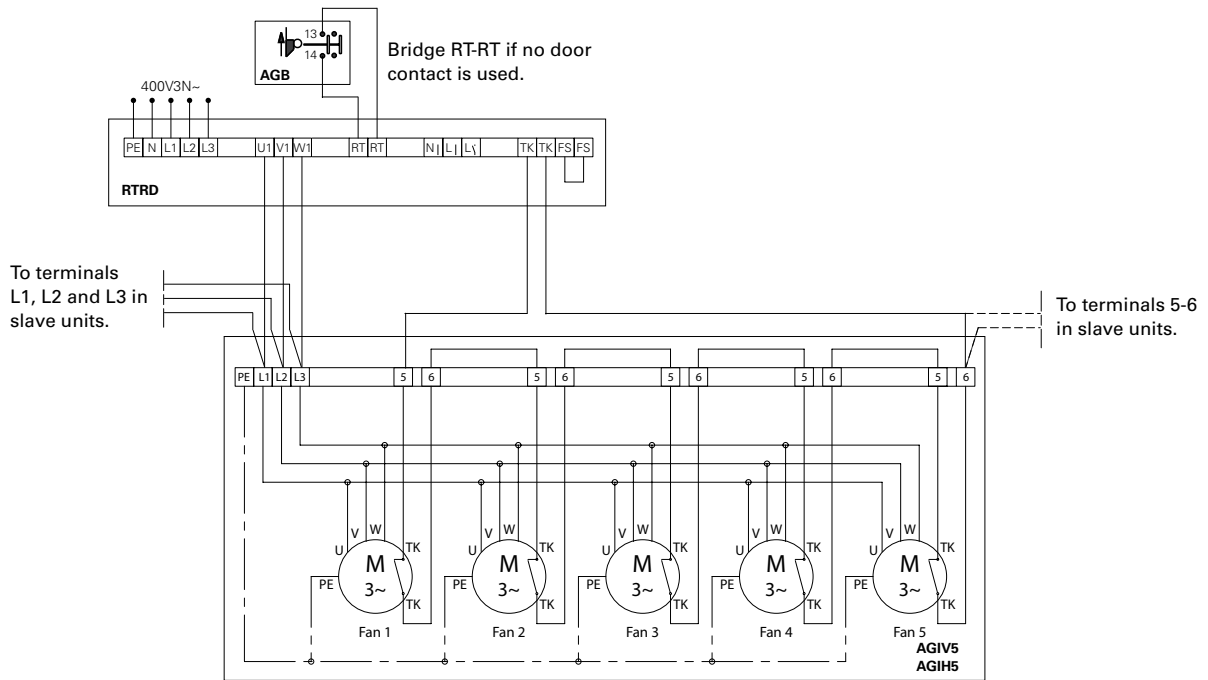


# AGI

## Wiring diagrams

Control options for units without heat

Level 1

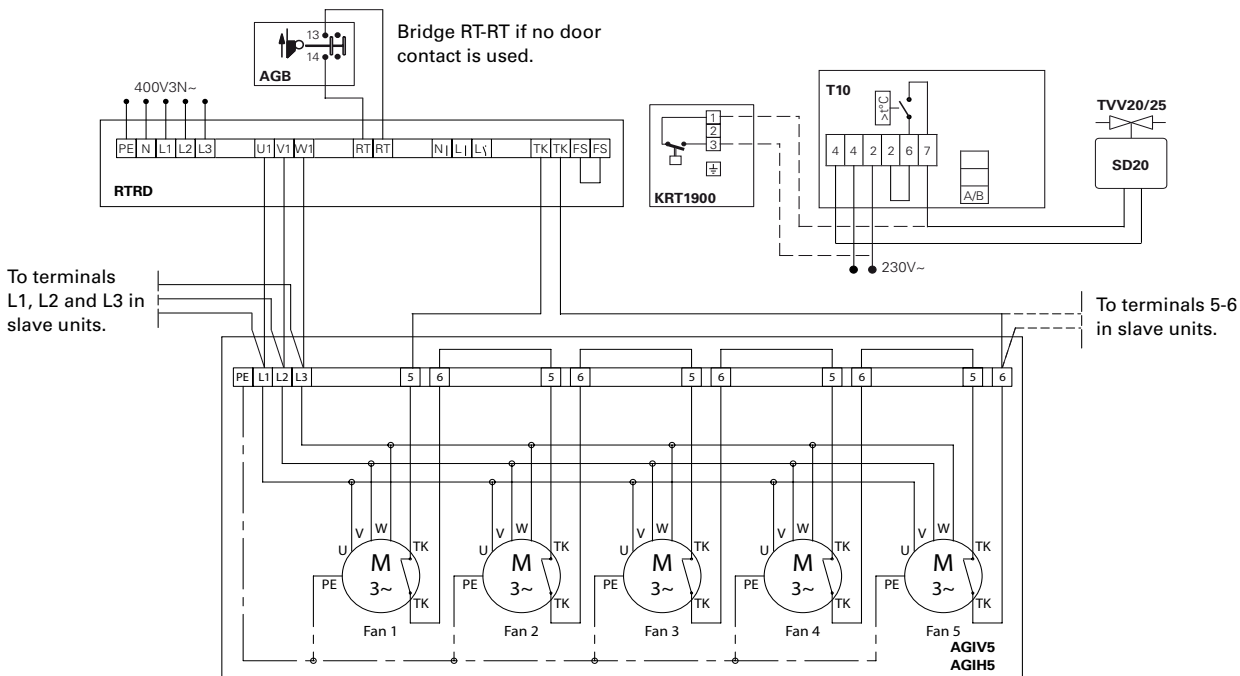


Wiring diagram valid for all AGI. Number of motors corresponds with the number in the type label.

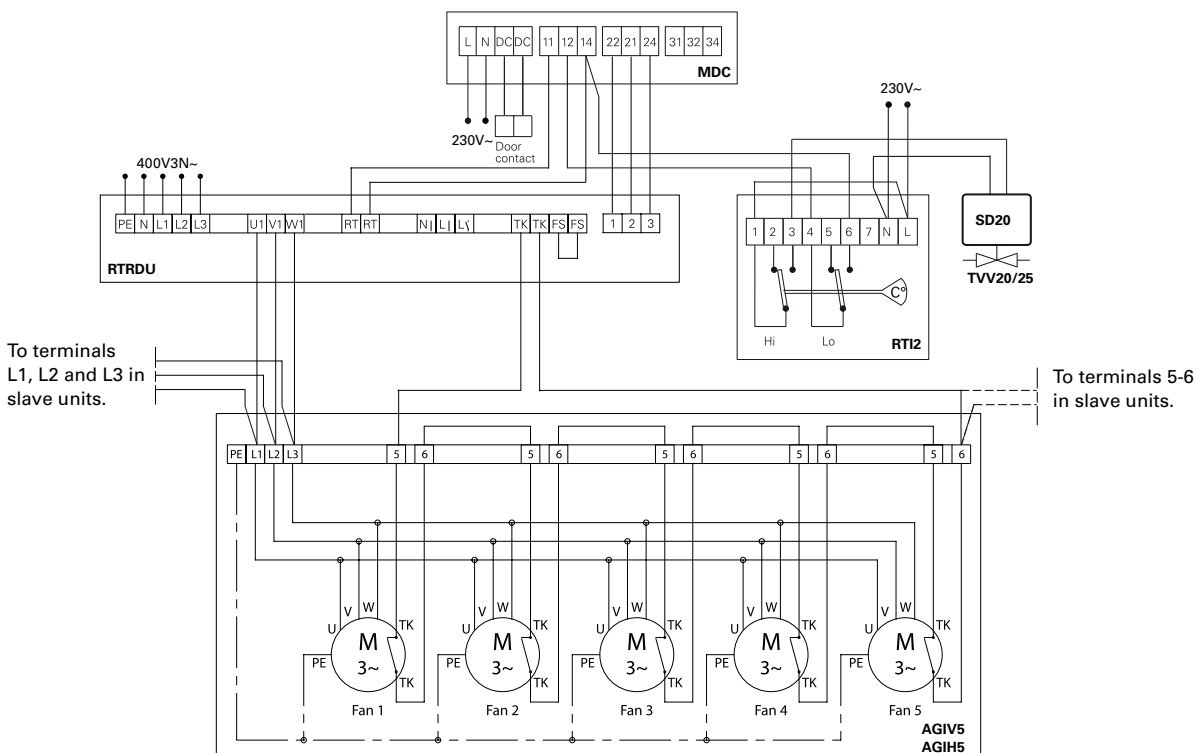
Wiring diagrams

Control options for water heated units

Level 1



Level 2



Wiring diagram valid for all AGI. Number of motors corresponds with the number in the type label.