



Compact and practical fan heater with cooling function

Therma is a fan heater and cooler with a clean, industrial design, built for water connection. The fan heater warms the premises during the colder months and provides cooling in the summer. Therma is well suited for industrial applications such as workshops, logistic centers, production facilities and machine rooms.

Heating or cooling

Room control for optimised indoor climate is available with the option of automatic change-over for heating or cooling. Room control with manual settings is available as an option.

Sustainable design

The fan heater is equipped with an EC motor that is up to 50% more energy efficient than a traditional AC motor. With smart design and efficient manufacturing, Therma uses less material, is lighter, and reduces resource use for a more sustainable choice.

Flexible installation

Therma offers flexible installation with the supplied mounting bracket which makes it possible to direct the fan heater downwards. With the angle bracket (accessory) the fan heater can be directed sideways. The fan heater can be rotated to locate connection pipes on either the left or right side.



Product specifications

- Mounted on wall or ceiling. For cooling, wall installation is required.
- Can be rotated to locate water connection either on the left or right side.
- Features adjustable louvres for directing the airflow.
- Automatic change-over with clamp-on sensor.
- The fan heater is equipped with an EC motor that is up to 50% more energy efficient than a traditional AC motor.
- Supplied with an adjustable mounting bracket.
- A selection of controls and accessories is available.
- Intended for water temperatures up to +150 °C and 10 bar.



Combined fan heater/cooler Therma (IP54) - Water coil 

Voltage motor: 230V, 400V3~*10

Item number	Type	Heat output*1,2 [kW]	Cooling output*3,5 [kW]	Cooling output (sensible)*4,5 [kW]	Airflow*2 [m ³ /h]	Sound power*6 [dB(A)]	Sound pressure*2,7 [dB(A)]	Δt *1,2,8 [°C]	Water volume*9 [l]	Amperage*2 [V]	Weight [kg]
524585	THE12	8,3/17,4	2,5/5,7	4,1	760/2400	72	30/56	32/21,3	1,5	0,1/1,3	15
524586	THE22	9,4/29,3	2,7/9,4	6,8	725/3850	75	27/60	38/22,3	2,7	0,1/1,6	24
524587	THE32	19,6/43	6,9/12,9	9,4	1590/5070	82	39/66	36,2/24,9	3,8	0,2/1,8	41
524588	THE33	23,3/56	9,2/17,6	12,4	1530/4870	82	38/66	44,7/33,7	5,2	0,2/1,9	45
524589	THE333	20,3/66,8	8,1/20,6	14,55	1300/6340	89	38/73	45,9/31	5,2	0,2/1,5	45

*1) Applicable at water temperature 80/60 °C, air temperature, in +15 °C.

*2) Applicable at control voltage 2V/10V.

*3) Applicable at control voltage 2V/7V.

*4) Applicable at control voltage 7V.

*5) Applicable at water temperature +7/12 °C, air temperature in +27 °C, relative humidity 50%.

*6) Sound power (L_{WA}) measurements according to ISO 27327-2: 2014, Installation type E.

*7) Sound pressure (L_{pA}). Conditions: Distance to the unit 5 metres. Directional factor: 2. Equivalent absorption area: 200 m².

*8) Δt = temperature rise of passing air.

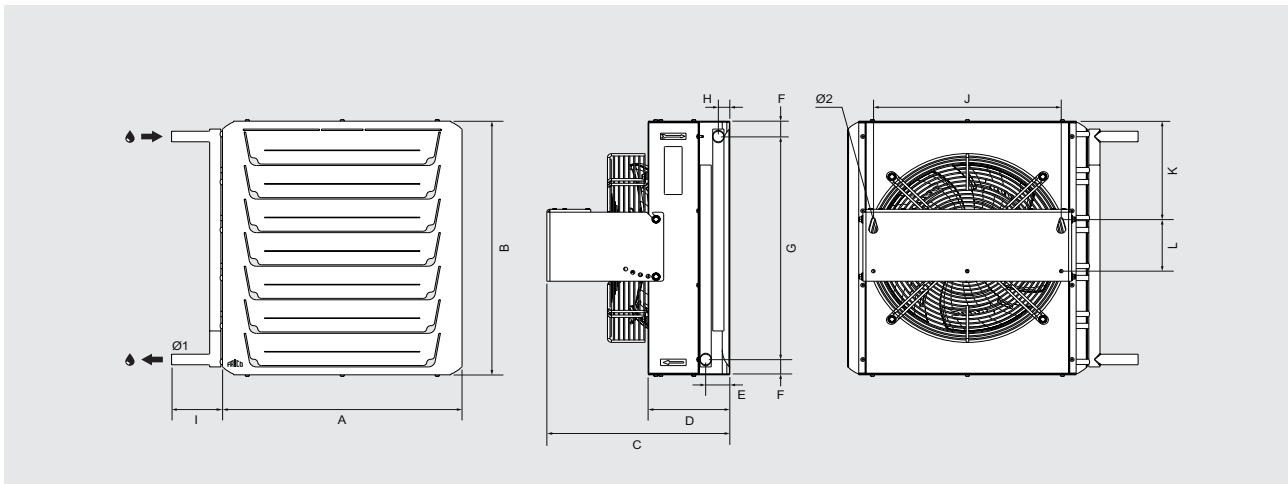
*9) Water volume inside water coil.

*10) Applies to THE333.

Approved for 220V/1ph/60Hz.

Manufactured in Sweden. Steel housing with Magnelis® coating, powder coated in RAL9006 (white aluminium). Brackets made out of powder coated galvanised steel.





	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	L [mm]	Ø1 [mm]	Ø2 [mm]
THE12	472	529	360	161	48	32	465	23	100	370	205	108	22	7
THE22	610	654	433	226	54	35	585	23	110	512	267	108	28	9
THE32	752	779	529	291	53	34	710	23	109	650	334	158	28	9
THE33	752	779	551	313	53	34	710	23	109	650	334	158	28	9
THE333	752	779	551	313	53	34	710	23	109	650	334	158	28	9

Accessories



THEDTx

THEDT, drip tray

Used to collect condensation when the unit is used for cooling.



THEABx

THEAB, Angle bracket

Reversible angle bracket that allows the device to be tilted 30 degrees to the right or left.

Item number	Type	Description	THE12	THE22	THE32	THE33/333
528762	THEDT2	Drip tray	X			
528763	THEDT3	Drip tray		X		
528764	THEDT4	Drip tray			X	
528765	THEDT5	Drip tray				X
548695	THEAB2	Angle bracket	X			
548696	THEAB3	Angle bracket		X		
548697	THEAB4	Angle bracket			X	X

Mounting and connection

Mounting

The fan heater can be permanently mounted on a wall for horizontal air distribution, or on the ceiling for vertical air distribution. For cooling operation only wall mounting is possible (no downward tilt).

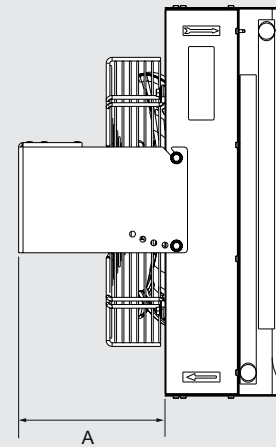
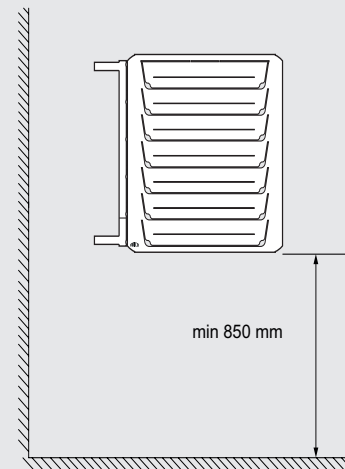
Connection

The fan motor is connected to a detached terminal box (not included), which is mounted on a wall next to the unit.

Installation of the water coil

The housing of the unit consists of two parts, a front and a rear part. By disassembling the two parts, the rear part can be rotated 180°, allowing for pipes to be connected on either the left or right side. The heating coil is equipped with aluminum fins and copper pipes with smooth connections, for soldering or compression fittings. An air valve should be connected at a high point in the pipe system. Vent- and drain valves are not included.

Minimum distances



Type	A [mm]
THE12	199
THE22	207
THE23	238
THE33	238
THE333	238



Control options

Heating/cooling

The FCR230 regulates the airflow according to the set room temperature. In “change over” mode between heating and cooling, the clamp-on sensor TG-A1/PT1000 must be used, which detects the temperature in the supply pipe.

Complete regulation kit:

- FCR230, stepless room controller
- TG-A1/PT1000, clamp-on sensor
- VPTK, VPTK_NC or VOT_NC, valve kit

Heating or cooling

The FCRB54 regulates the airflow according to the set room temperature. Heating or cooling operation is selected during installation.

Complete regulation kit:

- FCRB54, room controller
- VPTK, VPTK_NC or VOT_NC, valve kit



FCR230



ECG1



TG-A1/PT1000



FCRB54

Control

FCR230, room controller

FCR230 is a room regulator for control of heating and/or cooling in a room. It is intended to control 230V thermic actuators and has fan control that regulates the fan speed steplessly with an analogue 0-10V signal. Communication via Modbus, BACnet or EXOline. The regulator has an integrated sensor, alternatively an external room sensor (ECG1) can be connected. With FCR230 you can control up to 7 Therma units with either valve kits we offer. With FCRB54 you can control up to 15 Therma units with either valve kits we offer.

ECG1, external room temperature sensor

Room sensor which is used in the event of concealed installation in conjunction with room regulator FCR230.

TG-A1/PT1000, clamp-on sensor

Sensor in “change over” mode when unit is switching between heating and cooling. The sensor detects the temperature in the supply pipe.

FCRB54, room controller

FCRB54 is a room controller for control of heating and/or cooling in a room. It is intended to control 230V thermic actuators and has fan control that regulates the fan speed in 5 steps with an analogue 0-10V signal. Possibility for communication via Modbus RTU. The controller has a pre-mounted room sensor (PT500). IP54.

Item number	Type	Description	HxWxD [mm]
76649	FCR230	Room controller 0-10, IP20	120x102x29
11929	ECG1	External room temperature sensor, IP30	86x86x30
7284	TG-A1/PT1000	Clamp-on sensor PT1000, IP65	
477472	FCRB54	Room controller for control of heating or cooling	215x125x95

VPTK_NC



VPTK_NC, pressure independent valve system on/off

Two way pressure independent control and adjustment valve with on/off actuator and shut-off valve DN15/20/25/32. 230V.

VPIK



VPIK, Insulation kit

Insulation kit for valve kit VPTKxxNC including cover for valve body and spindle extension.

WCK



WCK, Water connection kit

Water connection kit containing all necessary couplings and hoses to connect from product to valve system. The water connection kits are intended for valve systems containing a pressure independent control and adjustment valve.

VPTK



VPTK, valve kit

Valve kit with two-way valve and 230V actuator. Available in four models: DN15 Kvs 0.4 or 0.6 and DN20 Kvs 2.4 or 4.0.

VOT_NC



VOT_NC, three-way valve kit

Valve kit with three-way valve and 230V actuator. Normally closed. DN15/20/25.

VPTB_NC



VPTB_NC, terminal balancing valve system on/off

Terminal balancing valve system with control and adjustment valve with on/off actuator and shut-off valve DN15/20/25/. 230V.

Item number	Type	Description	Length [mm]
456586	VPTK15NFNC	Valve kit DN15	
456587	VPTK15LFNC	Valve kit DN15 Low flow	
398214	VPTK20NC	Valve kit DN20	
398215	VPTK25NC	Valve kit DN25	
454159	VPTK32NC	Valve kit DN32	
477621	VPIK15	Insulation kit	
477622	VPIK20	Insulation kit	
477623	VPIK25	Insulation kit	
477624	VPIK32	Insulation kit	
459323	WCK1FH	Water connection kit (Therma 02-12)	1000
459324	WCK2FH	Water connection kit (Therma 02-12)	350
459325	WCK3FH	Water connection kit (Therma 22-333)	800
459326	WCK4FH	Water connection kit (Therma 22-333)	350
157457	VPTK1504	Valve kit DN15 Kvs 0,4	
157458	VPTK1506	Valve kit DN15 Kvs 0,6	
157459	VPTK2025	Valve kit DN20 Kvs 2,5	
157460	VPTK2040	Valve kit DN20 Kvs 4,0	
457399	VOT15NC	Three-way valve kit DN15	
457400	VOT20NC	Three-way valve kit DN20	
457400	VOT25NC	Three-way valve kit DN25	
548912	VPTB15LFNC	Valve system DN15	
548913	VPTB15NFNC	Valve system DN15	
548914	VPTB20NC	Valve system DN20	
548915	VPTB25NC	Valve system DN25	