



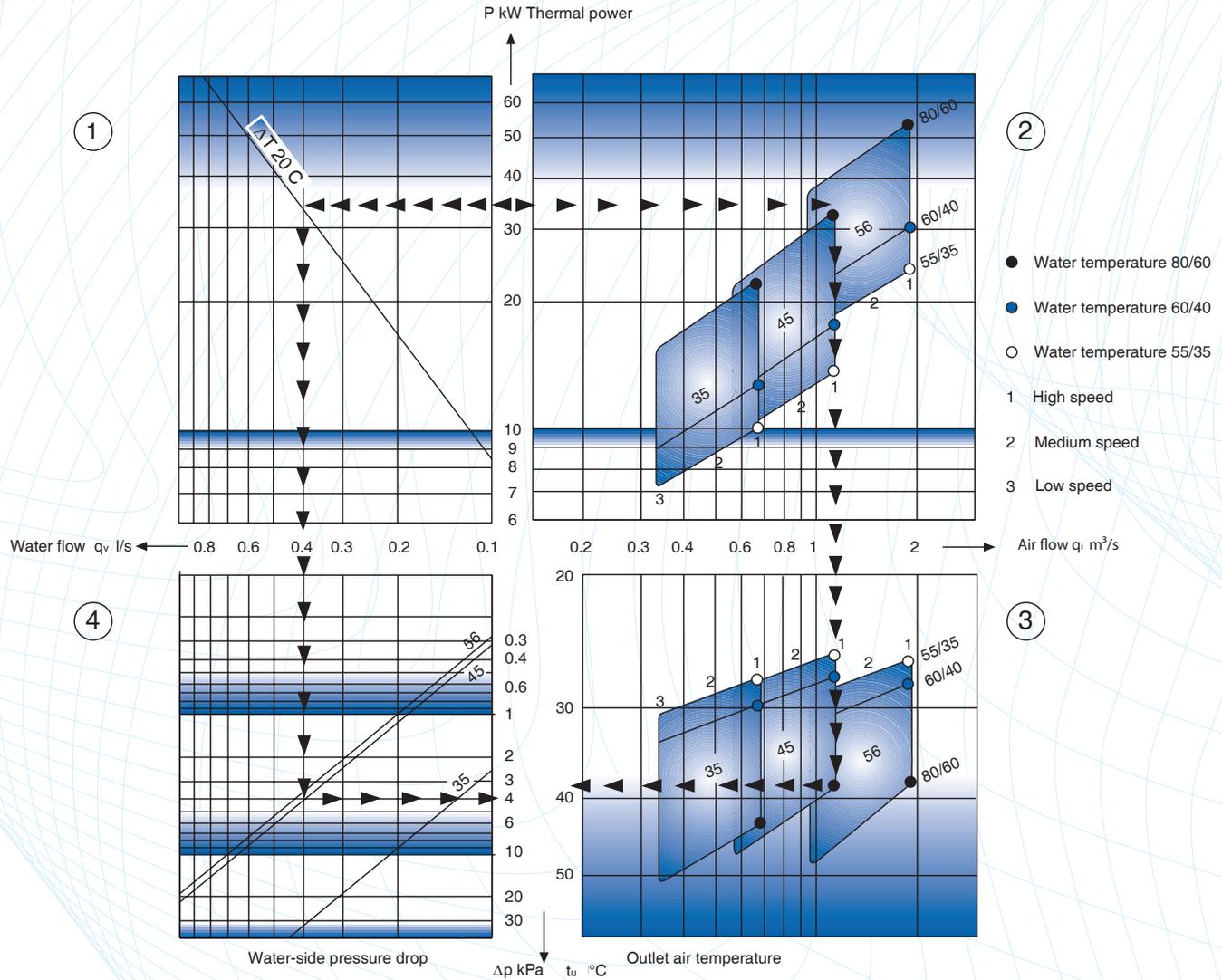
Air Heater Termis

Air heater Termis combines novel technical solutions and modern production technology. The new fan allows speed control in steps, enabling quiet operation for added comfort. Thanks to the timeless design, Termis is well suited to a large number of different applications.

The Termis air heater has a light and clear construction for easy installation and maintenance. There are three sizes to choose from. All sizes have a voltage-controlled motor which makes it possible to vary the fan speed and optimize the energy efficiency.

The Termis casing is made of white, plastic coated steel sheet. The directional louvers are anodized aluminium profiles with the same shade as the casing. The heat exchanger consists of copper pipes and aluminium lamellas.

Air heater performance at an inlet air temperature of +15°C



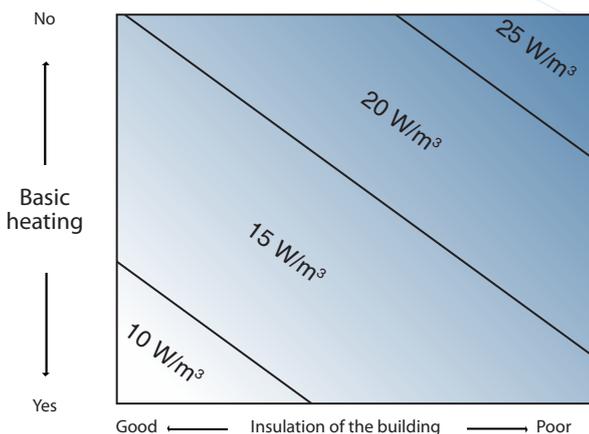
Design example

The required thermal power is $P = 32$ kW. Diagram sector 2 shows that such power can be achieved by running a size 45 fan at high speed and at a water temperature of 80/60°C. This gives an air volume flow of 1,15 m³/s.

Diagram sector 3 shows that, at an air volume flow of 1,15 m³/s, the outlet air temperature is 38°C.

The left-hand sectors of the diagram contain the water data. According to diagram sector 1, 32 kW heat requires a water flow of 0,4 l/s. When you then move straight down to the sector 4 and to the curve representing fan size 45, you can see that the pressure drop in the water-side of the heat exchanger is 4 kPa.

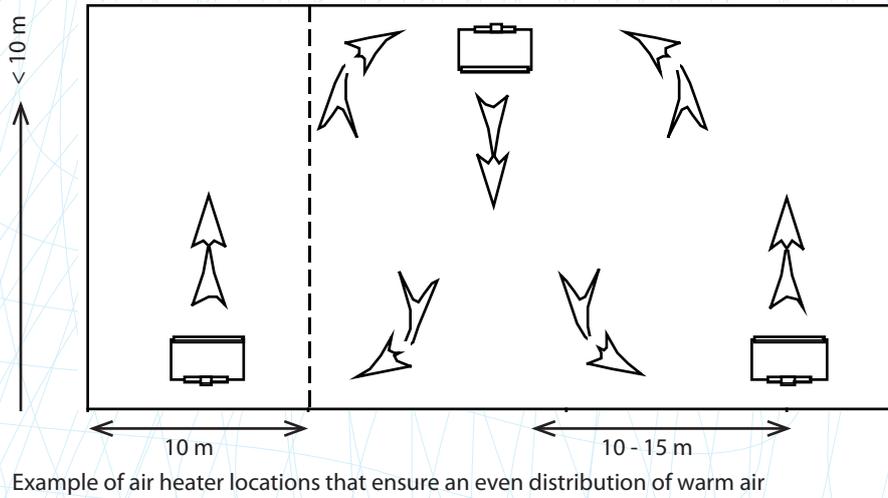
Determination of the required thermal power



Example of the determination of the required thermal power in different types of buildings

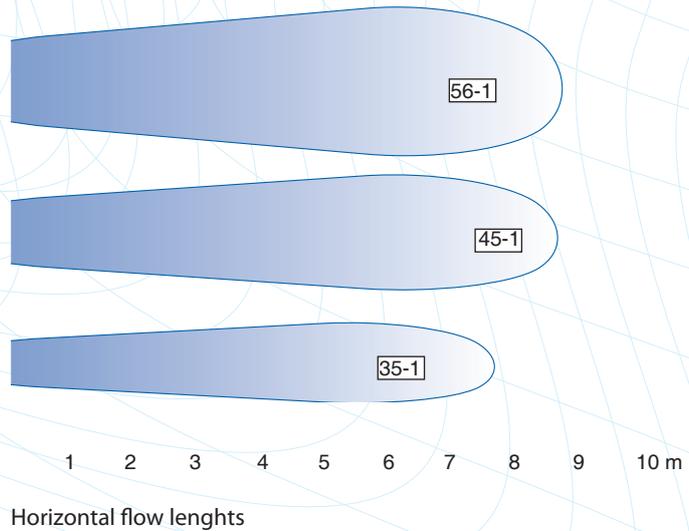
Required thermal power W/m³

Locating the air heaters



Air throw

Voltage-controlled fans keep the optimal throw and sound level in varying operating conditions.



Fan data

Size	q m ³ /s	n 1/min	230 V 1-phase			Sound data L _{da} dB(A)		
			I A	P kW	C μF 400 V	1 m	3 m	5 m
35 - 1	0,75	1400	0,58	0,13	4	64	55	50
45 - 1	1,15	1400	1,1	0,245	8	69	60	46
56 - 1	1,9	900	1,7	0,37	12	80	71	66

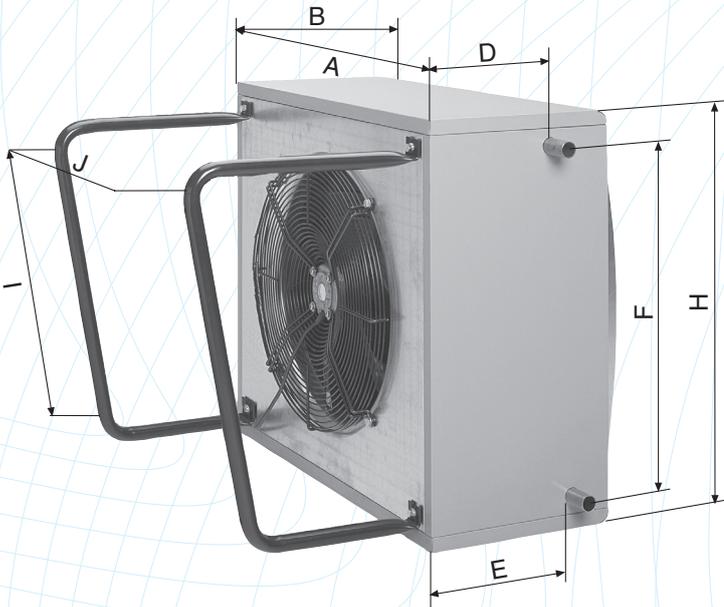
The data given in the table applies for 1-phase motors.

1-phase motors can be controlled by a transformer. The ambient temperature of the motor must not exceed +50°C.

Standard air heaters have a 1-phase motor running at a speed of 1400 rpm (sizes 35 and 45) or 900 rpm (size 56). Lower speeds require a 5-step transformer.

Dimensions and weights

The easiest way to install the air heater Termis is to use mounting supports. When mounted on supports, the fan discharges obliquely downwards (15°). The direction of the air can be varied by means of the adjustable directional louvres. Mounting supports and 5-step transformers for speed control are accessories and are to be expressly specified when ordering.



Size	A	B	H	D	E	F	I	J	m kg	Weight incl. water	Tube Ø mm
35	668	300	530	191	226	380	313	570	31	32,5	28
45	772	340	690	231	266	580	485	680	35	36,5	28
56	1002	380	810	271	306	700	558	910	54	57	28

Order code

Air heater Termis a - b - c - d

Size	a = 35, 45, 56
Motor	b = 1 (1-phase) b = 3 (3-phase)
Accessories	c = 0 excl. mounting supports c = 1 incl. mounting supports d = 0 excl. transformer d = 1 incl. transformer

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