

# Fan Heater

## FLH 250 – FLH 400

The FLH series of fan heaters consists of two versions with heating performance ratings of 250 and 400 Watts. This type of heating is ideal for use in larger electrical enclosures. It has an integrated fan that assists the natural convection and thus provides for fast and even distribution of the heat in the control cabinet.



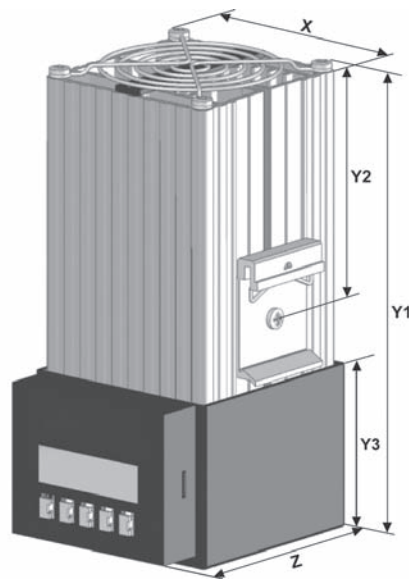
Data	FLH 250	FLH 400	Unit
Article number	17025010007	17040010007	
plus a 2 <sup>nd</sup> protective grille	17025010107	17040010107	
Heating performance (Ta = +20 °C)	250	400	W
Max. surface temperature	70	85	°C
Power consumption	260	410	W
Starting current	2.2 / 1.1	3.6 / 1.8	A
System of protection for intended purpose of use	IP 20		
Weight	1035	1200	g
Volumetric air flow	50 (50 Hz) / 61 (60 Hz)		m³/h
Rated voltage <sup>1</sup>	230 V AC 50 / 60 Hz		
Functional range	207 - 258 V AC 50 / 60 Hz		
Duty cycle	100%		
Operating temperature range	- 40 ... + 70 (- 40 ... + 158)		°C (°F)
Storage temperature range	- 40 ... + 70 (- 40 ... + 158)		
Installation orientation	as desired, preferably vertical		
Device construction	aluminium profile, brightly anodised		
Type of mounting	snap fastening for 35 mm profile bars according to EN 60715		
Protection class	I		
Type of connection	plug terminal connector		
Clamping range of connecting terminal	single wire: 2 x 0.5 - 2.5 mm², fine-stranded: (tinned, with ferrule, with pin cable lug) 2 x 0.5 - 1.5 mm²		
Accessories	Piece	Article number	Information on page
Thermostat	1	17111000000	188/190
Hygrostat	1	17207000000	192
Internal enclosure fan	1	18110000000	71

<sup>1</sup> other voltages available on request

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### Dimensions

mm	FLH 250	FLH 400
X	85	85
Y1	186.5	226.5
Y2	90	90
Y3	65	65
Z	104	104



# Fan Heater

## FLH 250 SL

## FLH 275 SLM

The FLH 250 SL and FLH 275 SLM fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures.

- all tests were performed according to European Norms, EN 60068-2-6 / 60068-2-27 / 60068-2-29 **Railway applications - Rolling stock equipment - Shock and vibration tests** and therefore are unique to the industry
- can be used under extreme conditions (- 40 °C...+ 70 °C)
- fan design with ball bearing: guaranteed long service life
- the heater is connected using the internal terminal connectors
- the heater compact design make it ideal for use in enclosures where space is at a premium

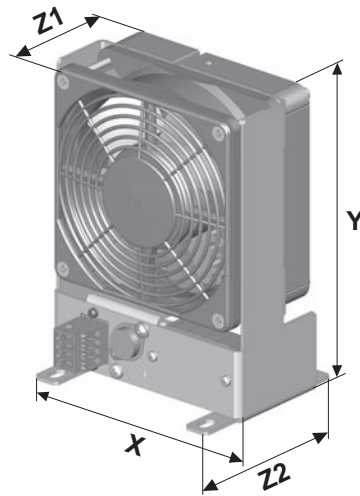


Data	FLH 250 SL	FLH 275 SLM	Unit
Article number	17025110007	17027610007	
Heating performance (Ta = +20 °C)	250	275	W
Max. surface temperature	70	70	°C
Power consumption	261	287	W
Starting current	2.4	1.5	A
System of protection for intended purpose of use	IP 20		
Weight	1500	955	g
Volumetric air flow	160	50	m³/h
Rated voltage	230 V AC 50 / 60 Hz		
Functional range	207 - 258 V AC 50 / 60 Hz		
Duty cycle	100%		
Operating temperature range	- 40 ... + 70 (- 40 ... + 158)		°C (°F)
Storage temperature range	- 40 ... + 70 (- 40 ... + 158)		
Installation orientation	as desired, preferably vertical		
Device construction	aluminium profile, brightly anodised		
Type of mounting	M6 screw fastening		
Protection class	I		
Type of connection	plug terminal connector		
Clamping range of connecting terminal	single wire: 0.08 - 4.0 mm² (AWG 28-12), fine-stranded: (tinned, with ferrule, with pin cable lug) 0.08 - 2.5 mm² (AWG 28-14)		
Accessories	Piece	Article number	Information on page
Thermostat	1	17111000000	188/190
Hygrostat	1	17207000000	192
Internal enclosure fan	1	18110000000	71

Approvals see page 175

### Dimensions

mm	FLH 250 SL	FLH 275 SLM
<b>X</b>	126.5	91
<b>Y</b>	170.5	108
<b>Z1</b>	75	89
<b>Z2</b>	103	115



# Heater with integrated thermostat

## FLH-T



New Pfannenberg heater line with integrated thermostat. This new line has been specifically developed for demanding environments, especially wind turbines and for use in the telecommunications sector.

- all tests were performed according to European Norms, EN 60068-2-6 / 60068-2-27 / 60068-2-29 **Railway applications - Rolling stock equipment - Shock and vibration tests** and therefore are unique to the industry
- can be used under extreme conditions (- 40 °C...+ 70 °C)
- fan design with ball bearing: guaranteed long service life
- voltage range: 230 V / 115 V / 50/60 Hz
- UL, cUL recognised

Data		FLH-T 250	FLH-T 400	FLH-T 600	FLH-T 800	FLH-T 1000	Unit	
Article number	230 V	17025310007	17040310007	17060310007	17080310007	17099310007		
	115 V	17025315007	17040315007	17060315007	17080315007	17099315007		
Heating performance (Ta = +20 °C)		250	400	600	800	1000	W	
Power consumption		269	419	619	819	1019	W	
Starting current		0.7	2.6	3.4	4.3	5.2	A	
Bearing type	fan	ball bearing						
Service life L <sub>10</sub> (+ 25 °C)		52,500						h
System of protection according to EN 60529		IP 20						
Weight		1.0	1.1	1.2	1.4		kg	
Volumetric air flow	50 Hz	160						m <sup>3</sup> /h
	60 Hz	180						
Rated voltage		115 V or 230 V AC 50/60 Hz						
Functional range		104 - 127 V or 207 - 253 V AC 50/60 Hz						
Duty cycle		100%						
Temperature setting range		- 20 ... + 40 (- 4 ... + 104)						°C (°F)
Switching temperature difference		< 7						K
Switching point tolerance		± 4						
Operating temperature range		- 40 ... + 70 (- 40 ... + 158)						°C (°F)
Storage temperature range		- 40 ... + 70 (- 40 ... + 158)						
Installation orientation		as desired, preferably vertical						
Device construction		plastic UL 94V-O, black						
Type of mounting		4 x M5 screws (not included)						
Protection class		II (double insulation)						
Type of connection		2-pole terminal strip						
Clamping range of connecting terminal		2.5 mm <sup>2</sup> (AWG 14); clamping torque 0.51 Nm						
Accessories	Piece	Article number				Information on page		
Hygrostat	1	17207000000				192		
Internal enclosure fan	1	18110000000				71		

## Dimensions

mm	FLH-T
X	150
X1	138
X2	6
X3	5.4
Y	100
Z	164
Z1	100
Z2	13.3
Z3	5

