

Shown: Fan Heater HVL 031 in 100 Watt

Fan Heater Series HVL 031 Heater Series HV 031

- Small, compact size fan heater
- Maintains minimum operating temperatures in enclosures
- Helps to prevent failure of electronic components caused by condensation and corrosion
- Built-in overheat protection
- Heater can be purchased separately for OEM use¹⁾
- DIN rail mountable

Technical data HV 031 / HVL 031

Operating voltage/Part nos.	AC 120 V	AC 230 V
HV 031 (heater only):	100W: 03100.9-00	03100.0-00
	150W: 03101.9-00	03101.0-00
	200W: 03110.9-00	03110.0-00
	300W: 03111.9-00	03111.0-00
	400W: 03112.9-00	03112.0-00
HVL 031 (complete fan heater):	100W: 03102.9-00	03102.0-00
	150W: 03103.9-00	03103.0-00
	200W: 03113.9-00	03113.0-00
	300W: 03114.9-00	03114.0-00
	400W: 03115.9-00	03115.0-00
Heating element:	Resistance type cartridge heater	
Heat sink:	Die-cast aluminum, glass bead finish	
Required fan size:	100/150W: 80 x 80 x 25 mm	
(included with HVL031 heaters)	min. air flow: 20 CFM (35m ³ /h)	
	200/300/400W: 120 x 120 x 25 mm	
	min. air flow: 63CFM (108m ³ /h)	
Overheat protection:	Built-in temperature limiter	
Air exit temperature:	approx. 113°F (45°C) 2" (50mm) above heater	
Wiring compartment:	Plastic UL 94V-0	
Wiring of axial fan:	2 pole terminal (L2/N2), AWG14 max. (2.5mm ²)	
Mounting:	Clip for 35mm DIN rail, EN 50022	
Protection type/class:	IP 44 / I (grounded)	
Weight:	100/150W: 0.6lbs (240g) without fan	
	200/300/400W: 1.1lbs (490g) without fan	
Agency approvals:	UL	

Determining the required heater size:

$$P_H = (A \times \Delta T \times k) - P_v$$

P_H = Required heating power for your application in Watts (W)

P_v = Heating power generated by existing components (e.g. a transformer) in Watts (W)

A = Exposed enclosure surface area in square meters (m²)

ΔT = Temperature differential between the desired minimum interior temperature and the Lowest possible external temperature of the enclosure in Kelvin (K), 1.8°F = 1°C = 1K

k = Heat transmission coefficient of the enclosure material used:

Painted steel: 5.5W/m²K

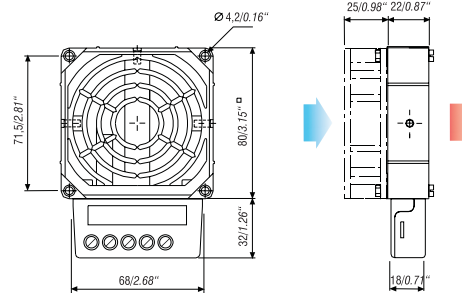
Stainless steel: 3.7W/m²K

Aluminum: 12W/m²K

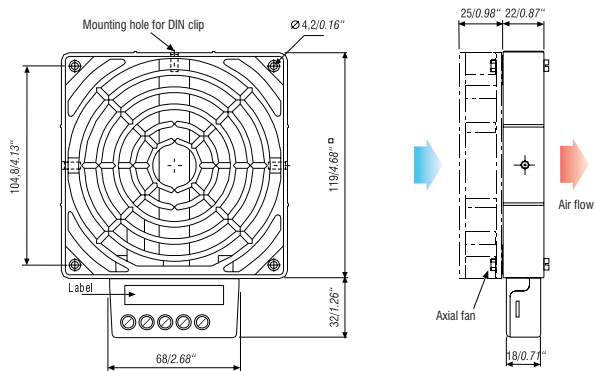
Polyester/Plastic: 3.5W/m²K

For outdoor applications it is recommended to double the heating power.

100W/ 150W Heater



200W/ 300W/ 400W Heater



¹⁾Caution: Heater may only be operated with fan!

Applications:

Electrical & Electronic enclosures
Telecommunications systems
Display panels
Personnel booths
Automatic teller machines (ATM's)
Access & Parking control systems
Ticket dispensers



HV031-06Z-E/US