

HEAT EXCHANGER 90 FOR ELECTRONICS



The Dantherm Heat Exchanger 90 is designed to control the internal temperature of Telecom enclosures and cabinets. It utilizes the outside air temperature, exchanges it in a high-efficiency counter flow plastic core and thereby cools the internal air inside the cabinet generating an internal, cooled closed loop.

The Heat Exchanger 90 offers a lot of features and benefits such as energy-efficient passive cooling, intelligent and changeable cooling strategy, easy plug and play installation, remote and onsite surveillance, fast and simple service and maintenance and built-in self-test.

The unit is highly energy-efficient due to the counter flow core with high thermal performance, highly efficient radial fans and optimized control strategy.

The Dantherm Heat Exchanger is installed in indoor and outdoor cabinets and enclosures with sensitive electronic equipment.

FEATURES AND BENEFITS

Cooling

- Closed loop cooling: protects equipment against hostile ambient environment.
- Passive cooling: uses air-to-air heat exchange, minimizes energy consumption.

Enclosure and Core

- Counter-flow core using patented plastic twin sheet technology and rifled tube channels: providing high energy efficiency.
- Flame retardant: V-0 classified plastic.
- Carbon black in plastic core for none static electricity: prolongs maintenance intervals.
- Light-weight plastic core to ease installation and decrease demands for cabinet wall or door hinges.
- Light-weight, strong casing: manufactured from thin sheet metal parts.
- Corrosion-proof construction: casing manufactured from thin sheet aluzinc metal- EN 10143 & EN 10327.
- Easy installation: supplied with mounting fixtures and lifting handles.
- Long service life for moving parts: high-performance radial fans.
- Energy-efficient fans: optimize power consumption.

Controller

- Cooling strategy based on internal temperature set points. The cooling capacity relates to fan speed on internal and external circuit. Internal and external fan speeds are controlled separately.
- Temperature sensor situated on control board eases plug and play installation.

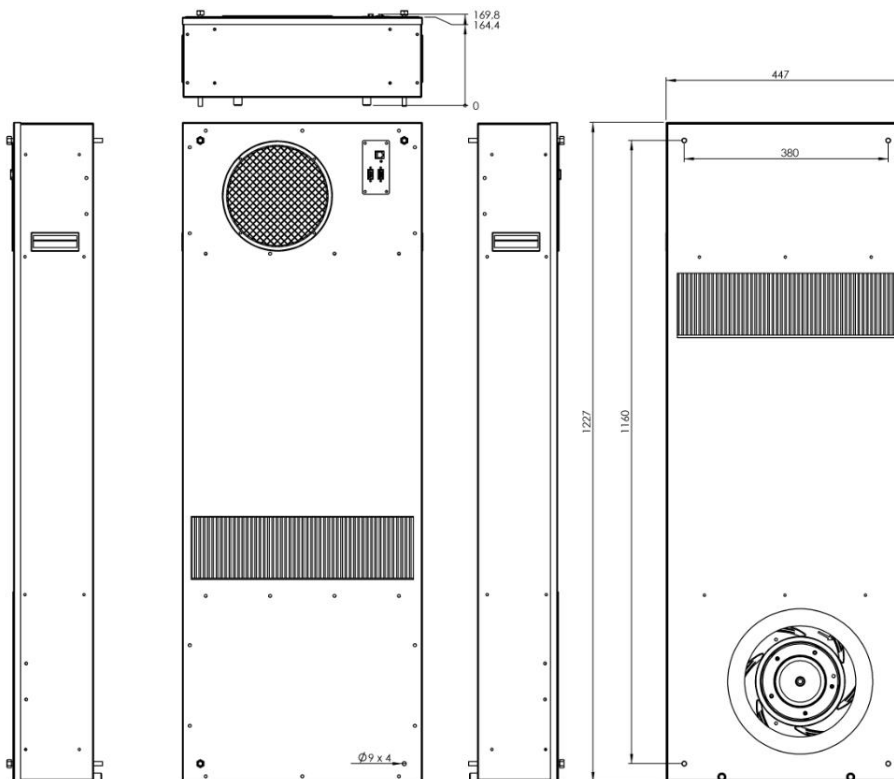
Optional Feature

- Hot spot temperature sensor for connection to the control board.

TECHNICAL DATA
HEAT EXCHANGER 90

General		
Supply voltage nominal	VDC	-48
Cabinet part dimensions (H x W x D)	mm	1227×449×165
Cabinet part with drain dimensions (H x W x D)	mm	1227×449×170
Weight	Kg	26
Performance		
Cooling capacity	W/K	90
Internal airflow (free blowing)	m ³ /h	580
External airflow (free blowing)	m ³ /h	680
Power consumption (max)	W	165
Current (max)	A	3.2
Operating temperature range	°C	-30 to +60
Relative humidity	%	0 to 99
Noise level	dB(A)	66
Environmental protection		
IP Rating according to EN 60529 (from external to internal air path)		IP 54
Material properties		
Aluzinc sheet metal parts coated steel plate	mm	0.8 – 2.0

DIMENSIONS



All dimensions in mm