

## COMBO COOLING 6000/900 FOR ELECTRONICS



Dantherm Combo Cooling 6000/900 is a total heat management system for very energy-efficient climate control with free cooling and backup air conditioning.

The total heat management is generated by intelligent free cooling, circulation, air conditioning and optional heating. Even emergency cooling is automatically regulated by the built-in digital controller CC4. The unit can run in lead lag combination with another air conditioner or combo unit. Optionally, the unit can be equipped with a humidity or fire alarm sensor.

The Combo Cooling 6000/900 contains a highly efficient free cooling and emergency cooling fan capable of delivering 2700m<sup>3</sup>/h.

## FEATURES AND BENEFITS

### Heat management modes

- Energy-efficient free cooling: controlled ventilation in the cabinet with filtered ambient air, when the ambient temperature is cooler.
- Modulating air mix: mixing warm internal air with cold ambient air.
- Closed loop for active cooling according to ingress protection level 55 (IP55). Design with efficient scroll compressor using environmentally-friendly refrigerant R410a to allow operation under very high temperatures (up to +55 C°).
- Control of external heater to provide total heat management of a cabinet or enclosure and to extend the possible geographical area of deployment.
- Circulation – in case of balance between indoor and ambient air, the air is circulated to avoid stagnant air and hot spots.
- Emergency cooling with DC-powered free cooling, in case of power outage or compressor failure.

### Installation

- Easy-to-install mounting frame with slide bracket for product installation. Mono-block plug-and-play unit.
- 100% function test from factory to ensure quality, smooth installation and long service life.
- Phase monitor – to ensure correct power connection.

### Controller

- Built-in microprocessor controller; Dantherm CC4.
- Changeable settings of e.g. cooling set point, heating, installed with high-temperature alarm, filter guard pressure etc.
- 2 galvanically insulated alarm outputs for warning, fault, high/low temperature, filter change, fan failure, door switch or fire/smoke.
- Digital input for smoke/fire alarm, door switch and one additional.
- Data logging and change of control parameters via SD Card.

### Optional features

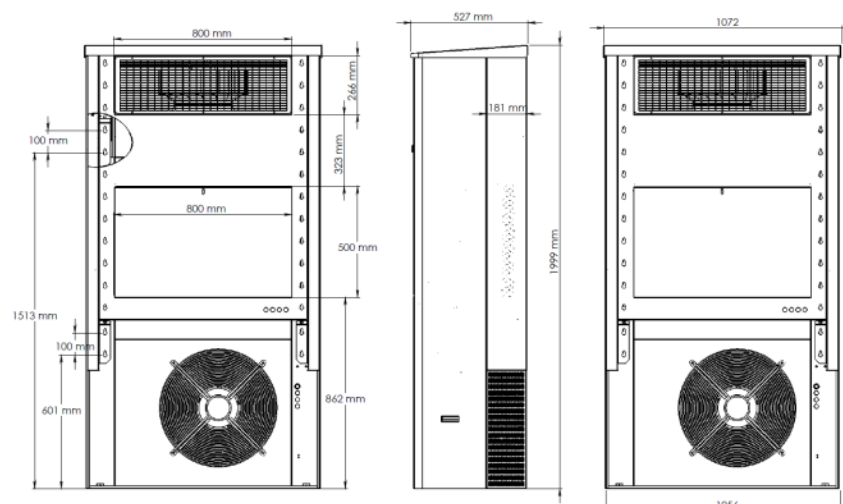
- Display
- Smoke alarm
- Soft starter
- SD Card
- External damper
- Filter options: M5, F7 (G4 standard)

## TECHNICAL DATA

### COMBO COOLING 6000/900

<b>Dimensions, weight &amp; mounting</b>	Item no	367506
Unit dimensions (height×width×depth)	mm	1999x1072x527
Single packing dimensions (height×width×depth)(wooden package)	mm	TBD
Net weight \ Single package weight incl. unit	kg	TBD
Mounting method		Outdoor
Controller location/interface		RS485 (Modbus) and USB serial
<b>Environmental protection &amp; performance</b>		
Operational temperature range	°C	-33 ~ 55
Storage temperature / relative humidity	°C /RH	-40 ~ 80 / Max 55%
Noise level, outside 1.5m distance	dB(A)	59
Protection from dust, water according to EN 60529	IP Class 2	IP 55 (air conditioning mode)
Refrigerant / amount	kg	R410a / 2.3
Filter / area	m <sup>2</sup>	G4 / 1
CE and RoHS compliant		✓
Expected service life		10 years
<b>Cooling capacity &amp; operational data (230V/50Hz)</b>		
Free cooling capacity (48VDC) equals $\Delta t = 1^{\circ}\text{C}$	W/K	900
Free cooling capacity (48VDC) $\Delta t = 10^{\circ}\text{C}$	W	9000
EER Free Cooling at $\Delta t = 10^{\circ}\text{C}$	W/W – BTU/W	23 - 76
Cooling capacity at 27°C internal/35°C Ambient (total)	W	8300
Cooling capacity 27°C internal/35°C Ambient (sensible)	W	7115
EER Air conditioning at 35°C internal/35°C Ambient	W/W	3.7
Internal airflow by air conditioning	m <sup>3</sup> /h	1840
External airflow by air conditioning	m <sup>3</sup> /h	2250
Free cooling airflow	m <sup>3</sup> /h	800-3200
MAX Power consumption – Free Cooling / Air Conditioning	W	572 (48VDC) / 2245 (230VAC/50Hz)
<b>Power, frequency &amp; range</b>		
Input voltage range	VAC/VDC	1 Phase: 1x230 (190-235)/48(40-60)
Frequency	Hz	50 (1 phase)
Start-up current without soft start (compressor LRA)	A	TBD
<b>Key components</b>		
Compressor		GMCC
Controller		CC4
Fans		PSC EC/DC
Sheet metal parts		Aluzink
Colour	RAL	7035/7040

## DIMENSIONS



Subject to change without notice