

**DISPLACEMENT FREE COOLING**



**DFC 450**  
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The Dantherm DFC 450 is a slim passive cooling unit utilising the displacement free air cooling technology. The unit is designed to remove excess heat from small rooms with electronic equipment.

The DFC 450 is the perfect choice when installed in a small room for electronic equipment with stagnant air. Because of the displacement technology, the DFC is more energy efficient than a traditional free cooling units.

Due to a low air flow and fan speed, the DFC operates with a very low noise level.

Read more about displacement cooling efficiency and function in the technology section on our website. For rooms without stagnant air, we recommend the Dantherm Flexibox series.

**FEATURES AND BENEFITS**

**Energy efficiency and environment**

- Total heat management: energy-efficient cooling is first choice. Only when free cooling is not sufficient, air conditioning will be activated.
- F5 displacement bag filter: fine filtered air is introduced to the room. Keeps the room clean from unwanted particles.
- Quick overview of status and alarms on LCD display. Status displayed in clear text: Efficient service. No laptop needed.
- Timer function: easily activated for service personnel. Safety: Returns to normal operation after 20 minutes.
- Quick and quality-assured service - full self-test.
- Security of operation: built-in filter monitor that provides alarm signal and enables planning of service visits.

**Cabinet & Controller**

- Compact cabinet for indoor mounting
- Constructed of sheet metal (Aluzinc AZ150)
- ACUE 3000 - 48 VDC Controller, wall-mounted (see datasheet)
- TKS 3000A - 230 V AC Controller, wall-mounted (see datasheet)

**Optional features**

- Outdoor temperature sensor for use with active cooling unit
- F6 bag filter.

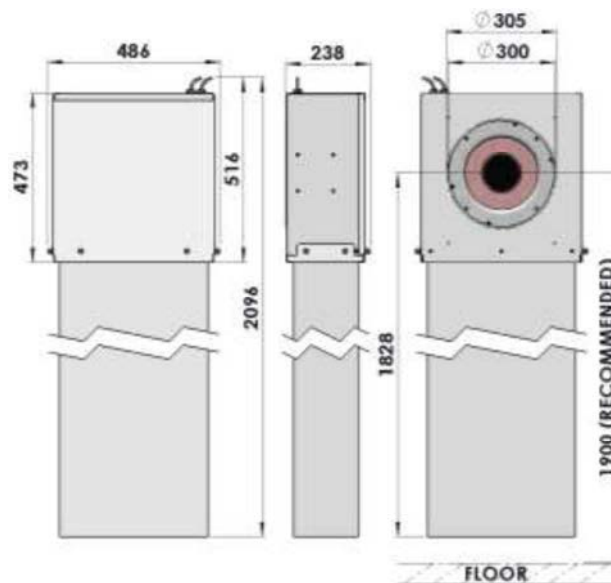
**Obtain optimal displacement cooling function:**

- Install the unit in rooms up to 12 m<sup>2</sup>.
- Observe request for stagnant air - avoid installation in rooms with obvious turbulent air streams from the equipment (internal fans).

**TECHNICAL DATA**  
**DFC 450**

Version	Unit	48V DC DC-fan	230V AC EC-fan
Item number – variant			299745
F5 Bag filter item number			299749
F6 Bag filter item number			840058
Maximum air flow	l/s	305	305
Maximum cooling capacity	m <sup>3</sup> /h	1100	1100
Cooling capacity up to 1.6 m above floor at Δt=5°C	kW	5	5
Fan max. current	A	2.5	1.1
Maximum power consumption	W	40	61
Power consumption, standby	W	3	3
Sound pressure at full speed, 5m distance from shelter	dB(A)	41	41
Filter	Class	F5 Bag	F5 Bag
Filter area	m <sup>2</sup>	2.0	2.0
Height	mm	2096	2096
Width	mm	486	486
Depth	mm	238	238
Weight	kg	13	13
Controller		ACUE 3000	TKS 3000
Air intake cut-out dimensions	mm	Ø300	Ø300

**DIMENSIONS**



**FLOW CHART**

