

DISPLACEMENT FREE COOLING



DFC 350 DISPLACEMENT FREE COOLING

The Dantherm DFC 350 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 350 is the perfect choice when installed in a small room for electronic equipment with stagnant air. Because of the displacement technology, the DFC is even more energy efficient than a traditional free cooling unit.

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

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

FEATURES AND BENEFITS

Energy efficiency and environment

- Total heat management, where the energy-efficient cooling is first choice. Only when free cooling is not sufficient, the air conditioning will be activated.
- F5 displacement bag filter. Fine-filtered air is introduced to the room. Helps keep the room clean from unwanted particles.
- Quick overview of status and alarms via the LCD display. Status is displayed in clear text: gives efficient service. No laptop is needed.
- Timer function. Easily activated for service personnel. Will as safety go back to normal operation after 20 minutes.
- Quick and quality-assured service with full self-test.
- Security of operation with built-in filter monitor that provides an alarm signal and enables you to plan service visits.

Cabinet & controller

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

Optional features

- Outdoor temperature sensor – to be used with active cooling unit
- F6 bag filter.

Optimal displacement cooling function is obtained when the following parameters are in place:

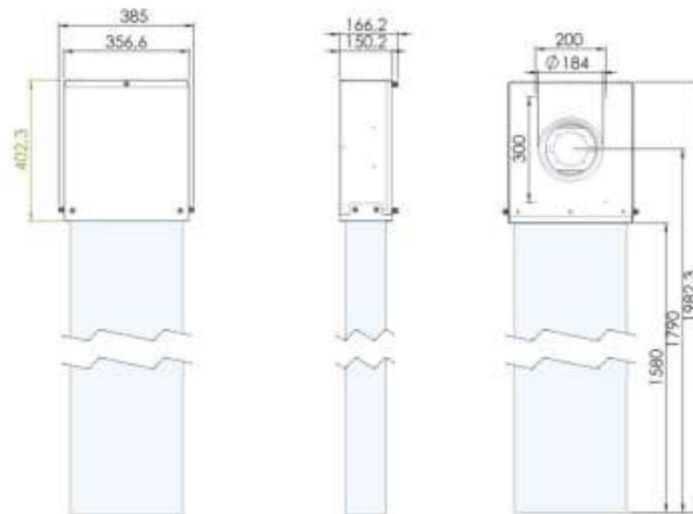
- Install the unit in small rooms up to 12 m².
- Observe the request for stagnant air – and avoid installation in rooms with obvious turbulent air streams from the equipment (internal fans).

TECHNICAL DATA

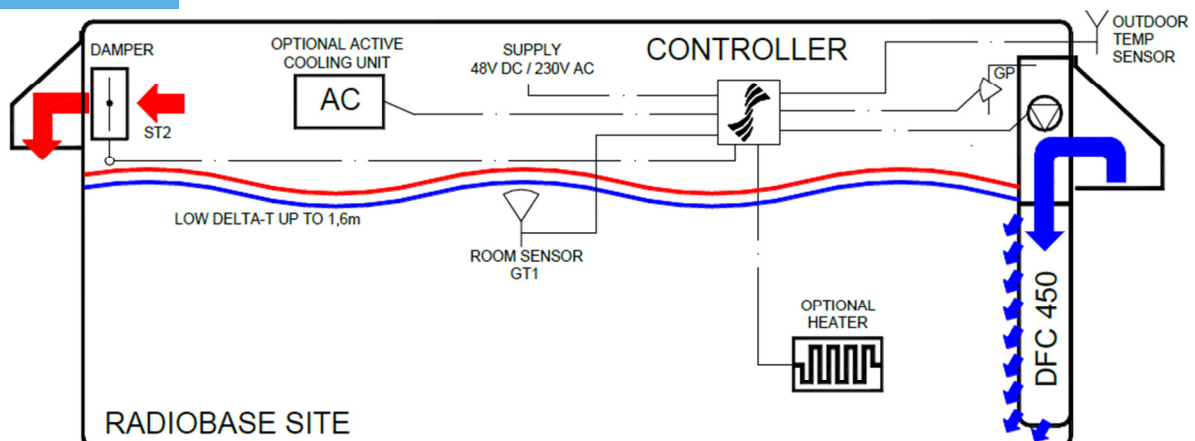
DFC 350

Version	Unit	48V DC DC-fan	230V AC EC-fan
Item number			299763 – variant
F5 bag filter item number			299821
F6 bag filter item number			067335
Maximum air flow	l/s	143	143
Maximum air flow	m³/h	514	514
Max displacement cooling capacity up to 1.6 meter above floor	w/k	600	600
Cooling capacity up to 1.6 m above floor at $\Delta t=5^{\circ}\text{C}$	kW	3	3
Fan max. current	A	2.3	0.9
Maximum power consumption	W	40	35
Power consumption, standby	W	3	3
Sound pressure at max cooling capacity (full speed, 5m distance from shelter)	dB(A)	36	34
Filter	Class	F5 Bag	F5 Bag
Filter area	m²	2.0	2.0
Height	mm	1982	1982
Width	mm	385	385
Depth	mm	166	166
Weight	kg	10	10
Controller		ACUE 3000	TKS 3000
Air intake cut-out dimensions	mm	Ø245	Ø245

DIMENSIONS



FLOW CHART



Subject to change without notice