



CONTEG DATA SHEET

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TARGETED COOLING

TOP MOUNT A/C UNITS

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CONTEG Top Mount solutions deliver exceptional cooling capacity without adding to the floor-area required for the rack. The Top Mount cooling solution is available in capacities ranging from 1000 Watts to 6000 Watts (approx 17.750 BTU/Hr) to give the correct required cooling without over-cooling. These cooling units are compatible with the free standing racks, series RHF, RDF, RSF.

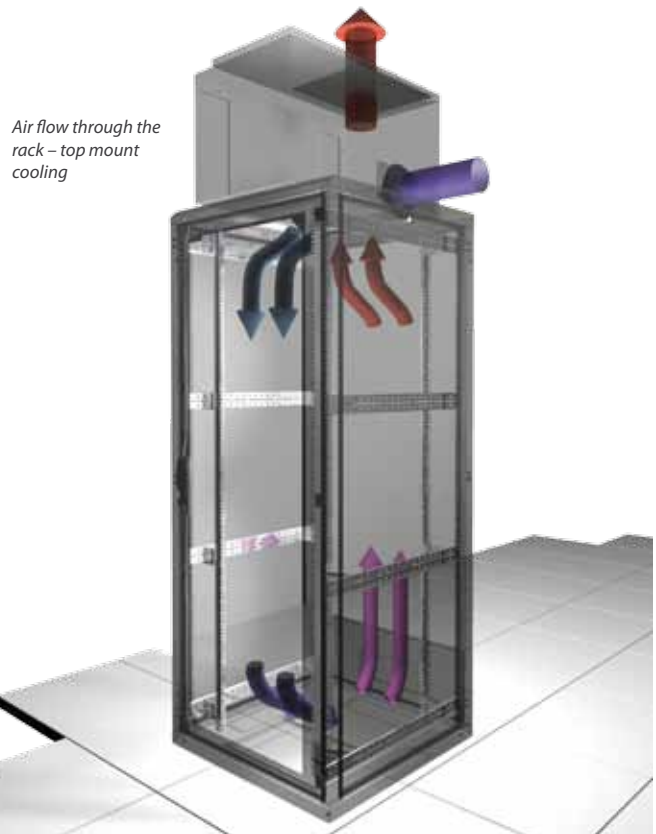
The Top Mount solution is a stand-alone direct expansion (DX) solution with compressor inside which means that no additional plumbing or piping is required. Condensate is eliminated thanks to a Condensate Dissipater (1.4 kW version and above) and triple condensate protection system. This means that the condensate normally associated with air-conditioning systems is eliminated, giving total flexibility for deployment.

The Top Mount solutions all feature electronic control boards as standard which give superior control of the air conditioner over standard electromechanical types. The Electronic Control Board ensures that the Top Mount units are running at optimal efficiency and not overcooling the cabinet.

When installing these units into closed areas always make sure that the room has sufficient clearance and adequate ventilation so that environmental operating conditions (up to 55°C) are not exceeded.

DESCRIPTION:

- Cooling output of cooling units 1 – 6 kW
- Compact design – coolant piping distribution systems are not necessary
- Condensate evaporation system (standard on units of 1.4 kW and above) eliminates the need for condensate drainage
- The triple protection system ensures condensate cannot enter rack
- The heat exchanger surface has been treated specially to provide the highest possible resistance against clogging, therefore the unit is able to operate with full output even when the ambient temperature reaches 55 °C
- The cooling system was designed for operation without filters reducing ongoing maintenance requirements
- The cooling units have easy to use electronic control boards for accurate and easy setting of the required temperature in the rack



Air flow through the rack – top mount cooling



In the case of a high temperature within the cabinet, alarm contacts will operate. This means that the Top Mount solution can be tied into existing monitoring systems or CONTEG's Rack & Environment Monitoring System to alert remotely if the temperature exceeds user defined thresholds.

TOP MOUNT A/C UNITS ¹	Required Cooling and Part Numbers (Includes Top Mounting Collar)						
	Compatible Rack Full Part No.	1 kW	1.4 kW	2 kW	2.8 kW	4.1 kW	6 kW
RSF-42-60/80T-GWSWA-ACA-B	AC-TM-10-60/80	AC-TM-14-60/80	AC-TM-20-60/80	AC-TM-28-60/80	AC-TM-41-60/80		
RSF-42-60/10T-GWSWA-ACA-B				AC-TM-28-60/100	AC-TM-41-60/100	AC-TM-60-60/100	
RSF-42-60/12T-GWSWA-ACA-B				AC-TM-28-60/120	AC-TM-41-60/120	AC-TM-60-60/120	
RSF-42-80/80U-GWSWA-ACA-B ²	AC-TM-10-80/80	AC-TM-14-80/80	AC-TM-20-80/80	AC-TM-28-80/80	AC-TM-41-80/80		
RSF-42-80/10U-GWSWA-ACA-B ²				AC-TM-28-80/100	AC-TM-41-80/100	AC-TM-60-80/100	
RSF-42-80/12U-GWSWA-ACA-B ²				AC-TM-28-80/120	AC-TM-41-80/120	AC-TM-60-80/120	
RHF-42-60/10L-GWSWA-ACF-B				AC-TM-28-60/100	AC-TM-41-60/100	AC-TM-60-60/100	
RHF-42-80/10P-GWSWA-ACF-B				AC-TM-28-80/100	AC-TM-41-80/100	AC-TM-60-80/100	

¹ Part numbers presented in configuration with standard extrusions, other types also available; racks in light gray (RAL 7035), for black (RAL 9005) write H instead of B in the end of rack's code

² For RDF racks simply write RDF instead of RSF in the rack's code; please note, that RDF load rating is limited to 500kg

top mount A/C units



AC-TM accessories

Air flow deflectors for AC-TM units

The deflector is located in the top part of the rack and is used to lead the cold air directly to the cold zone in front part of a rack. Deflector is produced in 600 or 800mm.

- Optimizes airflow in the rack
- Minimizes by-pass airflow between hot and cold zone
- Maximal effectiveness when used together with separation frame

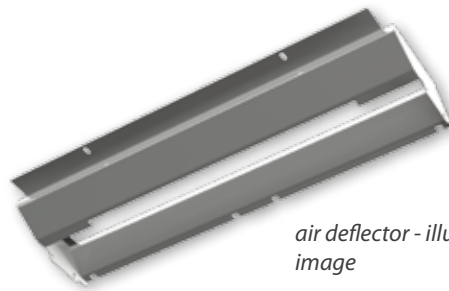
AIR FLOW DEFLECTORS FOR AC-TM UNITS

Code	Product description	Compatible with air separation frame
AC-TM-AFD-60/15	Air flow deflector for AC-TM units for rack width 600mm	Yes*
AC-TM-AFD-80/15	Air flow deflector for AC-TM units for rack width 800mm	Yes*

* Compatible with air separation frame depth 150mm



collar with air deflector - illustrative image



air deflector - illustrative image

Air separation frame AC-TM units

The Air Separation Frame is used for minimizing by-pass airflow between the rack columns and extrusions. Using an Air Separation Frame forms a "cool zone" inside the rack between the front door and the equipment mounted on the 19" profiles. Cool zone depth is recommended as 150mm.

Code	Depth of cold zone in mm	Applicable for ROF/RHF/RSF	
		H in U	W in mm
DP-ROF-CW-42/60/15 ³	150	42	600
DP-ROF-CW-42/80/15 ^{1,2,3}	150	42	800
DP-RHF-CW-42/60/15	150	42	600
DP-RHF-CW-42/80/15 ²	150	42	800
DP-RSF-CW-42/60/15 ³	150	42	600
DP-RSF-CW-42/80/15 ^{2,3}	150	42	800

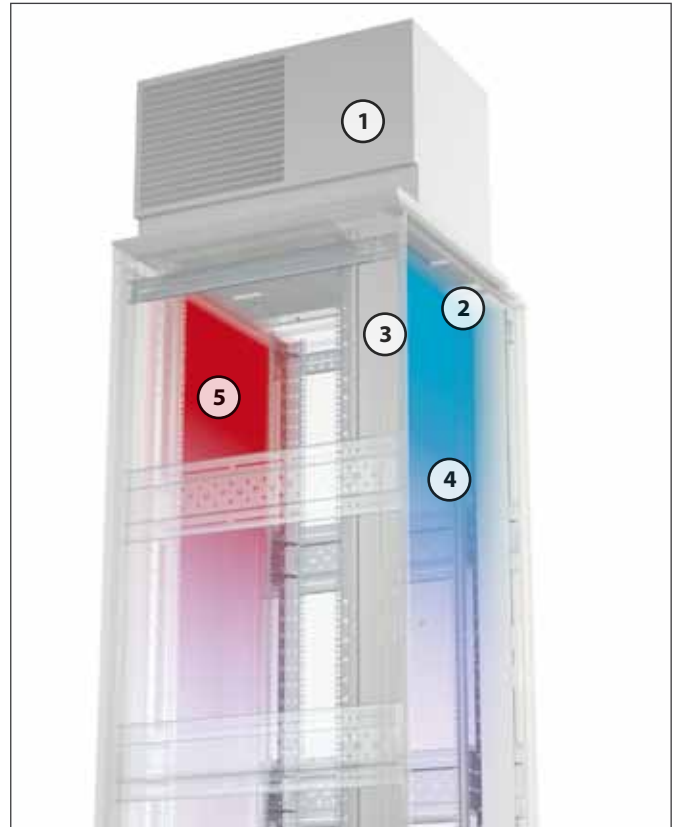
¹ Can be used for RDF racks

² Necessary to use extrusions type C or P (with blank panels)

³ Height 42U can be replaced by 45 or 48U



Air separation frame



illustrative image: 1. AC unit
2. deflector
3. air separation frame
4. cold zone
5. hot zone