

DATASHEET CRAC Room Cooling System

CONTEG



CRAC ROOM COOLING SYSTEM



➤ **CRAC** indoor room cooling unit is based on the principle of compressor cooling and direct evaporation. The compressor is integrated into the indoor unit, which is connected to its external condenser unit.

MAIN ADVANTAGES

- Variable installation options for the unit with fan module and air outlet into the raised floor or above the floor
- Operation in temperatures from -40°C up to $+55^{\circ}\text{C}$
- Regulation between 17–100 % cooling capacity
- No water in data center
- Compressor safely positioned inside the data center
- Variable design of outdoor unit (with regards to temperature, space, noise level, etc.)
- R410A refrigerant

COLOR:  RAL 9005  RAL 7035

| CRAC (Preliminary data—expected launch in 2023.) | | |
|--|-------------------|---------------------------------|
| Indoor unit code | Unit | AC-CRAx-x |
| Connected outdoor unit code | | AC-CONDx-xx-xx |
| Basic data | | |
| Cooling system | - | Direct evaporation |
| Architecture | - | Down flow/Under flow/Front flow |
| Nominal cooling capacity ¹ | kW | 43.4 |
| Nominal net cooling capacity ² | kW | 42.6 |
| Power supply | V/ph/Hz | 400/3/50-60 |
| Running current | A | 18.1 |
| Maximum current | A | 25.9 |
| Fan power consumption (maximum) | kW | 1.3 |
| Compressor power consumption | kW | 9.95 |
| Nominal airflow ³ | m ³ /h | 10 300 |
| Number of radial fans | pcs | 1 |
| Motor fan technology | - | EC |
| Refrigerant type | - | R410A |
| Filter class | | G4 |
| Dimensions | | |
| Height | mm | 2 023 |
| Width | mm | 1400 |
| Depth | mm | 800 |
| Weight | kg | 352 |
| Piping connection | | |
| Piping diameter—liquid line | mm | 16 |
| Piping diameter—gas line | mm | 22 |

¹ Cooling capacity is changed by the controller. Nominal cooling capacity is calculated at an internal hot air temperature of 35°C without condensation. ² Net useful cooling capacity is the total cooling capacity minus the heat load of the fans. Useful cooling capacity of the unit. ³ The air flow rate is changed automatically by the controller. The nominal airflow corresponds to the rated cooling capacity.

FOR CRAC ROOM COOLING SYSTEM

OUTDOOR AIR-COOLED **CONDENSERS**



➤ Outdoor air-cooled condensers dissipate the data center heat-load to the ambient. Indoor unit is designed so it's able to cooperate with the widest field of condensers. It allows customer to select the type which perfectly fits the requirements.

Recommended **condensers for CRAC** are listed in the table below. They are sorted according to the maximum ambient temperature.

| AIR-COOLED FINS AND TUBES | | | | | | | | | | | | |
|---------------------------|------------|----------------|----------------------|-----------|----------------|--------------|-----|------|-------------|------------|-------------|-------------|
| Indoor unit | Max. temp. | CONTEG P/N | Sound pressure level | | Number of fans | Power supply | | | Length (mm) | Width (mm) | Height (mm) | Weight (kg) |
| | | | Lw(A) | Lp(A) 10m | | ph/V/Hz | A | kW | | | | |
| CRAC | 35 °C | AC-COND2-03-35 | 87 dB | 56 dB | 2 | 3/400/50-60 | 4,2 | 2,59 | 1884 | 888 | 957 | 158 |
| CRAC | 45 °C | AC-COND2-02-45 | 93 dB | 61dB | 2 | 3/400/50-60 | 6,2 | 4,02 | 2 484 | 1088 | 961 | 236 |
| CRAC | 55 °C | AC-COND2-03-55 | 96 dB | 64 dB | 2 | 3/400/50-60 | 8,6 | 5,77 | 2 484 | 1088 | 961 | 267 |



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