

Operation

Cooling station circulates coolant between power electronics and heat exchanger. 3-way valve is used to ensure constant temperature. The cooling station is controlled by PLC system. The cooling station can be integrated with water to water heat exchanger or with external water to air heat exchanger. The station can be delivered with an electrical heater to ensure constant temperature during start-up in cold conditions. Cooling station can be ordered with or without control system.

Benefits

- Easy to integrate with the cooling circuit
- Minimum footprint need - Typical installation is inside 600x1000 mm Rittal cabinet. Can be installed also to separated 600x600 and 600x400 mm Rittal cabinets.
- Fast and easy commissioning (automatic de-aeration and visual coolant level indication)
- Stainless steel industrial pumps and copper free materials ensure long and reliable operation
- Use of hydraulic block technique minimizes the possibility of leaks
- Minimum service needed

Technical details

Cooling capacity	up to 300 kW
Coolant flow	up to 750 l/min
Expansion tank	12 liters, stainless steel
De-ionizing tank	17 liters, fulfilled by de-ionizing resins Change interval of resins 2-5 years depending on water hardness and materials in cooling circuit
Filter	10" with 50 µm/abs changeable element Change interval 2-5 years
Water Connections	CCE10x: R1 ¹ / ₂ " female CCE15x: R2" female CCE32x: R2 ¹ / ₂ " female The connections for water to water heat exchanger depending on size.
Instrumentation	Temperature sensors (2 pcs) Pressure sensors (2 pcs) Coolant level indicator Coolant level alarms (2 pcs)
Materials	Stainless steel and aluminum All materials are copper free No surface coatings
Coolant	De-ionized water-glycol mixture
Interfaces for water lines	Water to water heat exchanger Cooling manifolds
Options	- Electrical heater - External pipelines - External flexible steel hoses - Water conductivity measuring - Flow metering of de-ionizing system - Profinet, Profibus or Modbus - HMI with touch screen

