POWER CONVERSION & STORAGE

LV3 DMR 850A CDC

Scalable. Flexible. Powerful.

The LV3 Delta Module Replacement (DMR) represents a significant advancement, offering a high current density and 3-phase liquid-cooled power module that serves as an effective upgrade to our existing MV3000 Liquid Cooled Delta (LCD) module range.

TECHNICAL SPECIFICATION

Electrical Data	
Network type	TN, TT, IT
Voltage range	690 V_{AC} +10% / -20%
Current rating	850 A_{rms}
Overload	110% Full-load current for 60s/600s at T_{in}=50°C & 800 A_{rms}, 150% Full-load current for 60s/600s at Tin=50°C & 587 A_{rms}
Supply frequency (nominal)	50Hz, 60Hz
Output frequency range	20Hz to 200Hz, below on request
Switching frequency	2,500Hz
Interlock time	4.0µs
DC Link	
Nominal voltage	1,100V_{dc}
Maximum voltage	1,200V_{dc} (continuous) / 1,290V_{dc} (<1s)
Capacitance	11.6mF
Capacitor bank cooling	Air-forced
Environmental Data	
Max. operating temperature	+55°C
Min. operating temperature	+5°C (non-condensing)
Non-operational temperature	-20°C to +70°C
Storage and transport	-20°C to +60°C
Altitude	1,000m nominal
Coolant	
Type	Water/Glycole mixture 50/50%
Max. inlet temperature	+60°C
Min. inlet temperature	+5°C, below on request
Flow rate	25 l/min (400 mBar)
Mechanical	
Dimensions	1,265mm H x 251mm W x 542mm D
Weight	115kg
IP rating	IP00
Power terminals	2 studs M10 per AC phase 2 studs M10 per DC connection
Water connection in/out	(1) Return pipe/staubli with Ø 22mm (2) Hosetails with Ø 22mm (3) Vent/return pipe/hosetails with Ø 22mm options

LV3 DMR key data summary

- Voltage rating: 400–690V
- Maximum current: 850 A_{rms}
- IGBT based power module
- 3-phase in-/output and DC link connections
- Grid or electric machine applications
- Liquid-cooled
- Weight: 115 kg

Benefits

- Proven technology validated since 2018 in the field
- Improved reliability
- Decreased dry out time
- Higher efficiency and reduced losses
- Lower cooling requirements
- More robust design

GE VERNOVA

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