FREQCON Multi-Source Converter (MSC)
Technische Angaben
Technical Data

		MSC 1030	MSC 1500	MSC 2200
CONVERTER	Nominal AC Voltage	400 V	620 V	690 V
	Nominal Power	1,030 kW	1,500 kW	2,200 kW
	Nominal Current	1,487 A	1,397 A	1,844 A
	Maximum AC Current	1,575 A		2,200 A
	AC Power Frequency (Range)	50 Hz (47 Hz to 53 Hz) or 60 Hz (57 Hz to 63 Hz)		
	IGBT Switching Frequency	2 to 4 kHz		
	Power Factor at Rated Power (Adjustable)	1 (0.00 overexcited to 0.03 underexcited)		
	DC Link Voltage	1,150 V_{DC}		1,250 V_{DC}
	Number of DC Outputs	Flexible from 1 to 6 available		
	DC Current Outputs	Flexible		1,800 A
	DC Voltage (Range)	50 V_{DC} to 1,350 V_{DC} (at rated power)		1,250 V_{DC} to 1,500 V_{DC} (at rated power)
	Max. DC Voltage	1,500 V_{DC}		2,400 V_{DC}
	Max. Efficiency (AC to DC)	98.3%		
	Max. Efficiency (DC to DC)	99.4%		
	Max. THD	< 3% (at nominal power)		
CONTROL	Main Controller	Beckhoff CX5330-0185		
	Control Software	FREQCON Framework		
	Internal Communication	EtherCAT		
	External Communication	MODBUS TCP, EtherNet/IP (others available on request)		
GENERAL	Operating Temperature	Ambient: -30°C to 40°C (at rated power)		
	Lifetime	Minimum 20 Years (at rated conditions)		
	Cooling Principle	Liquid-Cooled		
	Standards and Certifications	Low Voltage Directive (NSRL) DIN EN 62109-1; EMV-Directive DIN EN 61000-6-2, DIN EN 61000-6-4; VDE 4110, 4120		
PROTECTION DEVICES	Battery (DC)	Fuse and DC Load Break Switch		
	AC Side Disconnection Point	ACB		
	DC Overvoltage Protection	Surge Arrester, Class I		
	AC Overvoltage Protection	Surge Arrester, Class I		
	Ground Fault Monitoring	Yes		
	Fire Protection	Smoke Detection		
	Insulation Monitoring at AC and DC	Yes		