

SEMaster

SE84.020.D to SE84.075.D

- Dual inverter for power generation plants
- Ultra-compact design for small footprint
- Speed modulation for extended operating times
- Static and dynamic grid stabilisation



Technical data

Designation	Size 1		Size 2		
	SE84.020.D	SE84.032.D	SE84.045.D	SE84.060.D	SE84.075.D
Generator connection (AC)					
Voltage	130...400 V _{AC eff}				
Frequency	0...400 Hz				
Recommended generator output	12 kVA	20 kVA	25 kVA	36 kVA	50 kVA
Constant current at 4 kHz	30 A _{AC eff}	31 A _{AC eff}	45 A _{AC eff}	60 A _{AC eff}	75 A _{AC eff}
Peak current ¹⁾ at 4 kHz	36 A _{AC eff}	34 A _{AC eff}	54 A _{AC eff}	72 A _{AC eff}	90 A _{AC eff}
Mains power connection (AC)					
Mains voltage (±10 %)	400 V _{AC}				
Constant current at 4 kHz	30 A _{AC eff}	31 A _{AC eff}	45 A _{AC eff}	60 A _{AC eff}	75 A _{AC eff}
Peak current ¹⁾ at 4 kHz	33 A _{AC eff}	34 A _{AC eff}	54 A _{AC eff}	72 A _{AC eff}	90 A _{AC eff}
Continuous output / grid support operation ^{1) 2)}	12.5 kVA / 14 kVA	21.5 kVA / 23.5 kVA	31 kVA / 37 kVA	41.5 kVA / 36.5 kVA	52 kVA / 46.5 kVA
Continuous output / grid support operation (cos φ = 0.9) ²⁾	11 kW	19.5 kW	28 kW	36.5 kW	46.5 kW
Efficiency					
Max. efficiency ³⁾	96 %				
Dimensions					
Height (incl. terminals)	292 (385) mm		346 (467) mm		
Width	272 mm		415 mm		
Depth	228 mm		249 mm		
Weight	15.2 kg		23.5kg		
General data					
Ambient temperature at 4 kHz	-10 °C...+45 °C	-10 °C...+40 °C	-10 °C...+45 °C		
Relative humidity	15 %...85 % (condensation not permitted)				
Cooling method	Air cooling	Liquid cooling	Air cooling		
Max. cable cross section generator / grid	16 mm ²		25 mm ²		
Pollution severity (cf. EN 60664-1)	2				
Safety / protective devices					
Protection class (cf. IEC 60529)	IP20, except IP00 terminals				
Disconnection device (cf. VDE-AR-N-4105)	Integrated in the unit				
Standards					
General standards	<ul style="list-style-type: none"> – CE conformity – Compliant with 2009 renewable energy law (EEG) – DIN EN 62109-1: Safety of power converters for use in photovoltaic power systems – DIN EN 61000-6-2: 2005 and DIN EN 61000-6-3: 2007 + A1:2011: Electromagnetic compatibility 				
Grid monitoring	– As attested by VDE-AR-N-4105 certificate				
Interfaces / Features / Options					
Interfaces	<ul style="list-style-type: none"> – 1 x Ethernet (RJ45) – 1 x CAN – 1 x microSD card – 3 x analogue input (-10 V...+10 V); (0 mA / 4 mA...20 mA) – 11 x digital input PLC level (0/24 V) – 3 x PT100 input – 1 x ENPO (<500 Hz; at 24 V typ. 3 mA; response time 10 s) – 10 x digital output PLC level (0/24 V; 200 mA) – 2 x output for control of AC contactors 				
Features	<ul style="list-style-type: none"> – AC short-circuit capability – Extensive power factor control functions for static and dynamic grid stabilisation – Integrated data logger 				
Options	<ul style="list-style-type: none"> – Online monitoring of operating data – Transmission of fault messages by email – Maintenance contract, service extension 				
System components	– Line filter, boost converter, input restrictor with capacitor				

 1) At I²t for 10 s

2) At 8 kHz

3) Depending on generator design