SSO Single

ferroamp

8 kW

PV Input	SSO Single
Maximum PV input power	8 000 W
Absolute maximum input voltage	1 000 V
Number of MPP trackers	1
Maximum MPP current [1]	14 A
MPPT operating range [2]	100 – 720 V
Starting voltage	100 V
String inputs	1
DC Output	
Nominal EnergyHub DC grid voltage	760 V
EnergyHub DC grid voltage range	740 – 780 V
Voltage range for other DC grid applications [3]	400 – 800 V
Maximum DC grid output current	12.5 A
DC grid connection	3-wire (L+, L-, PE)
Maximum DC grid fuse	25 A gPV
Max efficiency	99,5%
European weighted efficiency	99,2%
System communication	Narrow band power line communication (PLC)
Output voltage during fault, shut down or disconnected from DC-bus	0 V
Physical	
Dimensions H x W x D (including connectors)	360 x 250 x 150 mm
Weight	7.0 kg
Color	Natural anodized
Installation [4]	
Ambient temperature [5]	-25°C – 45°C
Humidity; Maximum altitude	0 – 100% RH; 2000m
Degree of protection	IP 65
PV connector	MC4
DC bus output connector	Push in, 2,5 - 4 mm^2, max cable diameter 6 - 12 mm
Compliance	
LVD	EN 62109-1, EN 62109-2 (protective class I, overvoltage cat. II)
EMC	EN 61000-6-2, EN 61000-6-3, CISPR 11 Ed.6.2 2019 Class B
RoHS	Yes
Protection functions [6]	PV polarity reversal, DC polarity reversal, DC bus short circuit, Overtemperature, Residual current breaker (30 mA), String insulation monitoring

1) SSO single may limit current to 13A, this has negligible impact on annual energy yield.
2) For stable operation with high I_{MPP} strings, the 720 V_{MPP} limit must be reduced by 80 V per ampere above I_{MPP} 12.5 A.
3) Consult Ferroamp prior to using SSO in other applications then PV production.
4) Consult Ferroamp for design guidelines for projects exceeding 30 SSOs or ESOs, or 200 m cable length.
5) Output power may be derated if ambient temperature exceeds 45°C.
6) Reverse PV polarity protection up to 13 A short circuit current, higher input currents with reverse polarity might damage the unit.

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