

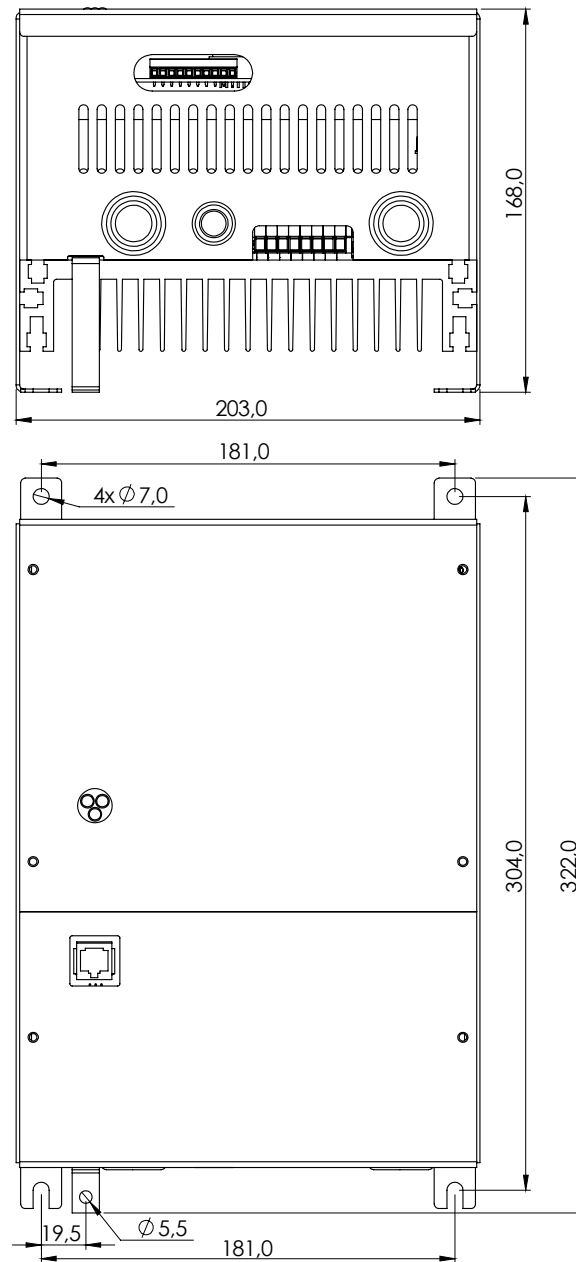
Technical Datasheet

Solar Power Control System - Booster / SPCS-B

SPCS-B x.xx-230 Technical Data

Type	SPCS-B 0.55-230	SPCS-B 0.75-230
Output Power Ratings Data		
Applicable AC Induction Motor Power	0.55 kW / 0.75 HP	0.75 kW / 1.00 HP
Converter Output Power Capacity	1.15 kVA	1.50 kVA
Output Voltage (Rated Motor Voltage)	3~ 230 V _{rms} (from 0 to U _{SUPPLY})	
Output Frequency	0÷60 Hz (up to 512 Hz upon request) variable frequency; <i>minimal and reference frequency parameters are software adjustable</i>	
Inverter Part Switching Frequency	2÷12 kHz (adjustable)	
Output Current (Rated Motor Current)	3.3 A _{rms}	4.0 A _{rms}
Overload Current	120% for 1 minute once per 10 minutes	
PV Input Power Ratings Data		
Max Input Voltage (V _{oc})	320 V _{DC}	
MPPT Range	100 ÷ 200 V _{DC}	120 ÷ 250 V _{DC}
Number of PV String Inputs	1	
Recommended PV Array	4÷6 PV Modules x 255÷300Wp	6÷8 PV Modules x 255÷300Wp
PV Inputs Protection	Thermally Fused Varistors 20kA / 350Vdc	
Additional External Power Options		
"Hybrid Power Source Input" module; converter matched output chokes and output sine filters (depending on the output line cable length, i.e. depending on the distance, between the converter output and the pump motor input); converter matched input line chokes and filters		
Application Data		
Rated Operating Temperature Range	-10°C to +45°C	
Maximum Operating Temperature Range	-20°C to +55°C	
Storage Temperature Range	-40°C to +70°C	
Protection Degree	IP20	
Operating Relative Humidity Range	5% to 95%, non-condensing	
Altitude	≤ 2000m (above 2000m – derating)	
Conformity with Norms	EN 62109-1:2010; EN 62109-2:2011; EN 61800-5-1:2007; EN 61800-3 C3	
Indication & Control Features		
LED Indication	Ready / Run / Alarm	
Communication Interface	RS 232/485 / MODBUS RTU	
Digital Inputs	5 Programmable Multifunctional Inputs	
AC Induction Motor Control	MPPT based V/f constant control	
Built-in Electronic Protections	Over Voltage, Short Circuit, Over Load, Earth Fault, Phase Loss, Overheating, PV Reversal, Dry Run	
Service mode and visualization through RS 232/485 port by remote control panel type "DRCP"		
Frequency Adjustment; Acceleration / Deceleration Time Ramps; Motor Voltage Adjustment; Service Diagnostic & Adjustment		
Visualization: DC Voltage / AC Voltage / Output Frequency / Motor Phase Current / Calculated Output Power / Solar Log and other		
SPCS-B x.xx-230 Converter Additional Control Features		
Water Level Control implemented by two sets of sensors for draw-well and water tank high/low level with LED indication		
Output Energy Management – built-in prepayment functionality for pump power sourcing, according to the pre-paid energy credit loaded to the system		

Dimensions



SPCS-B/H x.xx-230 Overall Dimensions, [mm]

Contacts



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