Data sheet



SPARE PART SIPLUS HCS4300 POM4320 Busbar mounting (IEC). Power output module for mounting on busbars system. With 9 outputs each max. 7680 W (for operating mode Half-wave control: Depending on the Inrush current of the load limitation to max. 4000 W)

Figure similar

General information	
Product type designation	POM4320
Installation type/mounting	
Mounting type	Busbar mounting
Mounting position	vertical
Type of ventilation	Self-ventilation
Supply voltage	
Type of supply voltage	AC
Rated value (AC)	400 V
 Relative negative tolerance 	10 %
 Relative positive tolerance 	30 %
2nd rated value (AC)	480 V
 Relative negative tolerance 	25 %
 Relative positive tolerance 	8 %
Line frequency	
● Rated value 50 Hz	Yes

Rated value 60 Hz	Yes
	5 %
Relative symmetrical tolerance Mains buffering	3 /0
Mains buffering	1 s
 Recovery time after power failure, typ. Connection method 	15
	Busbar mounting, 3-pole + PE
 Design of electrical connection for supply voltage 	Busbar mounting, 5-pole 11 E
Input voltage	
Design of the power supply	Power supply via CIM
Power	
Active power input, max.	8 W
Power electronics	Ohmia laad
Type of load Power capacity, max.	Ohmic load 57.6 kW; At 400 V AC
	57.6 kW; At 400 V AC
 For phase against phase with fan at 40 °C, max. 	37.0 KW, AL 400 V AG
Switching capacity current per phase, max.	83 A
Control of heating elements	
Half-wave control	Yes
Soft start	Yes
Phase control	No
Load connection type	
Star connection with neutral conductor (single-	No
phase)	
 Open delta connection (single-phase) 	Yes; Incoming fuse contained in the device
 Closed delta connection (3-phase) 	No
 Star connection with neutral conductor (2- phase) 	No
• 2-pole switching	No
Setpoint input	
• Percent	Yes
Watts	No
Heating power	
Number of digital outputs	9
 Number of heating elements per output, max. 	1
 Output voltage for heating power 	400 V
 2nd output voltage for heating power 	480 V
Power carrying capacity per output, min.	200 W; At 400 V AC
Power carrying capacity per output, max.	6 400 W; At 400 V AC
— for heating elements with high inrush current, max.	4 000 W; At 400 V AC

 Output current for heating power 	16 A; max.
Melting I2t value	250 A²-s
 Design of short-circuit protection per output 	Fuse 16 A
 Design of overvoltage protection 	Transil Diode
Connection method	
 Design of electrical connection at output for heating and fan 	Connector, 3-pole with spring-loaded connection
 Connectable conductor cross-sections, solid 	1x (0.2 10 mm²)
 Connectable conductor cross-sections, finely stranded with wire end processing 	1x (0.25 6 mm²)
 Connectable conductor cross-sections for AWG cables, stranded 	1x (24 8)

Interfaces	
Interfaces/bus type	system interface
Interrupts/diagnostics/status information	
Number of status displays	12
LED status display	LED green = ready, LED yellow = heating on/off, LED red = error
	display, LED red = error for each channel

Voltage diagnostics

Diagnostic messages	
• Fuse blown	Yes
Load failure	Yes
Triac error	Yes
 Switch-off threshold for internal device 	Yes

temperature

• Parallel-connected heating elements

• Rotating field fault

• Communication error

Yes

Supply voltage not connected
 Line voltage outside the permissible range
 Frequency outside the permissible range
 Fault current too high

Integrated Functions	
Monitoring functions	
Temperature monitoring	Yes
 Type of temperature monitoring 	NTC thermistor
Measuring functions	
Voltage measurement	Yes
 Current measurement 	No
Fault current detection	No

Diagnostics function

Potential separation	
Design of electrical isolation	Optocoupler and/or protective impedance between main circuit
	and PELV
between the outputs	No
Isolation	
Overvoltage category	III
Degree of pollution	2
EMC	
EMC interference emission	Limit value in accordance with IEC 61000-6-4:2007 + A1:2011
Electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Field-related interference acc. to IEC 61000-4-3	10 V/m (80 1 000 MHz), 3 V/m (1.4 2.0 GHz), 1 V/m (2.0 2.7 GHz)
Conducted interference due to burst acc. to IEC 61000-4-4	2 kV power supply lines, 2 kV load lines
Conducted interference due to surge acc. to IEC 61000-4-5	on supply and load lines: 1 kV symmetric, 2 kV unsymmetric
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6	10 V (0.15 80 MHz)
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	No
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
China RoHS compliance	Yes
Reference designation according to DIN EN 81346-2	Q
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• Storage, min.	-25 °C
• Storage, max.	70 °C
Transportation, min.	-25 °C
Transportation, max.	70 °C
Air pressure acc. to IEC 60068-2-13	
Operation, min.	860 hPa
Operation, max.	1 080 hPa
• Storage, min.	660 hPa

• Storage, max.	1 080 hPa
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	2 000 m
Relative humidity	
 Operation at 25 °C, max. 	95 %
 Operation at 50 °C, max. 	50 %; 95 % at 25 °C, decreasing linearly to 50 % at 50 °C
Vibrations	
 Vibration resistance during operation acc. to IEC 60068-2-6 	10 58 Hz / 0.075 mm, 58 150 Hz / 1 g
 Vibration resistance during storage acc. to IEC 60068-2-6 	5 8.5 Hz / 3.5 mm, 8.5 500 Hz / 1 g
Shock testing	
 Shock resistance during operation acc. to IEC 60068-2-27 	15 g / 11 ms / 3 shocks/axis
 Shock resistance during storage acc. to IEC 60068-2-29 	25 g / 6 ms / 1 000 shocks/axis
Dimensions	
Width	104 mm
Height	340 mm
Depth	250 mm
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