



SIPLUS HCS4300 POM4320 busbar mounting (UL) with 9 outputs each max. 6000 W (at 400 V AC)

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; Phase - phase
• Relative negative tolerance	10 %
• Relative positive tolerance	30 %
2nd rated value (AC)	480 V; Phase - phase
• Relative negative tolerance	25 %
• Relative positive tolerance	8 %
Line frequency	
• Rated value 50 Hz	Yes
• Rated value 60 Hz	Yes
• Relative symmetrical tolerance	5 %
Mains buffering	
• Recovery time after power failure, typ.	1 s
Connection method	
• Design of electrical connection for supply voltage	Busbar mounting, 3-pole + PE
Input voltage	
device version of the power supply for electronics	Power supply via CIM
Power	
Active power input, max.	8 W
Power electronics	
Type of load	Ohmic load
Power capacity, max.	64.8 kW; At 480 V AC
• For phase against phase with fan at 40 °C, max.	64.8 kW; At 480 V AC
Switching capacity current per phase, max.	80 A
Short-time withstand current (SCCR) acc. to UL 508A	100 kA
Control of heating elements	
• Half-wave control	Yes
• Soft start	Yes
• Phase control	No
Load connection type	
• Star connection with neutral conductor (single-phase)	No
• Open delta connection (single-phase)	Yes; Incoming fuse contained in the device
• closed delta connection (2-phase)	No

<ul style="list-style-type: none"> • Closed delta connection (3-phase) 	No
<ul style="list-style-type: none"> • Star connection with neutral conductor (2-phase) 	No
<ul style="list-style-type: none"> • star connection without neutral conductor (3-phase) 	No
<ul style="list-style-type: none"> • 2-pole switching 	No
Setpoint input	
<ul style="list-style-type: none"> • Percent 	Yes
<ul style="list-style-type: none"> • Watts 	No
Heating power	
<ul style="list-style-type: none"> • Number of digital outputs 	9
<ul style="list-style-type: none"> • Number of heating elements per output, max. 	1
<ul style="list-style-type: none"> • Output voltage for heating power 	400 V
<ul style="list-style-type: none"> • 2nd output voltage for heating power 	480 V
<ul style="list-style-type: none"> • Power carrying capacity per output, min. 	240 W; At 480 V AC
<ul style="list-style-type: none"> • Power carrying capacity per output, max. 	7 200 W; At 480 V AC
<ul style="list-style-type: none"> — for heating elements with high inrush current, max. 	4 000 W; At 480 V AC
<ul style="list-style-type: none"> • Output current for heating power 	15 A; max.
<ul style="list-style-type: none"> • Melting I2t value 	400 A ² ·s
<ul style="list-style-type: none"> • Design of short-circuit protection per output 	Melting fuse 20 A
<ul style="list-style-type: none"> • Design of overvoltage protection 	Transil Diode
Connection method	
<ul style="list-style-type: none"> • Design of electrical connection at output for heating and fan 	plug, 3-pole with spring-type terminal, push-in
<ul style="list-style-type: none"> — Connectable conductor cross-sections, solid 	1x (0.2 ... 10 mm ²)
<ul style="list-style-type: none"> — Connectable conductor cross-sections, finely stranded with wire end processing 	1x (0.25 ... 6 mm ²)
<ul style="list-style-type: none"> — 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
Diagnostics function	Voltage diagnostics
Diagnoses	
<ul style="list-style-type: none"> • Fuse blown 	Yes
<ul style="list-style-type: none"> • Load failure 	Yes
<ul style="list-style-type: none"> • Triac error 	Yes
<ul style="list-style-type: none"> • Switch-off threshold for internal device temperature 	Yes
<ul style="list-style-type: none"> • Parallel-connected heating elements 	No
<ul style="list-style-type: none"> • Rotating field fault 	Yes
<ul style="list-style-type: none"> • Communication error 	Yes
<ul style="list-style-type: none"> • Supply voltage not connected 	Yes
<ul style="list-style-type: none"> • Line voltage outside the permissible range 	Yes
<ul style="list-style-type: none"> • Frequency outside the permissible range 	Yes
<ul style="list-style-type: none"> • Fault current too high 	No
Integrated Functions	
Monitoring functions	
<ul style="list-style-type: none"> • Temperature monitoring 	Yes
<ul style="list-style-type: none"> • Type of temperature monitoring 	NTC thermistor
Measuring functions	
<ul style="list-style-type: none"> • Voltage measurement 	Yes
<ul style="list-style-type: none"> • Current measurement 	No
<ul style="list-style-type: none"> • Fault current detection 	No
Potential separation	
Design of electrical isolation between the outputs	Optocoupler and/or protective impedance between main circuit and PELV
	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	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
China RoHS compliance	Yes
reference designation according to IEC 81346-2 (2009)	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

last modified: 10/18/2021 