



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

General information	
Product type designation	POM4320 rear panel mounting (UL)
Installation type/mounting	
Mounting type	Backplane mounting
Mounting position	vertical
Type of ventilation	Self-ventilation
Supply voltage	
Type of supply voltage	AC
Rated value (AC)	400 V; Phase - phase
<ul style="list-style-type: none"> <li>Relative negative tolerance</li> <li>Relative positive tolerance</li> </ul>	10 % 30 %
2nd rated value (AC)	480 V; Phase - phase
<ul style="list-style-type: none"> <li>Relative negative tolerance</li> <li>Relative positive tolerance</li> </ul>	25 % 8 %
Line frequency	
<ul style="list-style-type: none"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> <li>Relative symmetrical tolerance</li> </ul>	Yes Yes 5 %
Mains buffering	
<ul style="list-style-type: none"> <li>Recovery time after power failure, typ.</li> </ul>	1 s
Connection method	
<ul style="list-style-type: none"> <li>Design of electrical connection for supply voltage</li> </ul>	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
<ul style="list-style-type: none"> <li>For phase against phase with fan at 40 °C, max.</li> </ul>	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	
<ul style="list-style-type: none"> <li>Half-wave control</li> <li>Soft start</li> <li>Phase control</li> </ul>	Yes Yes Yes
Load connection type	
<ul style="list-style-type: none"> <li>Star connection with neutral conductor (single-phase)</li> <li>Open delta connection (single-phase)</li> <li>closed delta connection (2-phase)</li> </ul>	No Yes; Incoming fuse contained in the device No

<ul style="list-style-type: none"> <li>• Closed delta connection (3-phase)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Star connection with neutral conductor (2-phase)</li> </ul>	No
<ul style="list-style-type: none"> <li>• star connection without neutral conductor (3-phase)</li> </ul>	No
<ul style="list-style-type: none"> <li>• 2-pole switching</li> </ul>	No
<b>Setpoint input</b>	
<ul style="list-style-type: none"> <li>• Percent</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Watts</li> </ul>	No
<b>Heating power</b>	
<ul style="list-style-type: none"> <li>• Number of digital outputs</li> </ul>	9
<ul style="list-style-type: none"> <li>• Number of heating elements per output, max.</li> </ul>	1
<ul style="list-style-type: none"> <li>• Output voltage for heating power</li> </ul>	400 V
<ul style="list-style-type: none"> <li>• 2nd output voltage for heating power</li> </ul>	480 V
<ul style="list-style-type: none"> <li>• Power carrying capacity per output, min.</li> </ul>	240 W; At 480 V AC
<ul style="list-style-type: none"> <li>• Power carrying capacity per output, max.</li> </ul>	7 200 W; At 480 V AC
<ul style="list-style-type: none"> <li>— for heating elements with high inrush current, max.</li> </ul>	4 000 W; At 480 V AC
<ul style="list-style-type: none"> <li>• Output current for heating power</li> </ul>	15 A; max.
<ul style="list-style-type: none"> <li>• Melting I2t value</li> </ul>	400 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• Design of short-circuit protection per output</li> </ul>	Melting fuse 20 A
<ul style="list-style-type: none"> <li>• Design of overvoltage protection</li> </ul>	Transil Diode
<b>Connection method</b>	
<ul style="list-style-type: none"> <li>• Design of electrical connection at output for heating and fan</li> </ul>	plug, 3-pole with spring-type terminal, push-in
<ul style="list-style-type: none"> <li>— Connectable conductor cross-sections, solid</li> </ul>	1x (0.2 ... 10 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>— Connectable conductor cross-sections, finely stranded with wire end processing</li> </ul>	1x (0.25 ... 6 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>— Connectable conductor cross-sections for AWG cables, stranded</li> </ul>	1x (24 ... 8)
<b>Interfaces</b>	
Interfaces/bus type	system interface
<b>Interrupts/diagnostics/status information</b>	
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
<b>Diagnoses</b>	
<ul style="list-style-type: none"> <li>• Fuse blown</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Load failure</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Triac error</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Switch-off threshold for internal device temperature</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Parallel-connected heating elements</li> </ul>	No
<ul style="list-style-type: none"> <li>• Rotating field fault</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Communication error</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Supply voltage not connected</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Line voltage outside the permissible range</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Frequency outside the permissible range</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Fault current too high</li> </ul>	No
<b>Integrated Functions</b>	
<b>Monitoring functions</b>	
<ul style="list-style-type: none"> <li>• Temperature monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Type of temperature monitoring</li> </ul>	NTC thermistor
<b>Measuring functions</b>	
<ul style="list-style-type: none"> <li>• Voltage measurement</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Current measurement</li> </ul>	No
<ul style="list-style-type: none"> <li>• Fault current detection</li> </ul>	No
<b>Potential separation</b>	
Design of electrical isolation between the outputs	Optocoupler and/or protective impedance between main circuit and PELV
	No
<b>Isolation</b>	
Overvoltage category	III
Degree of pollution	2
<b>EMC</b>	
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)
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Standards, approvals, certificates</b>	
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
<b>Ambient conditions</b>	
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
<b>Dimensions</b>	
Width	104 mm
Height	344 mm
Depth	217 mm

last modified:

10/18/2021 