



SIPLUS HCS4300 POM4320 Highend rear panel mounting UL with 6 outputs each max. 12800 W (at 400 V AC)

General information	
Product type designation	POM4320 Highend
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)	230 V; phase - neutral conductor
• Relative negative tolerance	10 %
• Relative positive tolerance	30 %
2nd rated value (AC)	277 V; phase - neutral conductor
• Relative negative tolerance	25 %
• Relative positive tolerance	8 %
3rd rated value (AC)	400 V; Phase - phase
• Relative negative tolerance	10 %
• Relative positive tolerance	30 %
4th 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	Terminal, 3-pole + N + PE
— Connectable conductor cross-sections, solid	1x (1.5 ... 50 mm <sup>2</sup> )
— Connectable conductor cross-sections, finely stranded with wire end processing	1x (1.5 ... 35 mm <sup>2</sup> )
— Connectable conductor cross-sections for AWG cables	1x (16 ... 1)
— Cable cross-sections for N	1x (0.2 ... 2.5 mm <sup>2</sup> )
Input voltage	
device version of the power supply for electronics	Power supply via CIM
Power	
Active power input, max.	10 W
Power electronics	
Type of load	Ohmic load

Power capacity, max.	76.8 kW; At 400 V AC
<ul style="list-style-type: none"> <li>• For phase against phase with fan at 40 °C, max.</li> <li>• For phase against neutral with fan at 40 °C, max.</li> </ul>	76.8 kW; At 400 V AC 44.16 kW; at 230 V AC
Switching capacity current per phase, max.	105 A; 90 A (UL)
Short-time withstand current (SCCR) acc. to UL 508A	100 kA
<b>Control of heating elements</b>	
<ul style="list-style-type: none"> <li>• Half-wave control</li> <li>• Soft start</li> <li>• Phase control</li> </ul>	Yes Yes Yes
<b>Load connection type</b>	
<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> <li>• Closed delta connection (3-phase)</li> <li>• Star connection with neutral conductor (2-phase)</li> <li>• star connection without neutral conductor (3-phase)</li> <li>• 2-pole switching</li> </ul>	Yes Yes; Incoming fuse in the device optionally possible Yes; Economy circuit Yes Yes; Economy circuit Yes Yes; Phase - phase
<b>Setpoint input</b>	
<ul style="list-style-type: none"> <li>• Percent</li> <li>• Watts</li> </ul>	Yes Yes
<b>Heating power</b>	
<ul style="list-style-type: none"> <li>• Number of digital outputs</li> <li>• Number of heating elements per output, max.</li> <li>• Output voltage for heating power</li> <li>• 2nd output voltage for heating power</li> <li>• 3rd output voltage for heating power</li> <li>• 4th output voltage for heating power</li> <li>• Power carrying capacity per output, min.</li> <li>• Power carrying capacity per output, max. <ul style="list-style-type: none"> <li>— for heating elements with high inrush current, max.</li> </ul> </li> <li>• Output current for heating power</li> <li>• Melting I<sub>2t</sub> value</li> <li>• Design of short-circuit protection per output</li> <li>• Design of overvoltage protection</li> </ul>	6; Possible parallel switching of 2 outputs 5 230 V 277 V 400 V 480 V 1 200 W; At 400 V AC 12 800 W; At 400 V AC 6 000 W; At 400 V AC 32 A; max. 250 A <sup>2</sup> ·s Melting fuse 32 A Transil Diode
<b>Connection method</b>	
<ul style="list-style-type: none"> <li>• Design of electrical connection at output for heating and fan <ul style="list-style-type: none"> <li>— Connectable conductor cross-sections, solid</li> <li>— Connectable conductor cross-sections, finely stranded with wire end processing</li> <li>— Connectable conductor cross-sections for AWG cables, stranded</li> </ul> </li> </ul>	plug, 3-pole, with operating lever, push-in  1x (0.75 ... 16 mm <sup>2</sup> ) 1x (0.75 ... 16 mm <sup>2</sup> ) 1x (18 ... 4)
<b>Interfaces</b>	
Interfaces/bus type	system interface
<b>Interrupts/diagnostics/status information</b>	
Number of status displays	9
LED status display	LED green = ready, LED yellow = heating on/off, LED red = error display, LED red = error for each channel
Diagnostics function	Voltage and current diagnosis
<b>Diagnoses</b>	
<ul style="list-style-type: none"> <li>• Fuse blown</li> <li>• Load failure</li> <li>• Triac error</li> <li>• Switch-off threshold for internal device temperature</li> <li>• Parallel-connected heating elements</li> <li>• Rotating field fault</li> <li>• Communication error</li> <li>• Supply voltage not connected</li> <li>• Line voltage outside the permissible range</li> <li>• Frequency outside the permissible range</li> <li>• Fault current too high</li> </ul>	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
<b>Integrated Functions</b>	

<b>Monitoring functions</b>	
<ul style="list-style-type: none"> <li>• Temperature monitoring</li> <li>• Type of temperature monitoring</li> </ul>	Yes NTC thermistor
<b>Measuring functions</b>	
<ul style="list-style-type: none"> <li>• Voltage measurement</li> <li>• Current measurement</li> <li>• Fault current detection</li> </ul>	Yes Yes Yes; For 2-pole switching
<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>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	0 °C 55 °C
<b>Ambient temperature during storage/transportation</b>	
<ul style="list-style-type: none"> <li>• Storage, min.</li> <li>• Storage, max.</li> <li>• Transportation, min.</li> <li>• Transportation, max.</li> </ul>	-25 °C 70 °C -25 °C 70 °C
<b>Air pressure acc. to IEC 60068-2-13</b>	
<ul style="list-style-type: none"> <li>• Operation, min.</li> <li>• Operation, max.</li> <li>• Storage, min.</li> <li>• Storage, max.</li> </ul>	860 hPa 1 080 hPa 660 hPa 1 080 hPa
<b>Altitude during operation relating to sea level</b>	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	2 000 m
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• Operation at 25 °C, max.</li> <li>• Operation at 50 °C, max.</li> </ul>	95 % 50 %; 95 % at 25 °C, decreasing linearly to 50 % at 50 °C
<b>Vibrations</b>	
<ul style="list-style-type: none"> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> <li>• Vibration resistance during storage acc. to IEC 60068-2-6</li> </ul>	10 ... 58 Hz / 0.075 mm, 58 ... 150 Hz / 1 g 5 ... 8.5 Hz / 3.5 mm, 8.5 ... 500 Hz / 1 g
<b>Shock testing</b>	
<ul style="list-style-type: none"> <li>• Shock resistance during operation acc. to IEC 60068-2-27</li> <li>• Shock resistance during storage acc. to IEC 60068-2-29</li> </ul>	15 g / 11 ms / 3 shocks/axis 25 g / 6 ms / 1 000 shocks/axis
<b>Dimensions</b>	
Width	104 mm
Height	344 mm

Depth

217 mm

last modified:

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