

SIPLUS HCS4200 POM4220 Lowend. Power output module (POM) for inserting in a HCS RACK4200. with 16 outputs each max. 1449 W (depending on inrush current Inrush current of the load limitation to max. 750 W)



General information	
Product type designation	POM4220 Lowend
Installation type/mounting	
Mounting type	Screw mounting to rack
Mounting position	vertical
Type of ventilation	Self ventilation or forced ventilation
Supply voltage	
Type of supply voltage	AC
Rated value (AC)	230 V
<ul style="list-style-type: none"> Relative negative tolerance Relative positive tolerance 	10 % 10 %
Line frequency	
<ul style="list-style-type: none"> Rated value 50 Hz Rated value 60 Hz Relative symmetrical tolerance 	Yes Yes 5 %
Mains buffering	
<ul style="list-style-type: none"> Recovery time after power failure, typ. 	1 s
Connection method	

- Design of electrical connection for supply voltage
 - Connectable conductor cross-sections, solid
 - Connectable conductor cross-sections, finely stranded with wire end processing
 - Connectable conductor cross-sections for AWG cables

Connector, 3-pole with spring-loaded connection

1x (0.2 ... 10 mm²)

1x (0.25 ... 6 mm²)

1x (24 ... 8)

Input voltage

Design of the power supply

Power supply via rack

Power

Active power input, max.

1 W

Power electronics

Type of load

Ohmic load

Power capacity, max.

16.1 kW; at 230 V AC

- For phase against neutral with fan at 40 °C, max.

16.1 kW; at 230 V AC

- For phase against neutral without fan at 40 °C, max.

7.3 kW; at 230 V AC

Switching capacity current per phase, max.

35 A

Short-time withstand current (SCCR) acc. to UL 508A

50 kA

Control of heating elements

- Half-wave control
- Soft start
- Phase control

Yes

No

No

Load connection type

- Star connection with neutral conductor (single-phase)
- Open delta connection (single-phase)
- Closed delta connection (3-phase)
- Star connection with neutral conductor (2-phase)
- 2-pole switching

Yes

No

No

No

No

Setpoint input

- Percent
- Watts

Yes

No

Heating power

- Number of digital outputs
- Number of heating elements per output, max.
- Output voltage for heating power
- Power carrying capacity per output, min.
- Power carrying capacity per output, max.

16

1

230 V

40 W; at 230 V AC

1 449 W; at 230 V AC

— for heating elements with high inrush current, max.	750 W; at 230 V AC
• Output current for heating power	6.3 A; max.
• Melting I ² t value	57 A ² ·s
• Design of short-circuit protection per output	Safety fuse 6.3 A
• Design of overvoltage protection	Transil Diode

Connection method	
• Design of electrical connection at output for heating and fan	Connector, 8-pin with tension spring connection
— Connectable conductor cross-sections, solid	1x (0.2 ... 10 mm ²)
— Connectable conductor cross-sections, finely stranded with wire end processing	1x (0.25 ... 6 mm ²)
— 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	19
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

Diagnostic messages	
• Fuse blown	Yes
• Load failure	Yes
• Triac error	Yes
• Switch-off threshold for internal device temperature	Yes
• Parallel-connected heating elements	No
• Rotating field fault	Yes
• Communication error	Yes
• Supply voltage not connected	Yes
• Line voltage outside the permissible range	Yes
• Frequency outside the permissible range	Yes
• Fault current too high	No

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

- 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	Supply and load lines: 1 kV symmetrical, 2 kV asymmetrical
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
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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 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	36 mm
Height	285 mm
Depth	281 mm
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