

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
Relative negative tolerance	10 %
Relative positive tolerance	10 %
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
 - 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

Type of control of the heating elements

Half-wave control

Power capacity, max.

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

16.1 kW; At 230 V AC

16.1 kW; At 230 V AC

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

Load connection type

Star connection with neutral conductor (single-phase)

Yes

Open delta connection (single-phase)

No

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
- Number of heating elements per output, max.
- Output voltage for heating power
- Power carrying capacity per output, min.
- Power carrying capacity per output, max.
 - for heating elements with high inrush current, max.
- Output current for heating power
- Melting I²t value
- Design of short-circuit protection per output

16

1

230 V

40 W; At 230 V AC

1 449 W; At 230 V AC

750 W; At 230 V AC

6.3 A; max.

57 A²·s

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	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	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
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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