SIEMENS

Data sheet 6BK1943-2AH00-0AA0

SIPLUS HCS4300 POM4320 Highend busbars mounting (IEC) with 6 outputs each max. 12800 W (at 400 V AC)

General information	
Product type designation	POM4320 Highend
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)	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	Busbar adapter, 3-pole + N + PE
— Cable cross-sections for N	1x (0.2 ... 2.5 mm²)
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
● For phase against phase with fan at 40 °C, max.	76.8 kW; At 400 V AC
● For phase against neutral with fan at 40 °C, max.	44.16 kW; at 230 V AC
Switching capacity current per phase, max.	83 A
Control of heating elements	

● Half-wave control	Yes
● Soft start	Yes
● Phase control	Yes
Load connection type	
● Star connection with neutral conductor (single-phase)	Yes
● Open delta connection (single-phase)	Yes; Incoming fuse in the device optionally possible
● closed delta connection (2-phase)	Yes; Economy circuit
● Closed delta connection (3-phase)	Yes
● Star connection with neutral conductor (2-phase)	Yes; Economy circuit
● star connection without neutral conductor (3-phase)	Yes
● 2-pole switching	Yes; Phase - phase
Setpoint input	
● Percent	Yes
● Watts	Yes
Heating power	
● Number of digital outputs	6; Possible parallel switching of 2 outputs
● Number of heating elements per output, max.	5
● Output voltage for heating power	230 V
● 2nd output voltage for heating power	277 V
● 3rd output voltage for heating power	400 V
● 4th output voltage for heating power	480 V
● Power carrying capacity per output, min.	1 200 W; At 400 V AC
● Power carrying capacity per output, max.	12 800 W; At 400 V AC
— for heating elements with high inrush current, max.	6 000 W; At 400 V AC
● Output current for heating power	32 A; max.
● Melting I2t value	250 A²·s
● Design of short-circuit protection per output	Melting fuse 32 A
● Design of overvoltage protection	Transil Diode
Connection method	
● Design of electrical connection at output for heating and fan	plug, 3-pole, with operating lever, push-in
— Connectable conductor cross-sections, solid	1x (0.75 ... 16 mm²)
— Connectable conductor cross-sections, finely stranded with wire end processing	1x (0.75 ... 16 mm²)
— Connectable conductor cross-sections for AWG cables, stranded	1x (18 ... 4)
Interfaces	
Interfaces/bus type	system interface
Interrupts/diagnostics/status information	
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
Diagnoses	
● Fuse blown	Yes
● Load failure	Yes
● Triac error	Yes
● Switch-off threshold for internal device temperature	Yes
● Parallel-connected heating elements	Yes
● 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	Yes
Integrated Functions	
Monitoring functions	
● Temperature monitoring	Yes
● Type of temperature monitoring	NTC thermistor
Measuring functions	
● Voltage measurement	Yes
● Current measurement	Yes

● Fault current detection	Yes; For 2-pole switching
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	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	No
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

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