SIEMENS

Data sheet

6BK1943-2AA00-0AA2



SIPLUS HCS4300 POM4320 busbar mounting (IEC) with 9 outputs each max. 6400 W (at 400 V AC)

Figure similar

General information		
Product type designation	POM4320 BUSBAR MOUNTING (IEC)	
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)	400 V; Phase - phase	
Relative negative tolerance	10 %	
Relative positive tolerance	30 %	
2nd 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 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.	57.6 kW; At 400 V AC	
 For phase against phase with fan at 40 °C, max. 	57.6 kW; At 400 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) 	No	
 Open delta connection (single-phase) 	Yes; Incoming fuse contained in the device	
 closed delta connection (2-phase) 	No	

 Closed delta connection (3-phase) 	No
 Star connection with neutral conductor (2-phase) 	No
 star connection without neutral conductor (3-phase) 	No
2-pole switching	No
Setpoint input	
 Percent 	Yes
Watts	No
Heating power	
 Number of digital outputs 	9
 Number of heating elements per output, max. 	1
 Output voltage for heating power 	400 V
 2nd output voltage for heating power 	480 V
 Power carrying capacity per output, min. 	200 W; At 400 V AC
 Power carrying capacity per output, max. 	6 400 W; At 400 V AC
— for heating elements with high inrush current, max.	4 000 W; At 400 V AC
 Output current for heating power 	16 A; max.
Melting I2t value	250 A²-s
Design of short-circuit protection per output	Fuse 16 A
Design of overvoltage protection	Transil Diode
Connection method	
Design of electrical connection at output for heating and fan	plug, 3-pole with spring-type terminal, push-in
 Connectable conductor cross-sections, solid 	1x (0.2 10 mm²)
 Connectable conductor cross-sections, finely stranded with wire end processing 	1x (0.25 6 mm²)
 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	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
Diagnoses	
Fuse blown	Yes
Fuse blown Load failure	Yes Yes
Load failure	Yes
Load failureTriac error	Yes Yes
Load failureTriac errorSwitch-off threshold for internal device temperature	Yes Yes Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements 	Yes Yes Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault 	Yes Yes Yes No Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error 	Yes Yes Yes No Yes Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected 	Yes Yes Yes No Yes Yes Yes Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected Line voltage outside the permissible range 	Yes Yes Yes No Yes Yes Yes Yes Yes
 Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected Line voltage outside the permissible range Frequency outside the permissible range 	Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes
Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected Line voltage outside the permissible range Frequency outside the permissible range Fault current too high Integrated Functions	Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes
Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected Line voltage outside the permissible range Frequency outside the permissible range Fault current too high Integrated Functions Monitoring functions	Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes
Load failure Triac error Switch-off threshold for internal device temperature Parallel-connected heating elements Rotating field fault Communication error Supply voltage not connected Line voltage outside the permissible range Frequency outside the permissible range Fault current too high Integrated Functions Monitoring functions Temperature monitoring	Yes Yes Yes No Yes Yes Yes Yes Yes Yos No
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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

last modified: 10/18/2021 🖸