



Figure similar

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

| 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  |
| <b>Setpoint input</b>  |   |
| • Percent  | Yes   |
| • Watts  | No  |
| <b>Heating power</b>   |   |
| • 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 A <sup>2</sup> ·s   |
| • Design of short-circuit protection per output                                  | Fuse 16 A   |
| • Design of overvoltage protection   | Transil Diode   |
| <b>Connection method</b>   |   |
| • 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 mm <sup>2</sup> )  |
| — Connectable conductor cross-sections, finely stranded with wire end processing | 1x (0.25 ... 6 mm <sup>2</sup> )  |
| — Connectable conductor cross-sections for AWG cables, stranded                  | 1x (24 ... 8)   |
| <b>Interfaces</b>  |   |
| Interfaces/bus type  | system interface  |
| <b>Interrupts/diagnostics/status information</b>                                 |   |
| 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   |
| <b>Diagnoses</b>   |   |
| • 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  |
| <b>Integrated Functions</b>  |   |
| <b>Monitoring functions</b>  |   |
| • Temperature monitoring   | Yes   |
| • Type of temperature monitoring   | NTC thermistor  |
| <b>Measuring functions</b>   |   |
| • Voltage measurement  | Yes   |
| • Current measurement  | No  |
| • Fault current detection  | No  |
| <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)  |

### 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 |

### Classifications

|        | Version | Classification |
|--------|---------|----------------|
| eClass | 14      | 27-24-40-01    |
| eClass | 12      | 27-24-40-01    |
| eClass | 9.1     | 27-24-40-01    |
| eClass | 9       | 27-24-40-01    |
| eClass | 8       | 27-24-26-90    |
| eClass | 7.1     | 27-24-26-90    |
| eClass | 6       | 27-24-26-90    |
| ETIM   | 9       | EC002982       |
| ETIM   | 8       | EC002982       |
| ETIM   | 7       | EC002982       |

|        |    |             |
|--------|----|-------------|
| IDEA   | 4  | 3567        |
| UNSPSC | 15 | 32-15-17-05 |

Approvals / Certificates

|                          |     |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



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