

## Data sheet for SINAMICS Power module PM230

Article No. : 6SL3223-0DE35-5AA0



Figure similar

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

### Rated data

|                    |                     |
|--------------------|---------------------|
| <b>Input</b>       |                     |
| Number of phases   | 3 AC                |
| Line voltage       | 380 ... 480 V ±10 % |
| Line frequency     | 47 ... 63 Hz        |
| Rated current (LO) | 102.00 A            |
| Rated current (HO) | 84.00 A             |

|                                     |   |
|-------------------------------------|---|
| <b>Output</b>                       |   |
| Number of phases                    | 3 AC  |
| <b>Rated voltage</b>                | <b>400V IEC      480V NEC <sup>1)</sup></b> |
| Rated power (LO)                    | 55.00 kW      75.00 hp                      |
| Rated power (HO)                    | 45.00 kW      60.00 hp                      |
| Rated current (LO)                  | 110.00 A                                    |
| Rated current (HO)                  | 90.00 A                                     |
| Max. output current                 | 180.00 A                                    |
| Pulse frequency                     | 4 kHz                                       |
| Output frequency for vector control | 0 ... 200 Hz                                |
| Output frequency for V/f control    | 0 ... 550 Hz                                |

|   |  |
|---|--|
| <b>Overload capability</b>  |  |
| Low Overload (LO)   |  |
| 1.1 × rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s<br>1.5 × rated output current (i.e. 150 % overload) for 3 s with a cycle time of 300 s   |  |
| High Overload (HO)  |  |
| 1.5 × output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s<br>2 × output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s |  |

|                                     |         |
|-------------------------------------|---------|
| <b>General tech. specifications</b> |         |
| Power factor λ                      | 0.90    |
| Offset factor cos φ                 | 0.95    |
| Efficiency η                        | 0.97    |
| Sound pressure level (1m)           | 61 dB   |
| Power loss                          | 1.40 kW |
| Filter class (integrated)           | Class A |

### Ambient conditions

|                            |                                |
|----------------------------|--------------------------------|
| Cooling                    | Internal air cooling           |
| Cooling air requirement    | 0.117 m³/s (4.132 ft³/s)       |
| Installation altitude      | 1,000 m (3,280.84 ft)          |
| <b>Ambient temperature</b> |                                |
| Operation LO               | 0 ... 40 °C (32 ... 104 °F)    |
| Operation HO               | 0 ... 50 °C (32 ... 122 °F)    |
| Transport                  | -25 ... 55 °C (-13 ... 131 °F) |
| Storage                    | -25 ... 55 °C (-13 ... 131 °F) |

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Relative humidity</b> |                                     |
| Max. operation           | 95 % RH, condensation not permitted |

### Connections

|                         |  |
|-------------------------|--|
| <b>Line side</b>        |  |
| Version                 | M8 bolt                                    |
| Conductor cross-section | 35.00 ... 120.00 mm²<br>(AWG 2 ... AWG -3) |
| <b>Motor end</b>        |  |
| Version                 | M8 bolt                                    |
| Conductor cross-section | 35.00 ... 120.00 mm²<br>(AWG 2 ... AWG -3) |

|                                |                   |
|--------------------------------|-------------------|
| <b>Max. motor cable length</b> |                   |
| Shielded                       | 25 m (82.02 ft)   |
| Unshielded                     | 100 m (328.08 ft) |

### Mechanical data

|                      |                      |
|----------------------|----------------------|
| Degree of protection | IP55 / UL type 12    |
| Frame size           | FSF                  |
| Net weight           | 70.00 kg (154.32 lb) |
| <b>Dimensions</b>    |                      |
| Width                | 410 mm (16.14 in)    |
| Height               | 915 mm (36.02 in)    |
| Depth                | 416 mm (16.38 in)    |

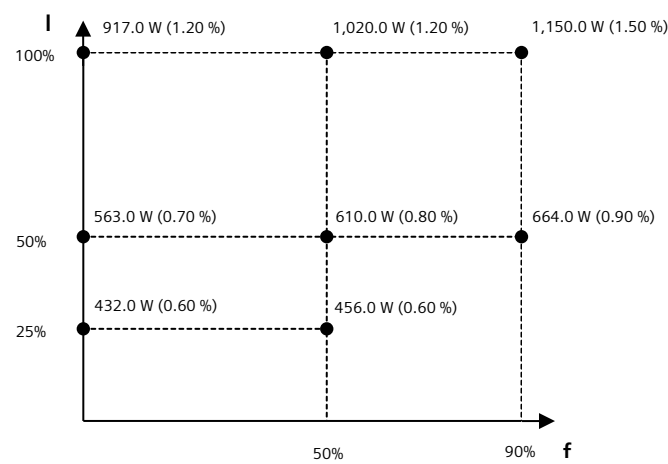
### Standards

|                           |                                  |
|---------------------------|----------------------------------|
| Compliance with standards | CE, C-Tick (RCM)                 |
| CE marking                | Low-voltage directive 2006/95/EC |

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| Converter losses to IEC61800-9-2*                    |         |
|--|---------|
| Efficiency class                                     | IE2     |
| Comparison with the reference converter (90% / 100%) | 32.30 % |



The percentage values show the losses in relation to the rated apparent power of the converter.

The diagram shows the losses for the points (as per standard IEC61800-9-2) of the relative torque generating current (I) over the relative motor stator frequency (f). The values are valid for the basic version of the converter without options/components.

\*calculated values

<sup>1)</sup>The output current and HP ratings are valid for the voltage range 440V-480V