

## Data sheet for SINAMICS Power module PM240

Article No. : 6SL3224-0XE41-3UA0



Figure similar

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

Item no. :  
Consignment no. :  
Project :

### Rated data

#### Input

|                                    |                          |
|------------------------------------|--------------------------|
| Number of phases                   | 3 AC                     |
| Line voltage                       | 380 ... 480 V $\pm$ 10 % |
| Line frequency                     | 47 ... 63 Hz             |
| Rated current with line reactor    | 245.00 A                 |
| Rated current without line reactor | 297.00 A                 |

#### Output

|                                     |                 |                 |
|-------------------------------------|-----------------|-----------------|
| Number of phases                    | 3 AC            |                 |
| <b>Rated voltage</b>                | <b>400V IEC</b> | <b>480V NEC</b> |
| Rated power (LO)                    | 160.00 kW       | 250.00 hp       |
| Rated power (HO)                    | 132.00 kW       | 200.00 hp       |
| Rated current (LO)                  | 302.00 A        |                 |
| Rated current (HO)                  | 250.00 A        |                 |
| Max. output current                 | 400.00 A        |                 |
| Pulse frequency                     | 2 kHz           |                 |
| Output frequency for vector control | 0 ... 200 Hz    |                 |
| Output frequency for V/f control    | 0 ... 550 Hz    |                 |

#### Overload capability

##### Low Overload (LO)

1.1 x rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s  
1.5 x rated output current (i.e. 150 % overload) for 3 s with a cycle time of 300 s

##### High Overload (HO)

1.36 x output current rating (i.e., 136 % overload) for 57 s with a cycle time of 300 s  
1.6 x output current rating (i.e., 160 % overload) for 3 s with a cycle time of 300 s

### General tech. specifications

|                              |         |
|------------------------------|---------|
| Power factor $\lambda$       | 0.85    |
| Offset factor $\cos \varphi$ | 0.95    |
| Efficiency $\eta$            | 0.98    |
| Sound pressure level (1m)    | 69 dB   |
| Power loss                   | 3.90 kW |
| Filter class (integrated)    | -       |

### Ambient conditions

|                         |   |
|-------------------------|---|
| Cooling                 | Internal air cooling                                |
| Cooling air requirement | 0.360 m <sup>3</sup> /s (12.713 ft <sup>3</sup> /s) |
| Installation altitude   | 1,000 m (3,280.84 ft)                               |

#### Ambient temperature

|              |                                |
|--------------|--------------------------------|
| Operation LO | 0 ... 40 °C (32 ... 104 °F)    |
| Operation HO | 0 ... 40 °C (32 ... 104 °F)    |
| Transport    | -25 ... 55 °C (-13 ... 131 °F) |
| Storage      | -25 ... 55 °C (-13 ... 131 °F) |

#### Relative humidity

|                |                                     |
|----------------|-------------------------------------|
| Max. operation | 95 % RH, condensation not permitted |
|----------------|-------------------------------------|

### Mechanical data

|                      |                       |
|----------------------|-----------------------|
| Degree of protection | IP20 / UL open type   |
| Size                 | FSGX                  |
| Net weight           | 174.00 kg (383.60 lb) |
| <b>Dimensions</b>    |                       |
| Width                | 326 mm (12.83 in)     |
| Height               | 1,533 mm (60.35 in)   |
| Depth                | 547 mm (21.54 in)     |

### Connections

#### Line side

|                         |  |
|-------------------------|--|
| Version                 | M10 bolt                                     |
| Conductor cross-section | 95.00 ... 240.00 mm <sup>2</sup><br>(AWG -2) |

#### Motor end

|                         |  |
|-------------------------|--|
| Version                 | M10 bolt                                     |
| Conductor cross-section | 95.00 ... 240.00 mm <sup>2</sup><br>(AWG -2) |

#### Max. motor cable length

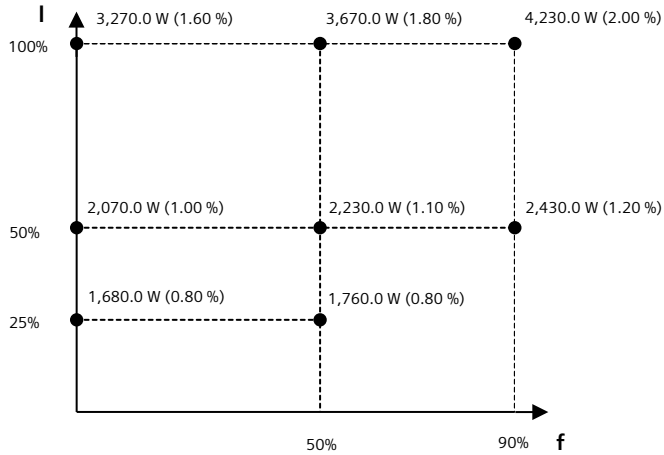
|            |                   |
|------------|-------------------|
| Shielded   | 200 m (656.17 ft) |
| Unshielded | 300 m (984.25 ft) |

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### Converter losses to IEC61800-9-2\*

|  |         |
|--|---------|
| Efficiency class                                     | IE2     |
| Comparison with the reference converter (90% / 100%) | 49.70 % |



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.

\*converted values

### Standards

|                           |                                     |
|---------------------------|-------------------------------------|
| Compliance with standards | UL, cUL, CE, C-Tick (RCM), SEMI F47 |
| CE marking                | Low-voltage directive 2006/95/EC    |