

## Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PH22-0UL0



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       | 500 ... 690 V ±10 % |
| Line frequency     | 47 ... 63 Hz        |
| Rated current (LO) | 18.00 A             |
| Rated current (HO) | 14.00 A             |

|                                     |   |
|-------------------------------------|---|
| <b>Output</b>                       |   |
| Number of phases                    | 3 AC  |
| <b>Rated voltage</b>                | <b>690V IEC</b> <b>600V NEC <sup>1)</sup></b> |
| Rated power (LO)                    | 15.00 kW      15.00 hp                        |
| Rated power (HO)                    | 11.00 kW      10.00 hp                        |
| Rated current (LO)                  | 19.00 A                                       |
| Rated current (HO)                  | 14.00 A                                       |
| Max. output current                 | 29.00 A                                       |
| Pulse frequency                     | 2 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                 | 0.99    |
| Efficiency η                        | 0.98    |
| Sound pressure level (1m)           | 72 dB   |
| Power loss                          | 0.41 kW |
| Filter class (integrated)           | -       |

### Ambient conditions

|                            |                                |
|----------------------------|--------------------------------|
| Cooling                    | Internal air cooling           |
| Cooling air requirement    | 0.055 m³/s (1.942 ft³/s)       |
| Installation altitude      | 1,000 m (3,280.84 ft)          |
| <b>Ambient temperature</b> |                                |
| Operation LO               | -20 ... 40 °C (-4 ... 104 °F)  |
| Operation HO               | -20 ... 50 °C (-4 ... 122 °F)  |
| Transport                  | -40 ... 70 °C (-40 ... 158 °F) |
| Storage                    | -40 ... 70 °C (-40 ... 158 °F) |

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

### Connections

|                         |  |
|-------------------------|--|
| <b>Line side</b>        |  |
| Version                 | screw-type terminal                      |
| Conductor cross-section | 10.00 ... 35.00 mm²<br>(AWG 8 ... AWG 2) |
| <b>Motor end</b>        |  |
| Version                 | Screw-type terminals                     |
| Conductor cross-section | 10.00 ... 35.00 mm²<br>(AWG 8 ... AWG 2) |

|                                       |  |
|---------------------------------------|--|
| <b>DC link (for braking resistor)</b> |  |
| Version                               | Screw-type terminals                     |
| Conductor cross-section               | 2.50 ... 16.00 mm²<br>(AWG 14 ... AWG 6) |
| Cable length                          | 10 m (32.81 ft)                          |
| PE connection                         | Screw-type terminals                     |
| <b>Max. motor cable length</b>        |  |
| Shielded                              | 200 m (656.17 ft)                        |
| Unshielded                            | 300 m (984.25 ft)                        |

### Mechanical data

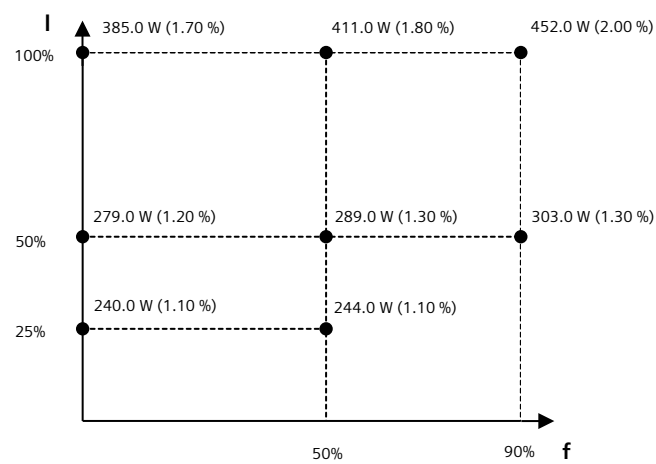
|                      |                     |
|----------------------|---------------------|
| Degree of protection | IP20 / UL open type |
| Frame size           | FSD                 |
| Net weight           | 17.00 kg (37.48 lb) |
| <b>Dimensions</b>    |                     |
| Width                | 200 mm (7.87 in)    |
| Height               | 472 mm (18.58 in)   |
| Depth                | 237 mm (9.33 in)    |

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

Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PH22-0UL0

| Converter losses to IEC61800-9-2*                    |         |
|--|---------|
| Efficiency class                                     | IE2     |
| Comparison with the reference converter (90% / 100%) | 39.40 % |



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

<sup>1)</sup> The output current and HP ratings are valid for the voltage range 550V-600V