

### MLFB-Ordering data

6SL3210-1PE33-7AL0



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Rated data                                 |                          | General tech. specifications                   |                                                    |
|--------------------------------------------|--------------------------|------------------------------------------------|----------------------------------------------------|
| <b>Input</b>                               |                          | <b>Power factor <math>\lambda</math></b>       | 0.90                                               |
| <b>Number of phases</b>                    | 3 AC                     | <b>Offset factor <math>\cos \varphi</math></b> | 0.98                                               |
| <b>Line voltage</b>                        | 380 ... 480 V $\pm 10$ % | <b>Efficiency <math>\eta</math></b>            | 0.98                                               |
| <b>Line frequency</b>                      | 47 ... 63 Hz             | <b>Sound pressure level (1m)</b>               | 75 dB                                              |
| <b>Rated current (LO)</b>                  | 365.00 A                 | <b>Power loss</b>                              | 4.61 kW                                            |
| <b>Rated current (HO)</b>                  | 330.00 A                 | <b>Filter class (integrated)</b>               | Class A                                            |
| <b>Output</b>                              |                          | <b>Ambient conditions</b>                      |                                                    |
| <b>Number of phases</b>                    | 3 AC                     | <b>Cooling</b>                                 | Internal air cooling                               |
| <b>Rated voltage</b>                       | 400 V                    | <b>Cooling air requirement</b>                 | 0.210 m <sup>3</sup> /s (7.416 ft <sup>3</sup> /s) |
| <b>Rated current (LO)</b>                  | 379.00 A                 | <b>Installation altitude</b>                   | 1000 m (3280.84 ft)                                |
| <b>Rated current (HO)</b>                  | 302.00 A                 | <b>Ambient temperature</b>                     |                                                    |
| <b>Max. output current</b>                 | 604.00 A                 | <b>Operation LO</b>                            | -20 ... 40 °C (-4 ... 104 °F)                      |
| <b>Rated power IEC 400V (LO)</b>           | 200.00 kW                | <b>Operation HO</b>                            | -20 ... 50 °C (-4 ... 122 °F)                      |
| <b>Rated power NEC 480V (LO)</b>           | 300.00 hp                | <b>Transport</b>                               | -40 ... 70 °C (-40 ... 158 °F)                     |
| <b>Rated power IEC 400V (HO)</b>           | 160.00 kW                | <b>Storage</b>                                 | -40 ... 70 °C (-40 ... 158 °F)                     |
| <b>Rated power NEC 480V (HO)</b>           | 250.00 hp                | <b>Relative humidity</b>                       |                                                    |
| <b>Pulse frequency</b>                     | 2 kHz                    | <b>Max. operation</b>                          | 95 % RH, condensation not permitted                |
| <b>Output frequency for vector control</b> | 0 ... 200 Hz             |                                                |                                                    |
| <b>Output frequency for V/f control</b>    | 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)

1.5 x output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s 2 x output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s

SIEMENS

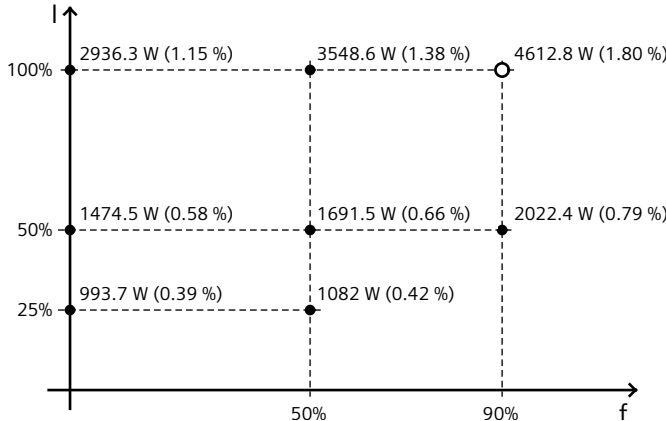
Data sheet for SINAMICS Power Module PM240-2

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Figure similar

| Mechanical data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|-----|-----|------|-------------------|-------------------|-----|-------------------|-------------------|-----|-----------------|--|
| Degree of protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IP20 / UL open type   |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FSG                   |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Net weight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 112.80 kg (248.68 lb) |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 305 mm (12.01 in)     |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Height                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000 mm (39.37 in)    |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Depth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 357 mm (14.06 in)     |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Converter losses to EN 50598-2*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Efficiency class                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IE2                   |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| Comparison with the reference converter (90% / 100%)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -0.44 %               |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |
|  <table><tr><th>I \ f</th><th>50%</th><th>90%</th></tr><tr><td>100%</td><td>3548.6 W (1.38 %)</td><td>4612.8 W (1.80 %)</td></tr><tr><td>50%</td><td>1691.5 W (0.66 %)</td><td>2022.4 W (0.79 %)</td></tr><tr><td>25%</td><td>1082 W (0.42 %)</td><td></td></tr></table> <p>The percentage values show the losses in relation to the rated apparent power of the converter.</p> <p>The diagram shows the losses for the points (as per standard EN 50598) 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.</p> |                       | I \ f             | 50% | 90% | 100% | 3548.6 W (1.38 %) | 4612.8 W (1.80 %) | 50% | 1691.5 W (0.66 %) | 2022.4 W (0.79 %) | 25% | 1082 W (0.42 %) |  |
| I \ f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50%                   | 90%               |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| 100%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3548.6 W (1.38 %)     | 4612.8 W (1.80 %) |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| 50%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1691.5 W (0.66 %)     | 2022.4 W (0.79 %) |     |     |      |                   |                   |     |                   |                   |     |                 |  |
| 25%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1082 W (0.42 %)       |                   |     |     |      |                   |                   |     |                   |                   |     |                 |  |

| Connections                    |                                          |
|--------------------------------|------------------------------------------|
| Line side                      |                                          |
| Version                        | M10 bolt                                 |
| Conductor cross-section        | 35.00 ... 185.00 mm² (AWG 2 ... AWG -5)  |
| Motor end                      |                                          |
| Version                        | M10 bolt                                 |
| Conductor cross-section        | 35.00 ... 185.00 mm² (AWG 2 ... AWG -5)  |
| DC link (for braking resistor) |                                          |
| Version                        | Screw-type terminals                     |
| Conductor cross-section        | 25.00 ... 70.00 mm² (AWG 4 ... AWG -1)   |
| Cable length                   | 10 m (32.81 ft)                          |
| PE connection                  | M10 screw studs                          |
| Max. motor cable length        |                                          |
| Shielded                       | 300 m (984.25 ft)                        |
| Unshielded                     | 450 m (1476.38 ft)                       |
| Standards                      |                                          |
| Compliance with standards      | UL, cUL, CE, C-Tick (RCM), EAC, SEMI F47 |
| CE marking                     | Low-voltage directive 2006/95/EC         |

\*converted values