

MLFB-Ordering data

6SL3210-1SE31-5UA0



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Rated data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | General tech. specifications              |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------|--------------------|--------------------------|--------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|------------------------------|---------------------------|---------------------------|---------------------------|------------|-----------------|-------|------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------|-------------------------|-------------------------|-----------------------|--------|--------------|-----------------------------|-----------|--------------------------------|---------|--------------------------------|----------------|------------------------|
| <b>Input</b> <table> <tr> <td>Number of phases</td><td>3 AC</td></tr> <tr> <td>Line voltage</td><td>380 ... 480 V <math>\pm 10</math> %</td></tr> <tr> <td>Line frequency</td><td>47 ... 63 Hz</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                          | Number of phases                          | 3 AC     | Line voltage       | 380 ... 480 V $\pm 10$ % | Line frequency     | 47 ... 63 Hz | <table> <tr> <td>Power factor <math>\lambda</math></td><td>0.95 ... 0.65</td></tr> <tr> <td>Offset factor <math>\cos \varphi</math></td><td>0.96</td></tr> <tr> <td>Sound pressure level (1m)</td><td>60 dB</td></tr> <tr> <td>Power loss</td><td>1.93 kW</td></tr> </table> | Power factor $\lambda$ | 0.95 ... 0.65       | Offset factor $\cos \varphi$ | 0.96                      | Sound pressure level (1m) | 60 dB                     | Power loss | 1.93 kW         |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Number of phases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3 AC                                      |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Line voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 380 ... 480 V $\pm 10$ %                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Line frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 47 ... 63 Hz                              |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Power factor $\lambda$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.95 ... 0.65                             |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Offset factor $\cos \varphi$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.96                                      |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Sound pressure level (1m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 60 dB                                     |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Power loss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.93 kW                                   |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| <b>Output</b> <table> <tr> <td>Rated power</td><td>75.00 kW</td></tr> <tr> <td>Rated current (IN)</td><td>145.00 A</td></tr> <tr> <td>Rated current (HO)</td><td>115.00 A</td></tr> <tr> <td>Current for S6 duty (40%)</td><td>188.00 A</td></tr> <tr> <td>Max. output current</td><td>220.00 A</td></tr> <tr> <td>Rated power IEC 400V (HO)</td><td>55.00 kW</td></tr> <tr> <td>Rated power NEC 480V (HO)</td><td>75.00 hp</td></tr> <tr> <td>Pulse frequency</td><td>4 kHz</td></tr> <tr> <td>Output frequency for servo control</td><td>0 ... 330 Hz</td></tr> </table> | Rated power                               | 75.00 kW | Rated current (IN) | 145.00 A                 | Rated current (HO) | 115.00 A     | Current for S6 duty (40%)                                                                                                                                                                                                                                                    | 188.00 A               | Max. output current | 220.00 A                     | Rated power IEC 400V (HO) | 55.00 kW                  | Rated power NEC 480V (HO) | 75.00 hp   | Pulse frequency | 4 kHz | Output frequency for servo control | 0 ... 330 Hz | <b>Ambient conditions</b> <table> <tr> <td>Cooling</td><td>Increased air cooling due to built-in fan</td></tr> <tr> <td>Cooling air requirement</td><td>0.094 m<sup>3</sup>/s</td></tr> <tr> <td>Installation altitude</td><td>1000 m</td></tr> </table> <b>Ambient temperature</b> <table> <tr> <td>Operation LO</td><td>0 ... 40 °C (32 ... 104 °F)</td></tr> <tr> <td>Transport</td><td>-40 ... 70 °C (-40 ... 158 °F)</td></tr> <tr> <td>Storage</td><td>-25 ... 70 °C (-40 ... 158 °F)</td></tr> </table> <b>Relative humidity</b> <table> <tr> <td>Max. operation</td><td>95 % at 40 °C (104 °F)</td></tr> </table> | Cooling | Increased air cooling due to built-in fan | Cooling air requirement | 0.094 m <sup>3</sup> /s | Installation altitude | 1000 m | Operation LO | 0 ... 40 °C (32 ... 104 °F) | Transport | -40 ... 70 °C (-40 ... 158 °F) | Storage | -25 ... 70 °C (-40 ... 158 °F) | Max. operation | 95 % at 40 °C (104 °F) |
| Rated power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 75.00 kW                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Rated current (IN)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 145.00 A                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Rated current (HO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 115.00 A                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Current for S6 duty (40%)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 188.00 A                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Max. output current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 220.00 A                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Rated power IEC 400V (HO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 55.00 kW                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Rated power NEC 480V (HO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 75.00 hp                                  |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Pulse frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4 kHz                                     |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Output frequency for servo control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0 ... 330 Hz                              |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Cooling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Increased air cooling due to built-in fan |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Cooling air requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.094 m <sup>3</sup> /s                   |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Installation altitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1000 m                                    |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Operation LO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0 ... 40 °C (32 ... 104 °F)               |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Transport                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -40 ... 70 °C (-40 ... 158 °F)            |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -25 ... 70 °C (-40 ... 158 °F)            |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |
| Max. operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 95 % at 40 °C (104 °F)                    |          |                    |                          |                    |              |                                                                                                                                                                                                                                                                              |                        |                     |                              |                           |                           |                           |            |                 |       |                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                                           |                         |                         |                       |        |              |                             |           |                                |         |                                |                |                        |

SIEMENS

Data sheet for SINAMICS S110 Power Module PM340

MLFB-Ordering data

6SL3210-1SE31-5UA0



Figure similar

| Mechanical data      |                     | Connections                    |                               |
|----------------------|---------------------|--------------------------------|-------------------------------|
| Degree of protection | IP20 / UL open type | Line side                      |                               |
| Frame size           | FSF                 | Version                        | M8 bolt                       |
| Net weight           | 50.70 kg            | Conductor cross-section        | 120.00 mm²                    |
| Width                | 350.0 mm            | Motor end                      |                               |
| Height               | 634.0 mm            | Version                        | M8 bolt                       |
| Depth                | 315.5 mm            | Conductor cross-section        | 120.00 mm²                    |
|                      |                     | DC link (for braking resistor) |                               |
|                      |                     | Conductor cross-section        | 120.00 mm²                    |
|                      |                     | PE connection                  | M8 Screw                      |
|                      |                     | Max. motor cable length        |                               |
|                      |                     | Shielded                       | 70 m                          |
|                      |                     | Unshielded                     | 100 m                         |
| Standards            |                     |                                |                               |
|                      |                     | Compliance with standards      | cULus                         |
|                      |                     | CE marking                     | Low-voltage and EMC guideline |