Siemens 6SL3210-1PE21-4UL0

01 Product role and installation boundary

What this product does

The PM240-2 is the power stage of a configured SINAMICS motor drive. It takes a three-phase line supply and delivers controlled motor power under the paired control unit and its parameter set.

This exact article has separate low-overload and high-overload continuous ratings. Select the duty from motor current and the real load cycle; the larger LO power figure must not be used as the HO rating. The FSB, IP20 construction also places cooling and enclosure responsibilities on the cabinet design.

The article has no integrated line filter. Before energizing a replacement, review the external EMC arrangement, protective earth, line and motor terminals, control-unit pairing and airflow. Commission with the retained parameter set and record motor rotation, operating current and protection response.

Installed-system path

1. **3-phase supply**
2. **PM240-2 power stage**
3. **Motor output**
4. **Driven machine**

Selection and pre-work reference

Input supply	3 AC 380–480 V ±10%
Input frequency	47–63 Hz
Rated input current LO	17.20 A
Rated input current HO	15.30 A
Rated output power LO	5.50 kW

Where this configuration is applied

Conveyor or pump drives:

Select LO duty only when the motor and load cycle fit the 5.50 kW and 13.20 A rating.

High-overload machinery:

Use the HO rating of 4.00 kW and 10.20 A where the application requires the published stronger overload cycle.

All numeric entries below match this complete Siemens article; LO and HO are distinct published duty ratings.

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02 Parameters and controlled replacement

Verified technical data

Rated output power HO	4.00 kW
Rated output current LO	13.20 A
Rated output current HO	10.20 A
Maximum output current	20.40 A
Pulse frequency	4 kHz
Protection	IP20 / UL open type
Frame size	FSB
Integrated line filter	None
Cooling-air requirement	0.009 m³/s

How to apply the published ratings

Use the LO row for its stated continuous current and duty, and the HO row for its separate continuous current and heavier overload profile. Record which selection was used in motor sizing so the replacement is not approved from output power alone.

The 4 kHz pulse frequency and 0.009 m³/s cooling-air requirement affect acoustic, thermal and cabinet planning. The IP20 open-type protection and absent integrated line filter require the approved enclosure, grounding and external EMC arrangement.

Installation and commissioning sequence

01 Separate LO and HO sizing

Use the correct duty row in the motor calculation.

02 Verify line supply

Measure the three-phase voltage and frequency before connection.

03 Preserve airflow

Keep the required cabinet air path and module clearance.

04 Check filter arrangement

Do not assume an integrated line filter for this article.

05 Inspect terminals

Confirm conductor size, torque and protective earth per Siemens instructions.

06 Commission motor output

Validate motor rotation, current and overload response with the control unit.

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03 Fault isolation and acceptance

If the restored function does not behave as expected

01 What should be transferred during 6SL3210-1PE21-4UL0 replacement?

Retain the compatible control unit, parameter backup, motor data and approved terminal schedule.

02 What would cause repeated overcurrent with 6SL3210-1PE21-4UL0?

Check the motor, cable insulation, acceleration profile and selected duty before attributing a fault to the power module.

03 What proves acceptable motor-cable routing for 6SL3210-1PE21-4UL0?

Compare shielded or unshielded length and grounding to the exact Siemens installation data.

04 Can an FSB module of another rating replace 6SL3210-1PE21-4UL0?

Only after the supply, duty current, mechanical fit, control compatibility and approvals are engineered.

05 How is 6SL3210-1PE21-4UL0 accepted after commissioning?

Record line voltage, motor current, temperature and a controlled start and stop under the approved parameter set.

Acceptance and handover evidence

Duty coordination	Select the published LO or HO output current for the actual load cycle.
Cooling	Maintain cabinet airflow for the specified 0.009 m³/s requirement.
EMC	Review external filtering and grounding because no line filter is integrated.

Drive duty: Separate LO from HO sizing; retain control-unit parameters and the approved cabinet EMC plan.

Other catalogue references

The references below are navigation aids, not confirmed substitutes. Review each against the installed system.

Siemens 6SL3120-2TE21-0AA4

Siemens 6SL3100-0BE23-6AB0

Siemens 6SL3352-1AE37-5BA1

Technical basis: Siemens SINAMICS PM240-2 data sheet, article 6SL3210-1PE21-4UL0, two pages.

For the exact offered unit, request current marking and connector photographs and retain the approved as-found configuration with the acceptance record.