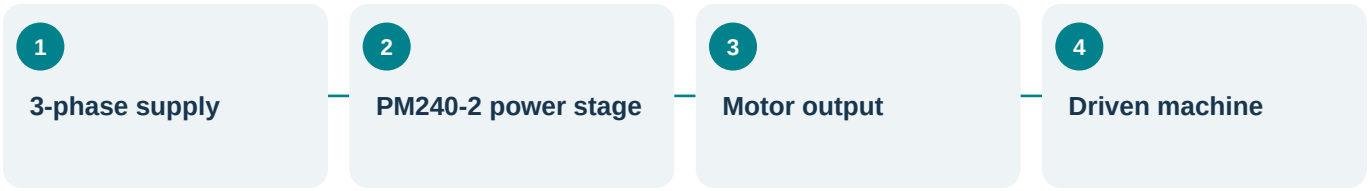
Siemens 6SL3210-1PE21-4UL0

01 Identity, function and installed-system path

Siemens 6SL3210-1PE21-4UL0 is a SINAMICS PM240-2 power module for a three-phase motor-drive installation. The exact article has separate low-overload and high-overload output ratings, so motor sizing must follow the selected duty.

How this product fits into the system



Power conversion

The module accepts a three-phase 380–480 V supply at 47–63 Hz. Its nominal output is 5.50 kW at low overload or 4.00 kW at high overload; the respective continuous current values differ and must be matched to the motor load profile.

Duty selection

The FSB module is IP20 and uses internal air cooling. Its stated cooling-air requirement and operation-temperature limits must be reflected in the cabinet design. This exact article has no integrated line filter, so EMC design depends on the external system arrangement.

Cabinet integration

The drive control unit, motor cable and installation accessories are selected separately in the SINAMICS architecture. During replacement, preserve the control-unit parameter set and check the line terminals, motor terminals, grounding and overload duty before energization.

Evidence boundary

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

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02 Ratings, interfaces and applicable limits

Verified technical specifications

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
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

Applying these values

LO and HO are separate continuous-duty selections. Compare the motor load cycle and control-unit configuration with the matching rated power and current before commissioning.

Technical boundary

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

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03 Application decisions and compatibility

Where the product is used

01 Conveyor or pump drives

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

02 High-overload machinery

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

03 SINAMICS cabinet integration

Match the FSB mechanical installation, forced-air path and external EMC measures to the cabinet design.

04 Control-unit pairing

Check the installed SINAMICS control unit and its parameter set against the replacement PM240-2 module.

Compatibility decisions before use

Separate LO and HO sizing:

Use the correct duty row in the motor calculation.

Verify line supply:

Measure the three-phase voltage and frequency before connection.

Preserve airflow:

Keep the required cabinet air path and module clearance.

Check filter arrangement:

Do not assume an integrated line filter for this article.

Inspect terminals:

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

Commission motor output:

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

Engineering decision record

Duty decision	Record whether the motor and load are sized to the published LO or HO rating.
Cabinet design	Retain the power connection, protective-earth, ventilation and external-filter design.
Acceptance evidence	Record direction of rotation, operating current and protection response after commissioning.

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04 Eight engineering questions beyond the table

01 How is LO versus HO duty chosen for 6SL3210-1PE21-4UL0?

Compare motor current and overload cycle with the separate published LO and HO current and power ratings.

02 What changes if the cabinet using 6SL3210-1PE21-4UL0 needs EMC filtering?

Review the approved external filter and grounding design because this article has no integrated line filter.

03 How should ventilation for 6SL3210-1PE21-4UL0 be checked?

Confirm the published cooling-air requirement at the actual cabinet temperature and obstruction conditions.

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

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

05 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.

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

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

07 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.

08 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.

Siemens 6SL3210-1PE21-4UL0

05 Selection boundary and service handover

Identify the offered assembly

Compare the full 6SL3210-1PE21-4UL0 marking, visible revision and physical interfaces with the installed item. Request current overall, label and connector photographs, and retain the exact quoted reference in the maintenance record.

Lifecycle and replacement assessment

Confirm current manufacturer support and replacement status for the complete marking and revision. Seller stock and dispatch availability are separate quotation matters; approve interchangeability against the actual host, software and site drawings.

Companion equipment and supply scope

Record the host, cables, mating connectors, accessories and documents needed for the installed arrangement. Confirm the delivered items individually in the quotation; a compatible companion shown in the system path is not automatically included.

Engineering handover

Keep the as-found hardware identities, approved configuration, before-and-after measurements, diagnostic results and completed acceptance record together. Validate the affected process or communication path before returning the equipment to service.

Related product references

These are other catalogue references, not confirmed substitutes. Assess fit independently.

Siemens 6SL3120-2TE21-0AA4

Siemens 6SL3100-0BE23-6AB0

Siemens 6SL3352-1AE37-5BA1

Discuss the exact product and installed configuration

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

Order review record

Before release: confirm LO or HO sizing, the control-unit pairing, cabinet airflow and any external line-filter provision.