Siemens 6EP1437-2BA20

01 Establish the three-phase feeder

1 Verify the supply and isolation

Record all three line voltages, protective-earth connection and coordinated external protection. Isolate and secure the circuit before terminal work.

2 Check protection responsibility

The unit has no internal input fuse. Compare the feeder arrangement with the applicable three-pole protection requirement rather than relying on output short-circuit protection.

Rated feeder	400–500 V three-phase AC
Operating range	340–550 V AC
Required boundary	External feeder protection and PE

How much continuous current remains at a 28 V setting on 6EP1437-2BA20?

The 960 W output boundary gives about 34.3 A from 960/28 before other temperature, mounting or system limits. Raising voltage does not preserve an unrestricted 40 A output across the adjustment range.

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02 Set the DC distribution budget

1 Measure the required load setting

Use an insulated tool for adjustment and confirm every connected load’s permissible voltage. Measure the remote loaded terminals as well as the supply output.

2 Coordinate current and power

Check the 960 W boundary at the selected voltage and apply the thermal limits. Record steady current separately from permitted transient demand.

Example at 28 V	Approximately 34.3 A from the power boundary
Example at 65 °C	34 A from temperature derating alone
Acceptance basis	Most restrictive applicable limits

Would the output-ready contact of 6EP1437-2BA20 safely switch any PLC or relay circuit?

Only a circuit within the contact’s AC or DC rating is suitable. Check voltage, load current and switching characteristics; the allowable current changes with the circuit voltage and must not be taken from a different rating line.

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03 Prove overload and branch selectivity

1 Observe a controlled fault response

Use an approved test arrangement to compare branch protection with the supply’s pulse and restart behavior. Do not create an uncontrolled short circuit in a live process.

2 Investigate recurrent collapse

If voltage repeatedly falls and returns, isolate the responsible branch and check current and wiring before replacing the converter.

Restart trigger	Output falls below approximately 10 V under overload
Fault evidence	Branch current and voltage waveform
Result	Required branch discrimination and recovery

How should branch-fuse selection account for the restart behavior of 6EP1437-2BA20?

Compare the available pulse current and duration with the protection device’s clearing behavior and cable impedance. A current-limited supply may fail to clear an ordinary branch fuse promptly, so evaluate selective protection under the actual fault conditions.

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04 Verify supervision and thermal installation

1 Test the contact circuit

Confirm the output-ready contact changes state as expected and that its load is within the applicable voltage/current rating.

2 Inspect cooling and hardware state

Keep the terminals below, ventilation clear and the cable duct within the approved depth. Apply the correct lower temperature limit for the actual EZ state.

Clearance	At least 40 mm above and below
Contact evidence	Correct local and controller indication
Environmental record	Actual hardware state and worst ambient

Does a redundant pair of 6EP1437-2BA20 remain redundant if both units are already fully loaded?

No. The surviving supply path must support the required load after a failure. Include correctly rated decoupling and verify the remaining capacity; a power-increase parallel connection is not automatically an N+1 arrangement.

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05 Accept continuity and restoration

1 Check the resilience design

Where fitted, test decoupling, remaining capacity and recovery of a redundant arrangement. Do not assume that parallel current increase creates fault tolerance.

2 Retain the final operating record

Record input conditions, output setting, load profile, protection and remote-voltage results. Compare any required ride-through duration with the installed buffering equipment.

Load acceptance	Steady and transient demands separated
Failure acceptance	Expected load survival or controlled stop
Release	Configuration and unresolved exceptions recorded

Other Siemens product references

Siemens 6ES7405-0KA02-0AA0

Siemens 6ES7414-2XL07-0AB0

Siemens 6ES7431-0HH00-0AB0

Separate product references; no substitution or compatibility is implied.