Siemens 6ES5470-4UB12

01 Identify the voltage-command circuit

Record the UB12 execution, output address and every actuator reference connection. Distinguish command, reference and sense conductors before removing the front connector.

Voltage-command circuit — acceptance

The circuit is confirmed as a voltage-input application and no current-loop wiring has been carried over from another module variant.

Stage record	Identify the voltage-command circuit observations and acceptance result
Analog output channels	8
Output range	±10 V

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02 Assess the receiving load

Review the actuator input resistance, any parallel instrument and the complete cable capacitance. Check allowable lead drop and the approved screen termination.

Receiving load — acceptance

The combined load meets the voltage-output requirements and the reference path is complete at both ends.

Stage record	Assess the receiving load observations and acceptance result
Digital representation	12-bit two’s complement
Nominal command scale	±1024 units

03 Restore address and enable behavior

Secure the actuator and isolate the relevant supplies. Install the module following the S5 procedure, restore the address and enable configuration, and reconnect the identified conductors.

Address and enable behavior — acceptance

The output word reaches the intended channel and the enable circuit behaves as recorded.

Stage record	Restore address and enable behavior observations and acceptance result
Minimum voltage-load resistance	3.3 kΩ
Maximum voltage-output current	3 mA

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04 Measure zero and bipolar response

With motion inhibited, issue zero and controlled positive and negative commands. Measure the delivered voltage at the actuator input and compare it with the intended digital scale.

Zero and bipolar response — acceptance

Polarity and slope are correct at the receiving terminals, with no unexplained offset or load-dependent collapse.

Stage record	Measure zero and bipolar response observations and acceptance result
Maximum capacitive load	100 nF including cable
Backplane current	Approximately 250 mA at 5 V

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05 Validate process interruption response

Test the authorized enable-loss and controller-stop conditions before releasing the actuator. Remove test instruments, restore the approved program and record the final command-response results.

Process interruption response — acceptance

The actuator reaches its required state during interruption and responds predictably through the validated operating range.

Technical basis: SIMATIC S5 Analog Modules, C79000-B8576-C300-06.

Related product navigation

- Siemens 6ES7390-1AE80-0AA0
- Siemens 6ES7334-0CE01-0AA0
- Siemens 6ES7138-4CA01-0AA0

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.