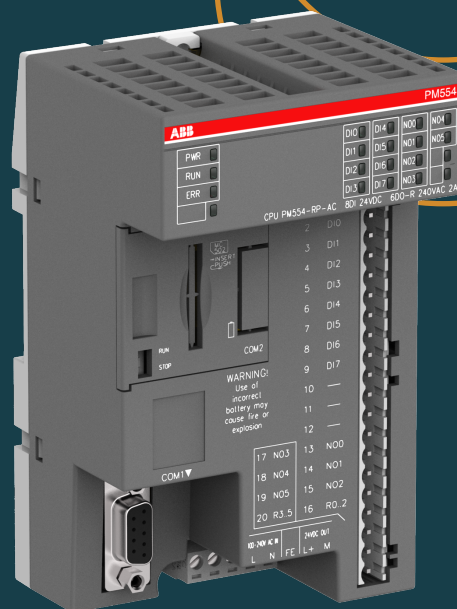




1SAP120800R0001

PM554-RP-AC

INSTALLATION AND VERIFICATION REFERENCE

ABB AC500-eCo | 100-240 V AC | 8 DI + 6 DO-R

Pre-installation verification

Important

Qualified personnel must use current ABB AC500-eCo safety and wiring instructions. Isolate energy sources and verify the physical nameplate before work begins.

1	Order code: 1SAP 120 800 R0001; module: PM554-RP-AC.
2	Supply variant: 100-240 V AC; onboard signals: 8 DI + 6 DO-R.
3	Program capacity: 128 kB Flash EPROM; physical record: 82 mm W x 135 mm H x 74 mm D.
4	Inspect the enclosure, terminal system, option slots, and communication connectors for damage or contamination.
5	Confirm the project hardware tree, software revision, field loads, protective devices, and optional accessories before energization.

Power and environment

Supply checkpoint	Environmental limits
100-240 V AC Typical: 20 mA at 100 V AC, 12 mA at 240 V AC; maximum: 200 mA at 100 V AC, 110 mA at 240 V AC Maximum 10 A supply fuse	0 to +60 deg C horizontal mounting 0 to +40 deg C vertical mounting with output load reduced to 50% per group Maximum 95% humidity without condensation

Important

The degree of protection is IP20 only when all terminal screws are tightened. Install the CPU inside a suitable industrial control cabinet.

Mounting, wiring, and interfaces

Mechanical mounting 35 mm DIN rail with 7.5 mm or 15 mm depth, or 4 mm mounting screws. Published fastening torque: 1.2 Nm.	Orientation Horizontal or vertical mounting is permitted. Apply the lower vertical temperature limit and the 50% output-load reduction.
Digital input review Confirm the project signal voltage, common reference, terminal assignment, cable routing, and protective design in the current ABB documentation.	Output review This variant uses relay outputs. Verify each connected load, protective device, and switching requirement before output testing.

Communication verification

COM1	RS-485, non-isolated; 1.2 to 187.5 kbit/s; 9-pin D-sub female
COM1 roles	Programming; Modbus master or slave; serial ASCII; CS31 master
COM1 common-mode range	Typical -8 V to +12 V; exceeding the range can damage the interface
Ethernet	No onboard Ethernet is listed for this variant
Local I/O expansion	Maximum 10 I/O modules

Commissioning sequence

1	Identify the exact CPU and supply variant from the nameplate and approved bill of materials.
2	Verify cabinet location, mounting, ventilation, environmental limits, and terminal tightness.
3	With power isolated, verify the supply circuit, protective device, digital inputs, output loads, and communication wiring.
4	Confirm the approved hardware configuration, option modules, local I/O modules, and project revision.
5	Apply power and check Power, Run, Error, and I/O status indications before commanding outputs.
6	Test every input and output under controlled conditions, then verify COM1 and local I/O-bus communication.
7	Record the final serial settings, project revision, accessory configuration, and verification results.
8	Archive the commissioning record with the machine or process documentation.

Official document basis

ABB data sheet	3ADR010065, revision 8, 2022-01-31
ABB product record	1SAP120800R0001 - PM554-RP-AC
Source rule	Values in this reference are limited to the ABB sources above. Project-specific settings must be verified in the current installed-system documentation.



Apter Power product page

<https://www.apterpower.com/ABB/1sap120800r0001-pm554-rp-ac>

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Important: This Apter Power field reference summarizes manufacturer-published information. It does not replace current ABB installation, safety, wiring, or engineering instructions.