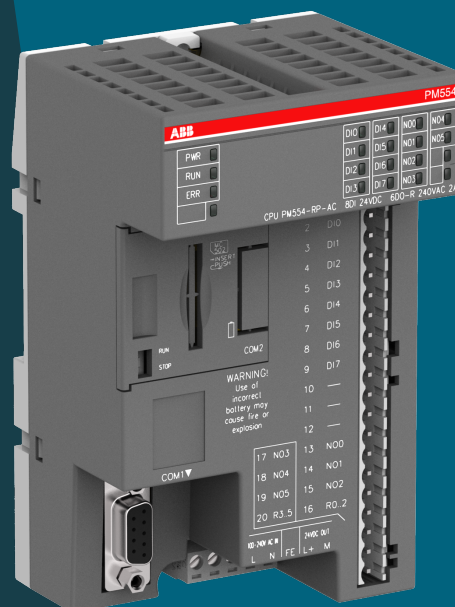




1SAP120800R0001 PM554-RP-AC

PRODUCT REFERENCE

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

Product identity and system role

The PM554-RP-AC is an AC500-eCo programmable logic controller CPU. It executes the PLC application, receives eight onboard digital field signals, switches six relay output circuits, communicates through COM1, and coordinates additional I/O modules through the local I/O bus.

Identity Order code: 1SAP 120 800 R0001 Type: PM554-RP-AC Platform: AC500-eCo	Onboard signal path 8 digital inputs and 6 relay outputs Relay outputs Maximum 10 local I/O modules
Execution memory Program memory: 128 kB Flash EPROM 10 kB VAR; 1 kB VAR_RETAIN; 2 kB %MB	Mechanical record 82 mm W x 135 mm H x 74 mm D 0.339 kg product net weight 0.505 kg gross weight

Core published data

Power supply	100–240 V AC
Current consumption	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
Internal dissipation	4.8 W maximum internal power dissipation
Onboard I/O	8 digital inputs and 6 relay outputs
Local expansion	Maximum 10 AC500-eCo I/O modules
Product record status	ABB product record currently lists the DEAPR sales status as Obsolete

Signals, processing, and communication

Sense Eight onboard digital inputs receive discrete field states for the PLC application.	Process The CPU executes cyclic, time-controlled, and multitasking PLC logic from 128 kB Flash EPROM program memory.
Actuate Six onboard relay outputs command external control circuits when the application conditions are met.	Expand The local I/O bus supports a maximum of 10 additional I/O modules; CS31 can address decentralized stations under the published system limits.

COM1 and onboard interfaces

COM1 physical link	RS-485, non-isolated, 9-pin D-sub female
COM1 transmission rate	Configurable from 1.2 to 187.5 kbit/s
COM1 functions	Programming port; Modbus master or slave; serial ASCII; CS31 master
Optional COM2	RS-485 through TA562-RS, TA562-RS-RTC, or isolated TA569-RS-ISO
Ethernet	Not listed for this PM554-RP-AC variant
Option positions	Two option slots are identified in the ABB product record

Important

The COM1 typical common-mode range is -8 V to +12 V. ABB warns that the interface can be damaged if the signal exceeds this range.

Application fit and selection boundaries

-	Compact machine control where eight discrete sensors and six relay-driven loads are handled locally
-	Control panels supplied from 100–240 V AC where an integrated AC-powered PLC CPU is required
-	Process skids and utility packages that use RS-485 programming, Modbus, serial ASCII, or CS31 master communication
-	Distributed automation cells expanded through up to 10 AC500-eCo I/O modules

Selection checkpoints

1	Confirm the complete order code 1SAP 120 800 R0001 and the PM554-RP-AC nameplate before configuration.
2	Use only the published 100–240 V AC supply data for this variant.
3	Confirm that the project expects 8 DI + 6 DO-R and not the signal mix of another PM55x or PM56x CPU.
4	Select memory, clock, serial, terminal, and I/O expansion accessories against the installed AC500-eCo configuration.
5	Use current ABB system documentation for terminal assignments, load limits, wiring diagrams, and software procedures.

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 is an independent Apter Power reference. It is not an ABB manual and does not replace current ABB safety, installation, wiring, or engineering instructions.