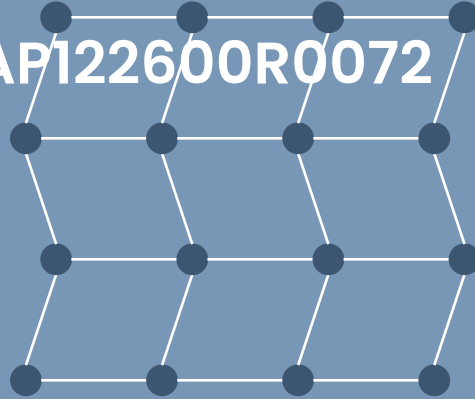


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB PM5012-T-ETH-1SAP122600R0072

Migration and Commissioning Guide

ABB AC500-eCo V3 Basic PLC CPU



DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

Product / lookup identity	ABB PM5012-T-ETH-1SAP122600R0072
Reference number	1SAP122600R0072
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/1sap122600r0072-pm5012-t-eth>

Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Controller migration path

ABB 1SAP122600R0072 PM5012-T-ETH is a revision-0 AC500-eCo V3 basic PLC CPU for compact industrial automation. It executes the control program, reads six onboard 24 V DC digital inputs and drives four 24 V DC transistor outputs, including documented counter, interrupt and PWM functions.

01	Executes an IEC 61131-3 PLC application in the AC500-eCo V3 platform.
02	Reads six onboard 24 V DC digital inputs; two can operate as 5 kHz counters and four support interrupt functions.
03	Drives four onboard 24 V DC transistor outputs rated 0.5 A resistive per channel; outputs support standard or PWM operation up to 5 kHz.
04	Provides one RJ45 Ethernet port for programming, TCP/IP, UDP/IP, DHCP, PING, network variables and Modbus TCP client/server.
05	Provides one option-board slot for an ABB-supported serial, digital-I/O or analog-I/O option board.

Software and hardware boundaries

01	This exact R0072 processor revision 0 is in Classic lifecycle; do not transfer the Active status of R0172 to it.
02	ABB lists revision 1 order code 1SAP122600R0172 as the Active replacement, with firmware 3.6.x and Automation Builder 2.6 or later migration requirements.
03	ABB documents no onboard analog I/O and no local AC500 I/O-bus expansion modules for PM5012.

Migration readiness checklist

01	Keep the 24 V DC supply within ABB's -15%/+20% tolerance; operation outside the limit can damage equipment or cause unreliable control.
02	Use the specified conductor type, wire size and temperature classification. ABB warns that incorrect wiring can overheat and damage terminals or modules.
03	De-energize the controller and field circuits before wiring, inserting an option board or servicing the installation.
04	Observe horizontal/vertical mounting temperature limits and the 50% output-load reduction required for vertical mounting of revision 0.
05	Maintain IP20 only with the required modules, options and terminal blocks installed; place the PLC inside a suitable industrial enclosure where required.
06	Check transistor-output current, grouping, inductive-load protection and short-circuit design against ABB's detailed wiring rules before connecting actuators.

Identity and release controls

Order Code	ISAPI22600R0072
------------	-----------------

Official ABB sources

ABB PM50xx AC500-eCo V3 data sheet	https://library.e.abb.com/public/1c18739ccabc4bf4a8d0ba84507c0a55/3ADR010585%2C%207%2C%20en-US%2C%20PM50xx_Data_Sheet.pdf
ABB legacy product page: PM5012-T-ETH R0072	https://new.abb.com/products/it/ISAPI22600R0072/pm5012-t-eth
ABB current product page: PM5012-T-ETH R0172	https://www.abb.com/global/en/products/isapi22600r0172
ABB AC500-eCo CPU page	https://new.abb.com/plc/programmable-logic-controllers-plcs/ac500-eco/cpus
ABB AC500-eCo product-family page	https://new.abb.com/plc/programmable-logic-controllers-plcs/ac500-eco
ABB AC500-eCo V3 migration guide	https://library.e.abb.com/public/75adbf2b37c141b7a60850d44da425ba/3ADR011272%2C%201%2C%20en_US_lowres.pdf