

MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB SPAM150C

Product Reference

ABB SPAM 150 C Multifunction Motor Protection Relay

DOCUMENT SCOPE

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

Product / lookup identity	ABB SPAM150C
Reference number	SPAM150C
Document basis	Published ABB product records, PDFs, and manuals listed on page 3

**Product page**

<https://www.apterpower.com/ABB/spam150c>
Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

ABB SPAM 150 C is a current-measuring multifunction protection relay for complete AC-motor protection; the model is verified, but the model-only request does not identify the complete RS 641 contact, frequency, and auxiliary-supply configuration. It operates as a secondary protection device connected to the protected motor drive's current transformers, continuously evaluating the three phase currents and neutral current, calculating motor thermal condition, supervising start and restart limits, and issuing alarm, trip, restart-enable, and self-supervision indications according to its programmed relay matrix. System context: ABB SPAM 150 C Multifunction Motor Protection Relay.

Published field	Manufacturer-published value or verified identity note
Manufacturer	ABB
Model	SPAM 150 C
Product type	Current-measuring multifunction motor protection relay
Measured currents	Three phase currents IL1, IL2, IL3 and neutral current IO
Mass	approximately 3.5 kg including flush-mounting relay case
Rated CT secondary inputs	1 A or 5 A, selected by the documented terminals
Phase-current monitoring range	0...63 x In

System function and signal path

01	Measured Signals: Three phase currents and one neutral current from the protected circuit's current transformers; rated secondary inputs are 1 A or 5 A.
02	Calculation And Protection: Continuously calculates motor thermal condition and evaluates configured thermal overload, start/stall, overcurrent, earth-fault, phase-unbalance/sequence, undercurrent, and cumulative-start-time conditions.
03	Control Input: One external logic/control input can be programmed for blocking protection stages, external trip, restart inhibit, or reset of a latched output relay.
04	Outputs: Programmable contact outputs provide trip, signal/prior-alarm, start, restart-enable, and internal-relay-fault functions; exact NO/NC trip behavior depends on the complete ordering variant.

Applications, answers, and official sources

1 Medium and large AC-motor feeders: Protects three-phase motors supplied through conventional contactor- or circuit-breaker-controlled drives using CT secondary-current inputs.

2 Motor start and stall supervision: Evaluates configured start current and time, thermal stress, cumulative start time, and restart-inhibit conditions before another start is permitted.

3 Motor feeder fault protection: Detects configured overcurrent, earth fault, phase unbalance or incorrect sequence, and undercurrent conditions and operates alarm or trip contacts.

4 Feeder or transformer overload protection: ABB documents use on non-rotating objects requiring supported single-, two-, or three-phase overcurrent/overload and non-directional earth-fault protection, subject to an engineered protection study.

Frequently asked questions

What is ABB SPAM 150 C?	It is an ABB current-measuring multifunction protection relay for AC motors.
Which signals does SPAM 150 C measure?	It continuously measures three phase-current CT secondaries and one neutral-current CT secondary.
Does it accept 1 A or 5 A CT inputs?	The ABB manual provides terminals for both 1 A and 5 A rated inputs; the wiring must match the CT secondary and exact connection diagram.
What motor faults can it protect against?	ABB documents thermal overload, start/stall, low- and high-set overcurrent, non-directional earth fault, phase unbalance or incorrect phase sequence, undercurrent, and restart-inhibit functions.
Is one SPAM150C order code sufficient for every installation?	No. The complete RS 641 ordering code is required to identify trip-contact type, 50/60 Hz frequency, and auxiliary-voltage variant.
What auxiliary voltage does it use?	Depending on the installed SPTU/order-code variant, it uses either 80...265 V AC/DC or 18...80 V DC. Check the physical relay label.

Official ABB sources

ABB Motor protection relay SPAM 150 C product page	https://new.abb.com/medium-voltage/digital-substations/protection-relay-services/legacy-relays-and-related-devices-and-tools/motor-protection-relay-spam-150-c
SPAM 150 C Motor protection relay - User's manual and Technical description	https://library.e.abb.com/public/395106e8cb76b10ec1257b0c00560311/FM_SPAM150C_EN_AAB.pdf
Application Examples for the relay SPAM 150 C	https://library.e.abb.com/public/99a2587261383d9cc2256df3002fd7f8/SPAM150%20Appl_EN_B.pdf
ABB Relay Retrofit Program for SPACOM to REX610	https://library.e.abb.com/public/2f449124690e429cae9cdb535c85ea65/Relay%20Retrofit%20Program%20for%20SPACOM%20to%20REX610.pdf