

ABB SPAM150C

SPAM 150 C Protection and Installation Guide

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>
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CT measurement, protection, and trip-output path

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.

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.
05	Communication: Optional SPA-ZC17 or SPA-ZC21 modules connect the relay to an ASCII fibre-optic serial bus at 4800 or 9600 Bd.

Motor-feeder, SPA, and Classic lifecycle boundaries

01	Verification Status: VERIFIED_EXACT_MODEL_FROM_ABB_OFFICIAL_PRODUCT_PAGE_AND_MANUAL; COMPLETE_ORDERING_VARIANT_NOT_SUPPLIED
02	Exact Mapping: ABB identifies SPAM 150 C as a current-measuring multifunction relay for complete AC-motor protection. The ABB manual lists make-contact variants under RS 641 014 and break-contact variants under RS 641 015; the final two letters encode rated frequency and auxiliary-voltage range.
03	Lifecycle Status: Not active product since 2016 on ABB's exact product page; identified as Classic in ABB's June 2024 SPACOM-to-REX610 retrofit material.

Ordering, CT-safety, settings, and trip checks

01	Confirm the complete RS 641 ordering number, not just SPAM 150 C, because trip-contact type, rated frequency, and auxiliary-voltage range vary by suffix.
02	Verify the relay front/rear label, SPTU module type, 50/60 Hz suffix, and 1 A/5 A current-input terminal selection before energization.
03	Isolate the motor feeder, auxiliary supply, trip circuits, external control circuits, and CT secondary circuits using the site's approved protection-maintenance procedure.
04	Never open-circuit an energized CT secondary; short and isolate CT circuits using the switchgear's approved test facilities before disconnecting relay current inputs.
05	Calculate and approve all thermal, stall, overcurrent, earth-fault, unbalance, undercurrent, start-count, and restart-inhibit settings from the actual motor, CT, starter, network, and protection-coordination data.
06	Do not interchange a make-contact RS 641 014 variant with a break-contact RS 641 015 variant without redesigning and testing the trip circuit.

Identity and release controls

Verification Status	VERIFIED_EXACT_MODEL_FROM_ABB_OFFICIAL_PRODUCT_PAGE_AND_MANUAL; COMPLETE_ORDERING_VARIANT_NOT_SUPPLIED
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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