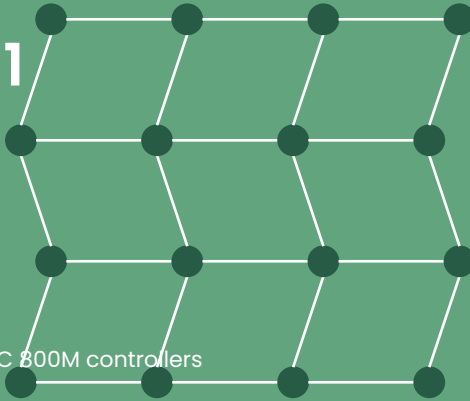


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB SB822 3BSE018172R1

Battery Unit Installation Guide

ABB External DIN-rail mounted rechargeable battery unit for AC 800M controllers



DOCUMENT SCOPE

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

Product / lookup identity	ABB SB822 3BSE018172R1
Reference number	3BSE018172R1
Document basis	Published ABB product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/ABB/sb822-3bse018172r1>
Apter Power contact

sales13@apterpower.com | +86 180 3023 5313

Controller backup-power path

ABB SB822, article number 3BSE018172R1, is an external DIN-rail rechargeable lithium-ion battery unit for ABB AC 800M controllers. It supplies battery backup to a compatible AC 800M processor so controller memory can be retained through loss of normal controller power; ABB specifically states that SB822 is the only external battery available for PM891.

- | | |
|----|---|
| 01 | Energy Path: A 24 V DC supply feeds the SB822 charger; the rechargeable battery unit provides a 3.6 V backup output to the connected controller through the documented cable. |
| 02 | Controller Function: Provides CPU-memory battery backup for a compatible AC 800M processor during loss of normal controller power. |
| 03 | Process Signals: None. SB822 does not acquire, condition, calculate, or command analog or digital field signals. |
| 04 | Documented Pm891 Role: ABB states that SB822 is the only external battery available for PM891. |

Power, cable, and controller boundaries

- | | |
|----|--|
| 01 | Verification Status: VERIFIED_EXACT_MODEL_AND_ARTICLE_NUMBER_FROM_CURRENT_ABB_HARDWARE_SELECTOR |
| 02 | Exact Mapping: ABB maps model SB822 to article number 3BSE018172R1. |
| 03 | Lifecycle Status: ABB publishes a model-specific SB822 page and a February 2026 data sheet, but those sources do not assign SB822 an Active, Classic, Limited, or Obsolete lifecycle phase. Do not invent a lifecycle label. |

Battery installation checks

01	Verify the complete SB822 and 3BSE018172R1 nameplate and the target AC 800M processor documentation before installation.
02	Do not confuse the 24 V DC charger connection with the 3.6 V rated battery output.
03	Use only the documented TK821V020 connection cable and the ABB-specified controller connection; do not substitute an unverified cable or polarity.
04	Keep the unit within 0 to +55 °C and install it in an enclosure appropriate for its IP20 protection rating, G2 corrosive-atmosphere classification, and Pollution Degree 2 specification.
05	Before battery service, disconnect the TK821V020 connector and 24 V supply connector, remove the unit from the DIN rail, and use the ESD precautions in the current ABB maintenance procedure.
06	Handle, transport, and dispose of the lithium-ion battery through an approved process; ABB lists 0.8 g equivalent lithium metal.

Identity and release controls

Verification Status	VERIFIED_EXACT_MODEL_AND_ARTICLE_NUMBER_FROM_CURRENT_ABB_HARDWARE_SELECTOR
---------------------	--

Official ABB sources

ABB Hardware Selector – SB822	https://compacthardwareselector.automation.abb.com/product/sb822
ABB Data Sheet SB822	https://800xahardwareselector.automation.abb.com/pdf/download/6566c5d2-8c4a-449e-b768-579c626a4345
AC 800M Controller Hardware Product Guide	https://library.e.abb.com/public/5e14a3e6c58a451a9e37c61af9875e71/3BSE036352-600_A_en_AC_800M_6.0_Controller_Hardware_Product_Guide.pdf
AC 800M Controller Hardware – Maintenance	https://library.e.abb.com/public/1cb4fadd66365e57c1257b740027013b/3BSE036351-510_A_en_AC_800M_5.1_Controller_Hardware.pdf