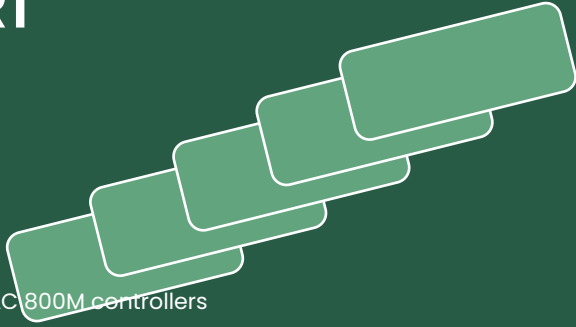


MANUFACTURER-SOURCE TECHNICAL REFERENCE

ABB SB822 3BSE018172R1

Product Reference

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

Product role and published parameters

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

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. System context: ABB External DIN-rail mounted rechargeable battery unit for AC 800M controllers.

Published field	Manufacturer-published value or verified identity note
Product type	Rechargeable external battery unit
Article number	3BSE018172R1
Controller family	ABB AC 800M
Battery chemistry	Lithium-ion
Rated output voltage	3.6 V
Maximum output current	0.05 A
Charger connection	24 V DC

System function and signal path

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.

Applications, answers, and official sources

1 AC 800M memory backup: Maintains the documented controller battery-backup function when normal controller power is interrupted.

2 PM891 external battery: Provides the external rechargeable-battery option that ABB identifies for PM891 processor units.

3 Rechargeable backup architecture: Supports AC 800M installations that require a rechargeable external battery instead of relying on a non-rechargeable external or internal battery arrangement.

4 Industrial control cabinets: DIN-rail mounting supports documented AC 800M cabinets in process and factory control systems, subject to enclosure, ambient, wiring, and controller-compatibility checks.

Frequently asked questions

What is ABB SB822?	It is an external DIN-rail rechargeable lithium-ion battery unit for compatible ABB AC 800M controllers.
What is the exact ABB article number?	ABB identifies SB822 with article number 3BSE018172R1.
What function does SB822 perform?	It provides controller battery backup so a compatible AC 800M processor can retain memory through loss of normal controller power.
Is SB822 compatible with PM891?	Yes. ABB states that SB822 is the only external battery available for PM891. The exact processor revision and installation still must be checked.
What is the rated output voltage?	The current ABB data sheet lists a rated output voltage of 3.6 V and a maximum output current of 0.05 A.
Why does SB822 also have a 24 V DC connection?	The 24 V DC connection powers the charger. It must not be described as the battery output voltage.

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