BC810K02
ABB Ability™ System 800xA® hardware selector

The BC810 unit consists of two basic parts: baseplate (TP857) and power supply/logic board. The baseplate is where the connectors to CEX-Bus and the external power reside. It is grounded to the DIN-rail through metal parts of the housing. The board also carries the external power voting diode and fuse. The power supply and logic board contain the +3.3 V converter, logic, drivers for CEX-Bus interconnection, and the connector for the interconnection cable.

The BC810 can be used with PM857, PM861A, PM862, PM863, PM864A, PM865, PM866, PM866A, PM867 and PM891.

In a fully redundant system with two interlinked BC810 and primary/backup CPU pair, the BC810 support online replacement of the CPU baseplate without disturbing the CEX traffic. If the BC810 has to be replaced, all traffic to the connected CEX segment is stopped.

The CEX-Bus is used for extending the onboard communication ports with communication interface units. It is also possible to use redundant communication interfaces on the CEX-Bus. The CEX-Bus Interconnection unit BC810 is used to increase the availability of the CEX-Bus by dividing it into separate segments. This improves the availability of systems with redundant communication interfaces.

Features and benefits

• Supports redundant communication interface units.
• Supports on-line replacement of the CPU.
• External power supply.
• Supports hot swap

More info

The BC810K02 kit includes:

- BC810, Interconnection Unit, 2 units

- TP857, Baseplate, width = 60 mm, 2 units

- TK851, Interconnection Cable, Length 1.0 m

- TB850, CEX-Bus Terminator, 2 units

General info

Article number	3BSE031155R1 (BC810K02)
Redundancy	Yes
High Integrity	Yes
Performance	Hot swap supported

Detailed data

Power supply	Inputs designated L+ and L- 24 V nominal, variation between 19.2 V DC and 30 V DC.
Power consumption +24 V typ/max	50 mA typical (70 mA max)
Power dissipation	1.2 W typical

Environment and certification

Temperature, Operating	0 to +55 °C (+32 to +131 °F)
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)
Relative humidity	5 to 95 %, non-condensing
Protection class	IP20 according to EN60529, IEC 529
CE Mark	Yes
Electrical Safety	UL 61010-1, UL 61010-2-201
Hazardous location	cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X
Marine certificates	ABS, BV, DNV-GL, LR
RoHS compliance	EN 50581:2012
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions

Width	59 mm (2.9 in.)
Height	185 mm (7.3 in.)
Depth	127.5 mm (5.0 in.)
Weight (including base)	1.5 kg (3.31 lbs) (BC810K02 package)

—
solutions.abb/800xA
solutions.abb/controlsystems

—
800xA and Symphony Plus is a registered trademark of ABB. All rights to other trademarks reside with their respective owners.

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.