GE ABB Series Service Manual

BC810K02

1. Description

General info

3. Product Information

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 +5 to +55 °C (+41 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)

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