GE ABB Series Service Manual

BC820K02

1. Description

General info

3. Product Information

General info

Article number 3BSE071500R1 (BC820K02)

Redundancy Yes

High Integrity No

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 120 mA typical (200 mA max)

Power dissipation 2.9 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 EN 60529, 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) 1.4 kg (3.1 lbs) (BC820K02 package)

The CEX-Bus unit BC820 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 BC820 CEX-Bus Interconnection Unit offers a way to section the CEX-Bus into two independent segments up to 200 meters apart. This improves availability in systems with redundant communication interfaces.

The BC820 can be used with PM858, PM862, PM866 (PR.F or later, which corresponds to PR:H or later for PM866K01), and PM866A.

The BC820 is powered from the processor unit via the CEX-Bus and can also support the CEX-Bus with redundant power through its external connector for power supply. BC820 transmits the RCU-Link and extends the CEX-Bus and RCU-Link cable length up to 200 m. The number of CEX-Bus interfaces is limited to 6 with each BC820.

You need to provide the following cables at a suitable length (not included in the BC820K02 kit):

RCU Control Link: Modular Jack, RJ45, shielded twisted pair crossover cable with all four pairs crossed: EIA/TIA-568 standard crossover T568A to T568B. Length: max 200m.

RCU Data Link: The optical interconnection is compatible with LC Duplex optical connector interface conforming to ANSI TIA/EIA60-10 (FOCIS 10A). The type of optical cable is 50/125µm OM3 fiber. Length: max 200m.

For more information about the cables see 3BSE036351-*

Features and benefits

Supports redundant communication interface units.

Supports on-line replacement of the CPU.

External power supply.

Supports hot swap.