GE GE □□□ Series Service Manual

531X307LTBAJG1

1. Description

SPECIFICATIONS

3. Product Information

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Part No.: 531X307LTBAJG1

Manufacturer: General Electric

Country of Manufacture: United States (USA)

Product Type: LAN I/O Terminal Card

Series: EX2000

531X307LTBAJG1 is a LAN I/O Terminal Card developed by General Electric. G1 LTB access eight 24 V dc configurable control input plugs. The 8PL connector and input connectors CI1PL through CI8PL are absent from the G2 LTB. Only dc input signals at connector terminals IN1–IN8 are compatible with the G2 LTB. Seven form C relay contact connectors with low voltage, low current, and three terminals each make up the LTB control outputs. The seven high voltage, high current relays are also activated by pilot contact connections. Relay contacts from both boards are accessible when the LTB and RTBA are used together.

531X307LTBAJG1 Functional Description

The drive (or exciter) cabinet houses the LAN Terminal Board (LTB). The LTB connects control devices (such as drives) with external devices such as contactors, indicator lights, pushbuttons, and interlocks. There is no adjustable hardware on the LTB.

The G1 LTB has eight CI1PL CI8PL 24 V dc programmable control input plugs. These inputs are linked to the 8PL bus, which transports I/O signals between the LTB, the NTB/3TB terminal board, and the drive control board.

The LTB has eight input terminal sets for 24 240 V ac or dc input signals. For usage by the drive control board, the input signals are transformed to 24 V dc logic signals. It should be noted that ac input signals cannot be used on G2 version LTBs.

The LTB control outputs are made up of seven low voltage, low current form C relay contact connectors, numbered OT1 through OT7, each with three terminals. Pilot contact connections are also used to activate the seven high voltage, high current relays.

Connector Types

The connectors on the LTB are divided into two types: plug-in connectors for ribbon cables and terminal board connectors for individual wires.

Plug-in connectors, denoted by the letter PL, provide signal and power I/O within the control device.

Terminal board connectors, denoted by the letter TB, link cables from both internal and external devices.

Input Features

An input with an ac/dc leakage current higher than 0.5 mA can be made to operate constantly in the ON state by devices connected in series with it.

I/O terminal Wiring

I/O ribbon cables shouldn't be routed alongside power wires.

Capacitive coupling of connection wires in ac applications might result in I/O input leakage (IN1 to IN8).

LED Indicators

The LTB includes 15 LED indicators that work as follows:

LED1 LED8 turn on when the source is applied to circuits IN1 IN8, respectively LED17 LED23 turn on when relays RX1 RX7 turn on, respectively

531X307LTBAJG1 ON/OFF specifications

Revision The following ON/OFF standards apply to LTBs:

6 V, 0.5 mA peak ac/dc is the turn-on threshold.

6 V, 0.5 mA peak ac/dc is the turn-off threshold.