



INSTRUCTION SHEET D2-3245

Inverter Disconnect Kit

Model 1CB4100

For Use With GP2000 50–100 HP and VTAC V 60–100 HP A-C V★S® Drives

DANGER

ONLY QUALIFIED ELECTRICAL PERSONNEL FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THIS EQUIPMENT AND THE HAZARDS INVOLVED SHOULD INSTALL, ADJUST, OPERATE, AND/OR SERVICE THIS EQUIPMENT. READ AND UNDERSTAND THIS MANUAL IN ITS ENTIRETY BEFORE PROCEEDING. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

DESCRIPTION

The products described in this instruction sheet are manufactured and/or distributed by Reliance® Electric Industrial Company.

The Inverter Disconnect Kit Provides a means of disconnecting input power from the controller. It consists of an inverter disconnect device, through-the-door handle and operating mechanism, and appropriate mounting and wiring hardware. This kit can be used with 50–100 HP GP2000 or 60–100 HP VTAC V controllers. The cabinet door comes with a prefabricated opening for the handle, covered by an access plate that is removed for installing the kit.

RECEIVE AND ACCEPT THE SHIPMENT

Reliance Electric's terms of sale in all instances are F.O.B. point of origin. The user is responsible for thoroughly inspecting the equipment before accepting shipment from the transportation company.

If all the items called for on the bill of lading or on the express receipt are not included or if any items are obviously damaged, do not accept the shipment until the freight or express agent makes an appropriate notation on your freight bill or express receipt. If any concealed loss or damage is discovered later, notify your freight or express agent within 15 days of receipt and request that he make an inspection of the shipment. Keep the entire shipment intact in its original shipping container.

The user is responsible for making claim against the carrier for any shortage or damage occurring in transit. Claims for loss or damage in shipment must not be deducted from the Reliance Electric invoice, nor should payment of the invoice be withheld while awaiting adjustment of such claims since the carrier guarantees safe delivery.

Upon receiving, check that the contents of the kit are as listed in Table 1. Store this equipment in a clean and dry area until ready to use. The ambient temperature of the storage area must not exceed 65°C (149°F) or go below –40°C (–40°F) within a relative humidity range of 5 to 95% without condensation.

FILE A RETURN REQUEST

1. To return equipment, send a written request to Reliance Electric within ten days of receipt.
2. Do not return equipment without a numbered Equipment Return Authorization (ERA) from Reliance Electric.
3. Reliance Electric reserves the right to inspect the equipment on site.

Table 1. Complete Parts List.

Description	Quantity	Part Number
Inverter Disconnect	1	65242-200ZSX
M5 x 8mm CCMS	4	419062-1PHF
Mounting Bracket	1	803433-31R
Wire Harness	1	803433-40RR
M4 x 100mm MS	4	419062-12CGZ
Disconnect Mechanism	1	77800-100RC
Interconnect Rod	1	612182-22A
Handle	1	77800-100S
Nameplate	1	423401-4A
Pop Rivet	2	601754-AR
1/4 x 20 Bolt	3	601741-B
1/4 Lock Washer	3	601748-3J
1/4 Flat Washer	3	601748-1E

INSTALLATION

DANGER

DO NOT INSTALL MODIFICATION KITS WITH POWER APPLIED TO THE UNIT. DISCONNECT AND LOCK OUT INCOMING POWER BEFORE ATTEMPTING SUCH INSTALLATION. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

1. Disconnect all power to the controller before installing this kit.
2. Loosen the two (2) captive screws and open the cabinet door.
3. Remove the nuts holding the inverter disconnect access plate to the door; discard the nuts and plate.
4. Mount the inverter disconnect mounting bracket to the inverter cabinet using the four (4) M5 x 8mm CCMS screws provided. Refer to Figure 1 for mounting location.
5. Wire harness 803433-40RR is already attached to the load side of the inverter disconnect. Before mounting the inverter disconnect to the mounting bracket, route the harness through the appropriate openings and channels in the cabinet as shown in Figure 1.
6. Position the disconnect mechanism (part number 77800-100RC) over the inverter disconnect so that the mounting holes in each line up and the toggle fits through the slot designed for it in the mechanism. Mount the assembly to the mounting bracket using the four (4) M4 x 100 MS screws provided. Refer to Figure 1 for mounting detail.

DANGER

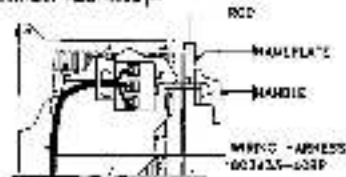
THE USER IS RESPONSIBLE FOR CONFORMING TO THE NATIONAL ELECTRICAL CODE AND ALL OTHER APPLICABLE LOCAL CODES. WIRING PRACTICES, ENCLOSURES, GROUNDING, DISCONNECTS, AND OVERCURRENT PROTECTION ARE OF PARTICULAR IMPORTANCE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

7. Follow the wiring diagrams and instructions in the controller Instruction Manual and/or any appropriate kit instruction manuals (if other kits are installed) for all wires except those wires detailed in this instruction manual.
8. Disconnect A-C input power from the input side of the inverter fuse panel terminals R, S, T. Refer to Figure 2 for wiring details.
9. Connect A-C input power to terminals L1, L2, L3 on the line side of the inverter disconnect. Refer to Figure 2 for wiring detail.

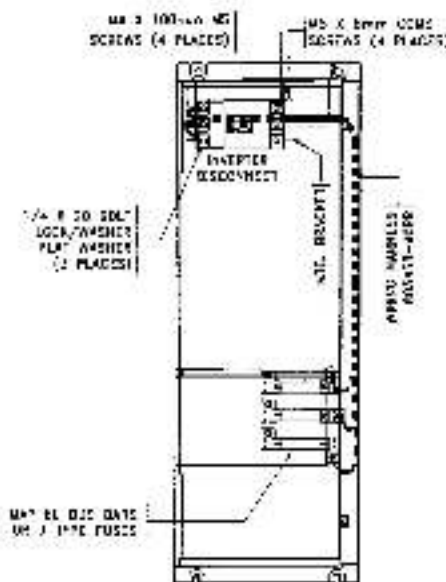
CAUTION: The disconnect switch does not provide short circuit protection. J-type input fuses must be installed for this purpose. Failure to observe this precaution could result in damage to, or destruction of, the equipment.

10. Connect the three leads from wire harness 803433-40RR to the input side of the inverter fuse panel, terminals R, S, T as shown in Figure 1. Keep nuts are supplied with the fuse panel.
11. Insert connection rod 612182-22A into the disconnect mechanism and tighten the set screw.
12. Close the cabinet door. Place the inverter disconnect handle over the end of the connecting rod and align the handle to the proper position. Then tighten the tap type mounting screws provided with the handle.
13. Operate the handle to verify that the disconnect mechanism is working properly.
14. Attach the INVERTER DISCONNECT nameplate to the cabinet door using the two pop rivets and the nameplate provided with the kit. Two holes are pre-drilled in the proper location.

DISCONNECT MECH. ASSEMBLY



ENCLOSURE SIDE VIEW
w/DOOR



ENCLOSURE FRONT VIEW
w/O DOOR

Figure 1. Inverter Disconnect Mounting Location.

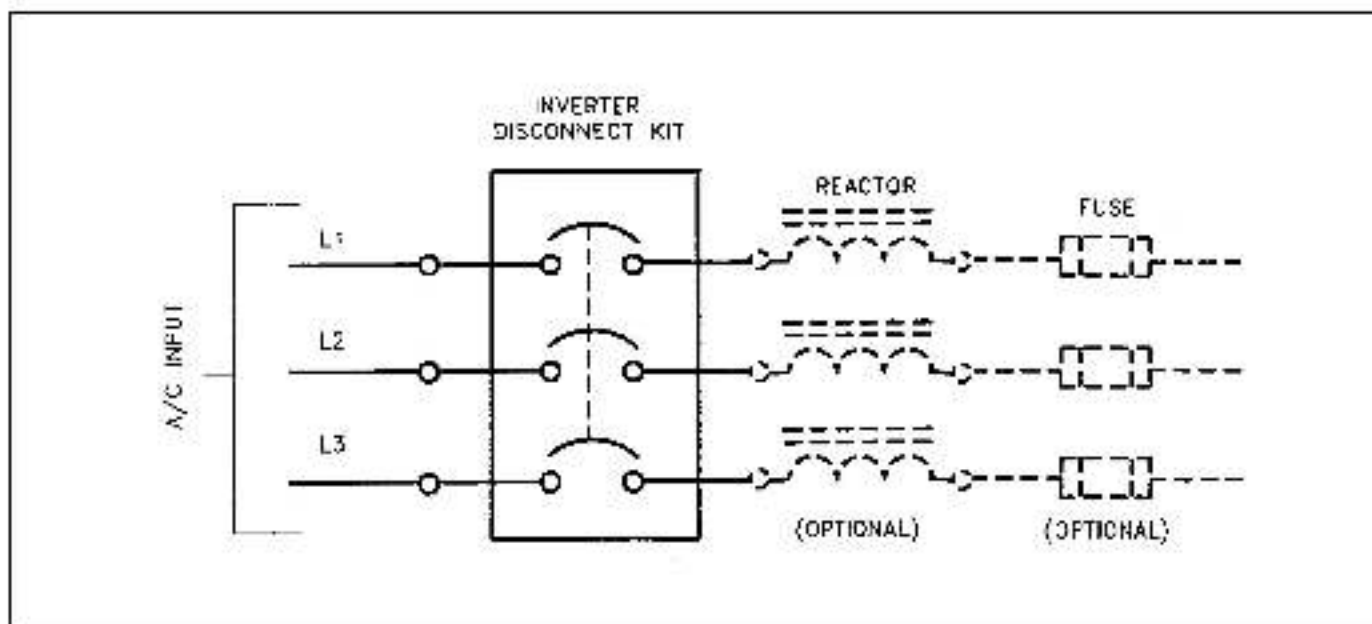


Figure 2. Inverter Disconnect Connection Diagram.

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