


Installation Instructions



⚠ DANGER

Hazardous voltage. Will cause death or serious injury.

Turn off and lock out all power supplying this device before removing cover(s) or device and while cover(s) are removed.

Replace all covers and shields before power supplying this device is turned on.

⚠ SAFETY INSTRUCTIONS

JD Frame Types: JXD2(-A), JXD6(-A), HJXD6(-A), HHJXD6, & CJD6(-A). LD Frame Types LXD6(-A), HLXD6(-A), HHLXD6, & CLD (-A). LMD Frame Types LMXD6 & HLMXD6. ETI Motor Circuit Interrupters Types JXD6(-A) ETI, CJD6(-A) ETI, LXD6(-A) ETI, CLD6(-A) ETI, & LMXD6 ETI. Solid State Molded Case Circuit Breaker Sentron Series III; JD Frame Types SJD6(-A), SHJD6(-A), SCLD6 (-A), & JD FP(-A); LD Frame Types SLD6(-A), SHLD6(-A), SCLD6(-A), & LD FP(-A). JM/LM Frame Types JM6, JMK, LM6, LMK.

NOTE: This instruction outlines the recommended installation procedure of the accessories noted into the devices listed above.

1. Turn power off supplying device before installing kit.
2. Make sure device is in tripped position. For circuit breakers: depress the red trip button (see fig. 1). For molded case switches: Removing the cover will trip the mechanism.
3. Remove two lug shield screws on load end shield (not shown) and (5 or 9) load end cover screws (A, Fig. 1) and, if device is mounted, also remove mounting screws (B, Fig. 1). Remove load end cover only. Remove label from trip unit that covers the accessory access opening at the back of trip unit (J, Fig. 2). Accessory units can be mounted in either right or left poles of the device. Except for types with an "S" prefix or an "FP" suffix, they can **ONLY** be mounted in the **RIGHT POLE**. If installed, remove paper label covering trip unit interface access port which states "remove this label before installing shunt trip U.V. trip or bell alarm accessory".

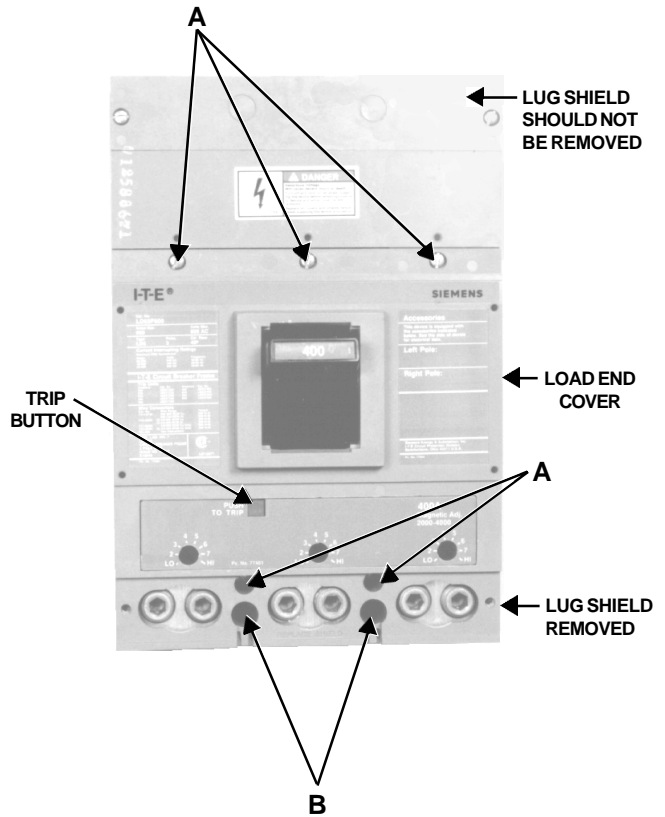


Fig. 1

COVER SCREW LOCATION

ACCESSORY MOUNTING INSTRUCTIONS

4. Feed leads through opening at bottom of accessory case for right hand or left hand mounting in device. (Leads should always exit accessory toward outer edge of device.) Feed accessory leads down and through 5/16 X 1/2 elongated opening (C, Fig. 2) to bring leads out bottom of device. NOTE: Leads must be brought out in the same order as they exit wire retainer of accessory case.
5. Accessory is located in the device by groove (E, Fig. 2), bottom side of accessory. Slide accessory down to rest on pad (D, Fig. 2) Trip Unit. When accessory is installed correctly, front of accessory (F, Fig. 2) will rest on pad (G, Fig. 2) of line cover. Pull gently and evenly on accessory wire leads (2 to 6 wires) while lowering accessory into base. Make sure all the **slack** is removed from leads inside device.



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NOTE: On shunt trip and undervoltage trip units, be sure transfer link (H, Fig. 2) is in opening (J, Fig. 2 & 3) at back of trip unit.

6. Replace load end cover and cover screws (quantity 5 or 9) and mounting screws (quantity 4) if mounted, and lug shield with screws.
7. Add two labels to device. Attach internal accessory label (K, Fig. 4) on top of device on right hand side. Make sure it is located in the proper space on existing label. Attach wiring label (L, Fig. 4) on side of device cover as shown.

NOTE: The Shunt Trip Accessory is suitable for use for Ground Fault Protection when combined with Class I Ground Fault Sensing Element equipped with internal clearing switch.

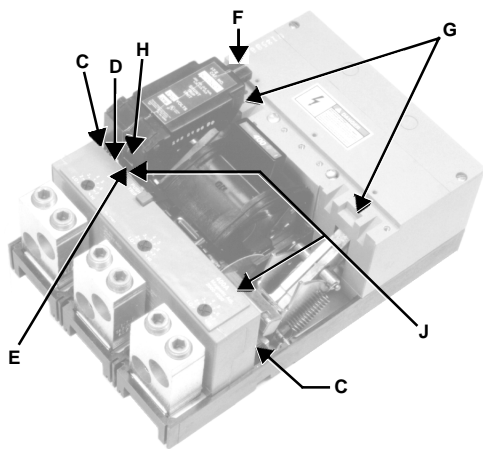


Fig. 2
INSTALLING ACCESSORY

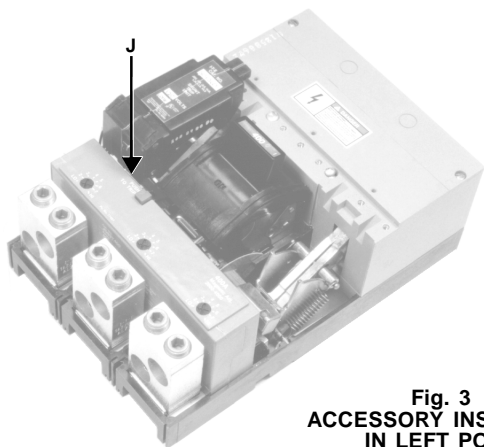


Fig. 3
ACCESSORY INSTALLED
IN LEFT POLE

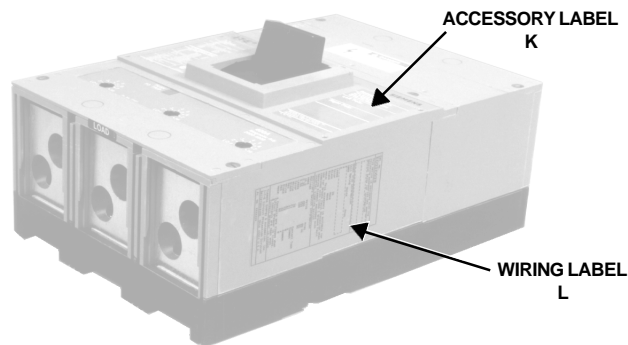


Fig. 4
ADDING LABELS
TO CIRCUIT BREAKER

ELECTRICAL CHECK

SHUNT TRIP ACCESSORY

1. Reset and turn device ON.
2. Attach test circuit to accessory leads. When the test voltage reaches 55 percent or more of the rated coil voltage, the device should trip.
3. With device TRIPPED or OFF, check to make sure coil circuit has opened.

ELECTRICAL DATA FOR SHUNT TRIP

Coil Voltage	Inrush Current At Rated Voltage (Amperes)	Cat. No.
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60 CYCLES AC

12V AC	3.9	S19JLD6
24V AC	1.2	S17JLD6
48V AC	.8	S18JLD6
120V AC	.395	S01JLD6
208V AC	.265	S02JLD6
240V AC	.165	S03JLD6
277V AC	.190	S15JLD6
480V AC	.145	S04JLD6
600V AC	.080	S06JLD6

D.C.

12V DC	4.3	S16JLD6
24V DC	2.2	S07JLD6
48V DC	1.2	S09JLD6
125V DC	.5	S11JLD6
250V DC	.35	S13JLD6



Installation Instructions

UNDervOLTAGE TRIP ACCESSORY

1. With device in TRIPPED position, connect test circuit to accessory leads. Energize undervoltage trip device at 85 percent of the marked rated voltage of the coil. Reset and turn device handle ON.
2. Reduce voltage to 35 percent of rated coil voltage. Device must trip.

ELECTRICAL DATA FOR UNDervOLTAGE TRIP

Coil Voltage	Sealed-in Current At Rated Voltage (Amperes)	Cat. No.
60 CYCLES AC		
120V AC	.03	U01JLD6
208V AC	.018	U02JLD6
240V AC	.016	U03JLD6
277V AC	.013	U16JLD6
480V AC	.008	U06JLD6
*600V AC	.008	U08JLD6
120V AC	.03	U01JLM6

D.C.

24V DC	.11	U13JLD6
48V DC	.06	U14JLD6
125V DC	.027	U10JLD6
**250V DC	.02	U12JLD6
125V DC	.027	U10JLM6

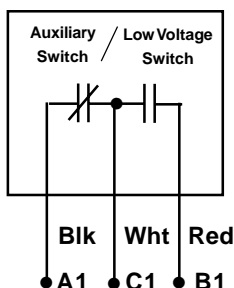
* Kit includes a 30k ohm, 25 watt resistor (Clarostat Cat. No. VP-25-K or equivalent).

** Kit includes a 2.5k ohm, 25 watt resistor (Clarostat Cat. No. VP-25-K or equivalent).

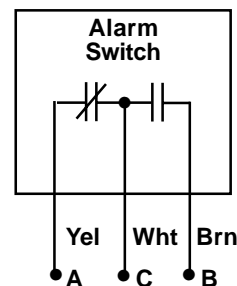
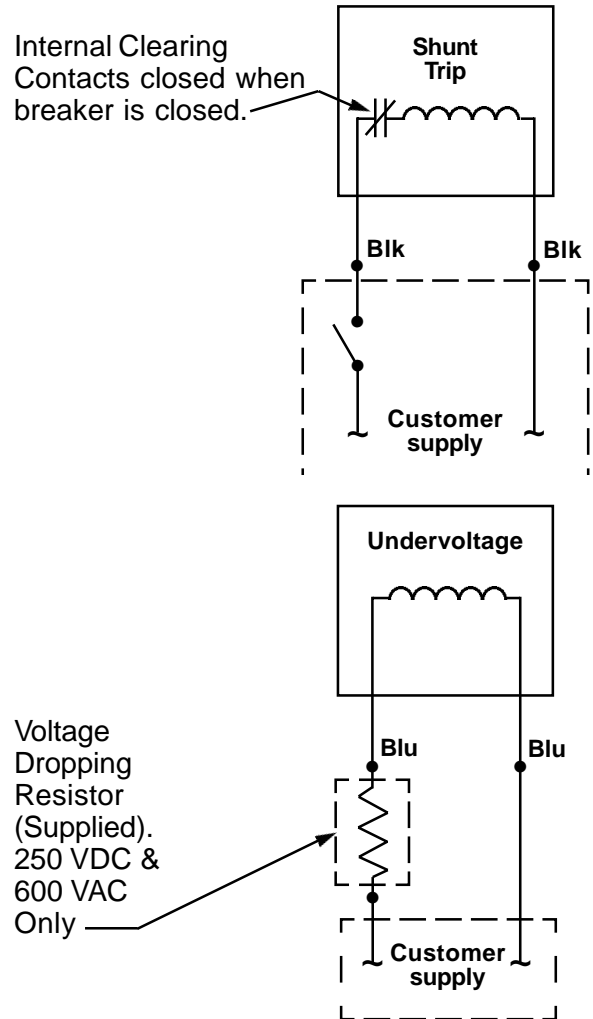
Note: Resistor to be mounted externally of device & connected by installer.

ACCESSORY UNITS

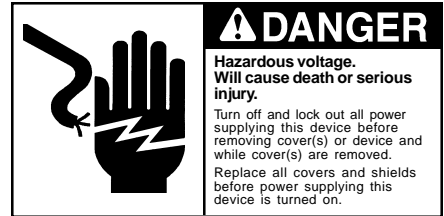
Accessory units employing an auxiliary switch in combination with a shunt trip, an undervoltage trip, an alarm switch, or a second auxiliary switch will utilize the wire colors and designations for each device as shown below. A double auxiliary switch combination will use wiring marking A2, B2, and C2 for the second switch.



- A1-C1 Closed when circuit breaker is closed.
- B1-C1 Open when circuit breaker is closed.



- A-C Closed when circuit breaker is in tripped position.
- B-C Open when circuit breaker is in tripped position.



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AUXILIARY SWITCH INFORMATION

ALL SWITCHES HAVE THREE LEADS AND ARE IDENTIFIED AS FOLLOWS.

WIRE MARKING	WIRE COLORS	SWITCH TERMINALS OR CONTACTS.
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C1	or	C2	WHITE	C-COMMON TERMINAL
A1	or	A2	BLACK	N.O.—NORMALLY OPEN CONTACT (OPEN WHEN DEVICE IS OPEN, CLOSED WHEN DEVICE IS CLOSED).
B1	or	B2	RED	N.C.—NORMALLY CLOSED CONTACT (CLOSED WHEN DEVICE IS OPEN, OPEN WHEN DEVICE IS CLOSED).

AUXILIARY SWITCH KITS

Cat. No.	Number of Switches	Ampere Rating of Switch				
		A.C. Voltage			D.C. Voltage	
		120V.	240V.	480V.	125V.	250V.
A01JLD64	1	10	10	10	.5	.25
A02JLD64	2	10	10	10	.5	.25

MAXIMUM ACCESSORY COMBINATIONS THAT CAN BE INSTALLED

- ONE SHUNT TRIP* + ONE UNDERVOLTAGE TRIP + THREE AUXILIARY SWITCHES
- ONE SHUNT TRIP* + THREE AUXILIARY SWITCHES
- ONE SHUNT TRIP* + ONE BELL-ALARM + THREE AUXILIARY SWITCHES
- ONE UNDERVOLTAGE TRIP + FOUR AUXILIARY SWITCHES
- ONE UNDERVOLTAGE TRIP + ONE BELL-ALARM + FOUR AUXILIARY SWITCHES
- ONE BELL-ALARM + FOUR AUXILIARY SWITCHES
- FOUR AUXILIARY SWITCHES

* SHUNT TRIP UNITS INCLUDE A COIL CLEARING SWITCH

LOW VOLTAGE SWITCH

CAT NO.	VOLTS	AMPS
A01JLDLV A02JLDLV	12 - 24 VDC	.1 A MAX

NOT TO EXCEED 24 VDC .1 AMPS