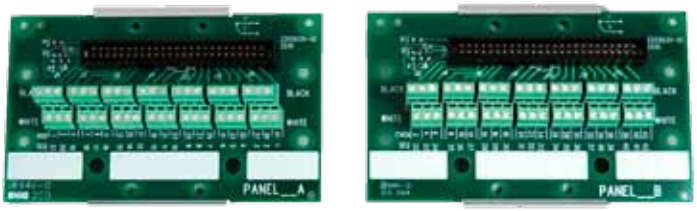
E31CTDB



E31CTDB

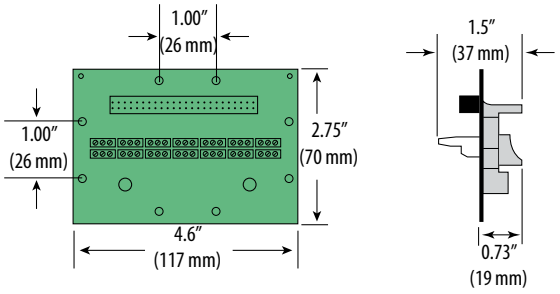
Adapter Boards for E31 Panelboard Monitoring System

QUICK INSTALL

Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

1. Disconnect and lock out power. Use a properly rated voltage sensing device to confirm power is off.
2. Mount the adapter boards in the electrical enclosure using either DIN Rail or SNAPTRACK.
3. Connect adapter boards to the main board via ribbon cable (sold separately).
4. Connect current transducers to the adapter boards (sold separately).
5. Secure wires using strain relief cable ties.

DIMENSIONS



⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off. DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION
- Only install this product on insulated conductors.

Failure to follow these instructions will result in death or serious injury.

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.

FCC PART 15 INFORMATION

NOTE: This equipment has been tested by the manufacturer and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications to this product without the express authorization of Veris Industries nullify this statement.

PRODUCT IDENTIFICATION

E31CTDB	Adapter Boards for E31

INSTALLATION

Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

1. Disconnect power to the electrical panel and lock it out. Use a properly rated voltage sensing device to confirm power is off.

Figure 1A: Side-by-side panel orientation

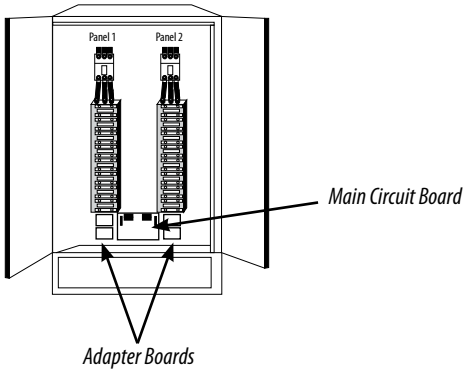
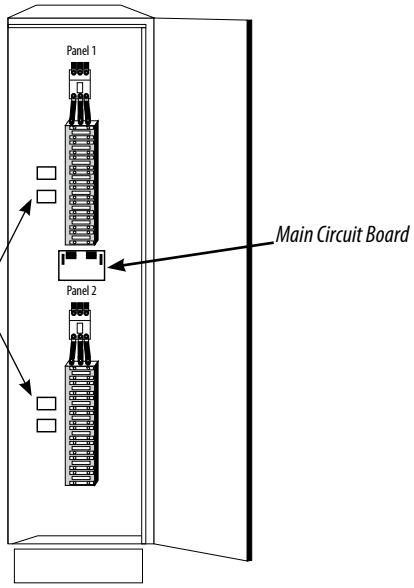


Figure 1B: Vertical panel orientation

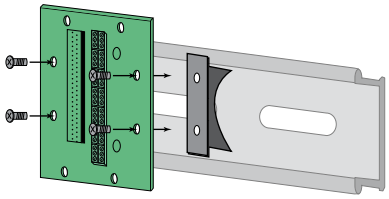


2. Mount the adapter boards in the enclosure using either DIN rail or SNAPTRACK.

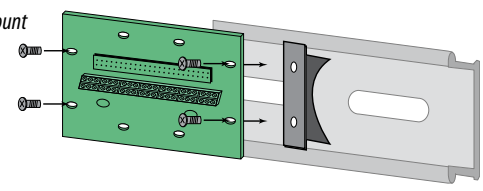
   A. DIN Rail: Use the supplied screws to secure the plastic DIN clip to the adapter board. Affix the clip to the DIN rail (Figure 2).

Figure 2

DIN Option 1: Vertical Mount

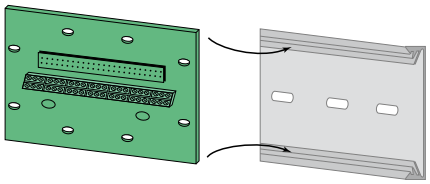


DIN Option 1: Horizontal Mount



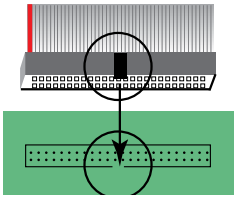
   B. SNAPTRACK: Secure the SNAPTRACK to the mounting surface. Click the adapter board into place (Figure 3).

Figure 3



3. Connect adapter boards to the main board using ribbon cable (Figure 4). Ribbon cables are keyed to ensure proper installation.

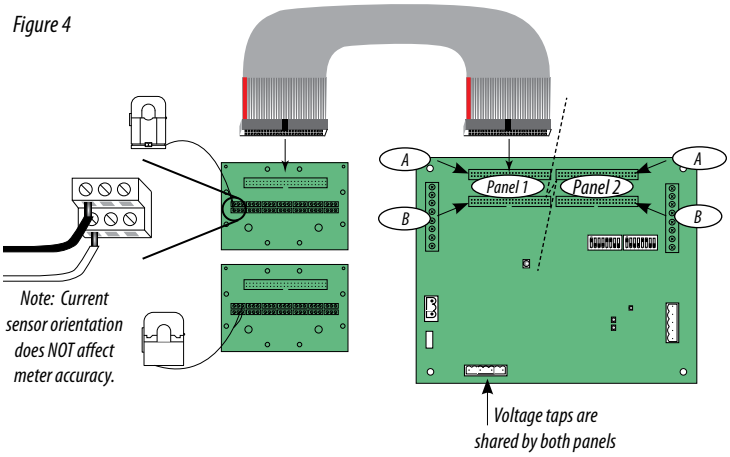
   Note: Flat and round ribbon cable are available from Veris. See Recommended Accessories (page 10)



Note: Align ribbon cable key with connector keyhole.

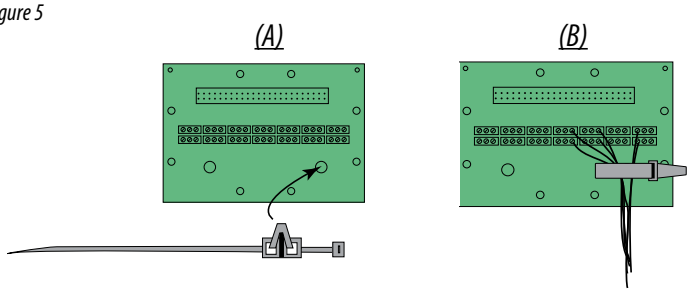
4. Connect current sensors to the terminals on the adapter boards (Figure 4).

Figure 4



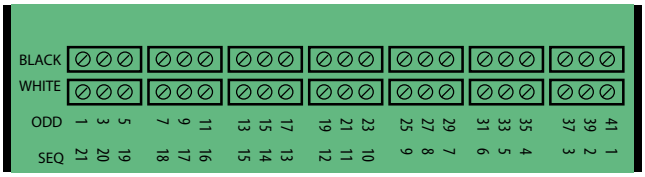
5. Plastic cable ties are included with the product for strain relief. Insert the strain relief device into one of the available holes on the adapter board (Figure 5A). Gather all current sensor wires connected to that adapter board and secure the cable tie around them (Figure 5B).

Figure 5



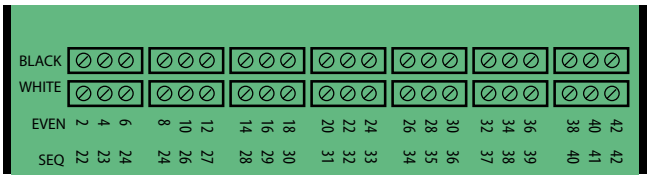
6. The adapter boards are silk screened with two rows of numbers. For applications that require odd/even branch circuit numbering, use the row designated ODD or EVEN. For applications that require sequential numbering, use the number row marked SEQ (Figure 6).

Figure 6



Adapter Board A numbering:

ODD	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41
SEQ	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1



Adapter Board B numbering:

EVEN	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42
SEQ	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

RECOMMENDED ACCESSORIES

Part ID	Description
CBL^{008}	Flat ribbon cable, ^{50} x ^{28} AWG, $^{1.5}$ ft. $^{(0.45}$ m$^{)}$
CBL^{016}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{4} ft. $^{(1.2}$ m$^{)}$
CBL^{017}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{5} ft. $^{(1.5}$ m$^{)}$
CBL^{018}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{6} ft. $^{(1.8}$ m$^{)}$
CBL^{019}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{8} ft. $^{(2.4}$ m$^{)}$
CBL^{020}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{10} ft. $^{(3.0}$ m$^{)}$
CBL^{021}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{20} ft. $^{(6.1}$ m$^{)}$
CBL^{022}	Round ribbon cable, ^{50} x ^{28} AWG, ^{4} ft. $^{(1.2}$ m$^{)}$
CBL^{023}	Round ribbon cable, ^{50} x ^{28} AWG, ^{10} ft. $^{(3}$ m$^{)}$
CBL^{024}	Round ribbon cable, ^{50} x ^{28} AWG, ^{20} ft. $^{(6}$ m$^{)}$
CBL^{025}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{2} m
CBL^{026}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{4} m
CBL^{027}	Flat ribbon cable, ^{50} x ^{28} AWG, ^{6} m
E^{31}CT^{0}	Six-pack ^{50} A CT, ^{6} ft. $^{(1.8}$ m$^{)}$ lead
E^{31}CT^{0}R^{20}	Six-pack ^{50} A CT, ^{20} ft. $^{(6}$ m$^{)}$ lead
E^{31}CT^{1}	Six-pack ^{100} A CT, ^{6} ft. $^{(1.8}$ m$^{)}$ lead
E^{31}CT^{1}R^{20}	Six-pack ^{100} A CT, ^{20} ft. $^{(6}$ m$^{)}$ lead
E^{31}CT^{2}	Six-pack ^{100} A CT, ^{4} ft. $^{(1.2}$ m$^{)}$ lead
E^{31}CTDB	^{2} E^{31} Adapter boards
AE^{001}	E^{3}x MCB Cover
AV^{01}	Veris DIN Rail

SAFETY

If Veris E31 products are used in installations with circuits higher than the product ratings, the circuits must be kept segregated per UL508A Sec. 17.5.

Note: 277/480VAC Wye connected (center grounded) power systems operate within the 300VAC line to neutral safety rating of the E3x series, and the operational voltage limit (single-phase connection) as the line to neutral voltage is 277VAC in such power systems. Corner-grounded delta 480VAC systems would not qualify, as the actual line to earth voltage is 480VAC on each leg, exceeding the E3x ratings.

Note: E31 internal circuitry (cables and CTs) are not circuits as defined by UL508A, as they do not extend beyond the E31 itself without further safety/ fire isolation.

UL listed under standard 508 as an "open type device."

Maximum ambient air temperature for use is 60°C.

Installation category: CAT III

E31CTDB adapter boards, their connections to CTs, and the E31 main board must be installed in an appropriate electrical and fire enclosure per local regulations.

For use in a Pollution Degree 2 or better environment only.

A Pollution Degree 2 environment must control conductive pollution and the possibility of condensation or high humidity. Consideration must be given to the enclosure, the correct use of ventilation, thermal properties of the equipment and the relationship with the environment.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.

IEC/EN 61010-1 CE

This symbol indicates an electrical shock hazard exists.

Documentation must be consulted where this symbol is used on the product.

CHINA ROHS COMPLIANCE INFORMATION (EFUP TABLE)

部件名称	产品中有毒有害物质或元素的名称及含量Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
电子线路板	X	0	0	0	0	0

0 = 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下.

X = 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求.

Z000057-0A