

## HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH

1. If the product (EPower) is used in a manner not specified by the manufacturer, the protection provided by the product might be impaired.
2. Any adjustment, maintenance and repair of the opened apparatus under voltage, is forbidden for safety reasons.
3. The product must be installed and maintained by suitably qualified personnel, authorized to work in an industrial low voltage environment.
4. The product is not suitable for isolation applications, within the meaning of EN60947-1.
5. The product is designed to be installed in a cabinet connected to the protective earth ground according to IEC60364-1 and IEC60364-5-54 or applicable national standards.
6. Electrically conductive pollution must be excluded from the cabinet in which the product is mounted. To ensure a suitable atmosphere in conditions of conductive pollution, fit adequate air conditioning/filtering/cooling equipment to the air intake of the cabinet, e.g. fitting fan-cooled cabinets with a fan failure detection device or a thermal safety cut-out.
7. Before carrying out any wiring to the product, it must be ensured that all relevant power and control cables, leads or harnesses are isolated from voltage sources.
8. Before any other connection is made, the protective earth ground terminal shall be connected to a protective conductor. The earth connection must be made by using a lug terminal of size as given in safety earth details.
9. CE: Protective earth ground minimum size must be selected according to IEC 60364-5-54 table 54.2 or IEC61439-1 Table 5 or applicable national standards.
10. The earth connection must be made using a UL-listed lug terminal. The cables must be rated 75°C stranded copper only. Wire conductor cross sections must comply with NEC requirements.
11. Protective earth ground minimum size must be selected according to IEC 60364-5-54 table 54.2 or IEC61439-1 Table 5 or applicable national standards.
12. Any interruption of the protective earth ground conductor inside or outside the product, or disconnection of the protective earth ground terminal is likely to make the product dangerous under some conditions. Intentional interruption is prohibited. Whenever it is likely that protection has been impaired, the unit shall be made inoperative, and secured against accidental operation. The manufacturers nearest service centre must be contacted for advice.
13. According to the CE and UL certifications, high speed fuses (supplemental fuses) are mandatory for compliant installation and protection of the EPower controller against short circuit. See paragraph 12.3 of user manual HA179769 for details.
14. The EPower's rated short-circuit conditional current is defined for co-ordination type 1. If opening of either the branch circuit protective or the supplemental (high speed) fuses occurs, the product shall be examined by suitably qualified personnel and replaced if damaged.
15. To achieve IP10 rating according to IEC60529, power connections must be made by using lug terminals of size as given in Line Load Termination details.
16. UL: Power connections connection must be made using UL-listed lug terminals.
17. The mains supply fuse within the Driver Module is not replaceable. If it is suspected that the fuse is faulty, the manufacturer's local service center should be contacted for advice.
18. The I/O Input and Output, the Communications ports are SELV circuit. They must be connected to SELV or PELV circuit.
19. The relays outputs are compliant to the SELV requirements; they can be connected to SELV, PELV circuit or to voltage up to 230V (maximum value of rated operational voltage to earth:300V).
20. Do not exceed the device's ratings.

## HAZARD OF FIRE

1. This product does not contain any branch-circuit protection or internal safety overload protection. The installer must add branch-circuit protection upstream of the unit, and provide external or remote safety overload protection to the end installation. Branch circuit shall be rated according to maximum current in each phase.
2. CE: branch-circuit protection must be selected according to IEC 60364-4-43 or applicable local regulations.
3. UL: branch-circuit protection must be selected according to NEC article 210.20, it is necessary for compliance with National Electric Code (NEC) requirements.
4. Power connections: The cables must be rated 90°C stranded copper only, the cross section must be selected according to the branch circuit protection rating.
5. CE: Wire conductor cross sections must comply with IEC 60364-5-52 or applicable national standards.
6. UL: Wire conductor cross sections must comply with NEC Table 310.15(B)(16) (formerly Table 310.16) taking account of table 310.15(B)(2) for the ampacity correction factors or NFPA79 Table 12.5.1 taking account of Table 12.5.5(a) for the ampacity correction factors or applicable national standards.
7. Power terminals must be tightened according to the torque values defined in Table Line/Load Termination Details. Appropriate regular inspections must be performed. Periodicity depends on the local environment, but should not exceed 1 year.
8. The lightning torques for supplemental (high speed) fuses should be checked according to value defined in table 12.3. Ceramic fuse bodies should be checked for visible cracks. Appropriate regular inspections must be performed. Periodicity depends on the local environment, but should not exceed 1 year.
9. Neutral cross-sectional area when neutral is connected to the star point of the load (4S load type): Without current limit activated, maximum neutral current is not upper than maximum current in each phase. The cross-sectional area of the neutral conductor, shall be sized to carry the maximum phase current. With current limit activated, maximum neutral current may reach  $\sqrt{3}$  x current limit setting. The cross-sectional area of the neutral conductor shall be sized to carry up to  $\sqrt{3}$  x current limit setting.
10. CE: Wire conductor cross sections must comply with IEC 60364-5-52 or applicable national standards.
11. UL: Wire conductor cross sections must comply with NEC Table 310.15(B)(16) (formerly Table 310.16) taking account of table 310.15(B)(2) for the ampacity correction factors or NFPA79 Table 12.5.1 taking account of Table 12.5.5(a) for the ampacity correction factors or applicable national standards.
12. The cables used to connect the remote voltage sensing inputs (if fitted) and the cable used to connect the reference input in 4S, 6D and two-leg configurations must be correctly protected by branch-circuit protection. It is the responsibility of the user to add branch-circuit protection. Such branch-circuit must comply with applicable local regulations.
13. The above-mentioned branch-circuit protection is necessary for compliance with National Electric Code (NEC) requirements.
14. The cables used to connect the EPower auxiliary/fans supply must be correctly protected by 3A branch-circuit protection. (3A rating selected to protect AWG18 fan supply wiring). It is the responsibility of the installer to add branch-circuit protection. Such branch-circuit protection must comply with applicable local regulations.
15. UL: The Auxiliary (Fan) supply is Installation category II. Supply to Auxiliary (Fan) supply shall be provided by isolated transformer secondary grounded protected by a Listed 3A branch circuit fuse. The above-mentioned branch-circuit protection is necessary for compliance with National Electric Code (NEC) requirements.
16. EPower alarms protect thyristors and loads against abnormal operation, and provide the user with valuable information regarding the type of fault. Under no circumstances must these alarms be regarded as a replacement for proper personnel protection. It is strongly recommended that the installing authority include independent, system-safety mechanisms to protect both personnel and equipment against injury or damage, and that such safety mechanisms be regularly inspected and maintained. Consult the EPower supplier for advice.
17. Failure to follow these instructions will result in death or serious injury.

## WARNING: This product can expose you to chemicals including lead and lead compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: https://www.P65Warnings.ca.gov

1. The product shall have one of the following as a disconnecting device, fitted within easy reach of the operator, and labelled as the disconnecting device:
  - a) A switch or circuit breaker which complies with the requirements of IEC60947-1 and IEC60947-3.
  - b) A separable coupler which can be disconnected without the use of a tool.
2. In 4S, 6D and two-leg configurations do not use the reference terminal to replicate voltage signals (in a 'daisy chain'), as the PCB track between the two poles is not designed to withstand short-circuit.

## Failure to follow these instructions can result in death, serious injury or equipment damage.

1. The product is designed to be mounted vertically. There must be no obstructions (above or below) which could reduce or hamper airflow. If more than one instance of the product is located in the same cabinet, they must be mounted in such a way that air from one unit is not drawn into another.
2. To reach the thermal performance the gap between two EPower must be at minimum 10 mm.
3. The Driver Module power supply can work from any supply voltage between 85 Vac and 265 Vac. The fans (if fitted) on the power modules are for use at 115 Vac or 230 Vac, as defined at time of order. It must therefore be ensured that the fan voltage matches the supply voltage, or the fan will either fail within a short period, or it will be ineffective at cooling.

## Failure to follow these instructions can result in death, serious injury or equipment damage.

1. External feedback connections must be correctly phased (refer to Figure 2.2.2b in the User Guide) or the unit might switch to full conduction at start-up. With external feedback: The current transformer should be chosen such that its full-scale output is 5 amps.
2. Signal and power voltage wiring must be kept separate from one another. Where this is impractical, all wires must be rated to the power voltage and shielded cables are recommended for signal wiring.
3. This product has been designed for environment A (Industrial). Use of this product in environment B (domestic, commercial and light industrial) may cause unwanted electromagnetic disturbances in which cases the installer will be required to take adequate mitigation measures.
4. To ensure that EPower complies with Electromagnetic Compatibility requirements, ensure that the panel to which it is attached is correctly grounded. The ground connection, designed to ensure ground continuity, is not in any way a substitute for the protective earth ground connection.

## Failure to follow these instructions can result in death, serious injury or equipment damage.

## CAUTION

1. In burst mode and primary of transformer load, the star-star configuration is not recommended as it may become unstable, high speed fuse may blow.
2. Do not allow flammable or heat-sensitive parts in the immediate vicinity of hot surfaces.

## Failure to follow these instructions can result in injury or equipment damage.

## NOTICE

1. For USA & Canada EPower 125A fuse holder terminal capacity is rated UL 1/0AWG, this may decrease the maximum Load current according to standard, ambient temperature, wiring arrangement.

## Failure to follow these instructions can result in non-compliance to North America regulations.

## NOTICE

1. In order to maintain protection against damage due to electrostatic discharge, any ribbon cable which is chafed, scratched or otherwise damaged must be replaced.

## Failure to follow these instructions can result in equipment damage.

## SYMBOLS USED ON THE INSTRUMENT LABELLING

One or more of the symbols below may appear as a part of the instrument labelling.

|  |  |  |   |
|--|--|--|---|
|  | Protective conductor terminal  |  | Risk of electric shock  |
|  | AC supply only   |  | Precautions against static electrical discharge must be taken when handling this unit |
|  | Underwriters Laboratories listed mark for Canada and the US                    |  | Refer to the manual for instructions  |
|  | Do not touch Heatsink Hot Surface  |  | Declaration of conformity to European standard  |
|  | Regulatory Compliance Mark (RCM) to Australian Communication & Media Authority |  |   |

## GENERAL STANDARDS

|  |  |
|--|--|
|  | EN60947-4-3:2014 (identical to IEC60947-4-3:2014)<br>Low-voltage switchgear and controlgear — Part 4-3: Contactors and motor-starters — AC semiconductor controllers and contactors for non-motor loads<br>Declaration of conformity available on request. |
|  | UL60947-4-1 ; CAN/CSA C22.2 NO.60947-4-1-14<br>Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters U.L. File N° E86160  |
|  | Regulatory Compliance Mark (RCM) to Australian Communication and Media Authority<br>Based on compliance to EN60947-4-3:2014  |

## ELECTRICAL INSTALLATION

### Drive Module Connectors

Beacons: Power (PWR), Local (LOC), Alarm (ALM)

Pushbuttons: Return, Scroll down, Scroll up, Enter

Configuration Port (EIA232)

### Power Module Connectors

| External Feedback Connector Pinout and Polarisng Details |                  |                   |                |
|--|------------------|-------------------|----------------|
| Module 1: I2, I1   | Module 2: I1, I2 | Module 3: I1 + I2 | Module 4: None |
| Current feedback connector                               |                  |                   |                |
| V1, V2   | V2, V1           | V1 + V2           | None           |
| Voltage feedback connector                               |                  |                   |                |
| None   | None             | None              | V1 + V2        |
| Neutral/phase reference connector                        |                  |                   |                |

### Line/Load Termination Details (Maximum)

| EPower Current Rating | Internal Lug Terminal Size | Stud Diameter (mm (in)) | Maximum Length (mm (in))        | Maximum Capacity | Tightening Torque (Nm (ft. lb.)) |
|-----------------------|----------------------------|-------------------------|---------------------------------|------------------|----------------------------------|
| 50A, 100A and 160A    | M8 (3/8)                   | 45 (1.75)               | 70 mm <sup>2</sup> (AWG 2/0)    | 9 (6.6)          |                                  |
| 250A                  | M10 (1/2)                  | 60 (2.35)               | 120 mm <sup>2</sup> (250 Kcmil) | 15 (11.1)        |                                  |
| 400A                  | M12 (1/2)                  | 80 (3.15)               | 240 mm <sup>2</sup> (500 Kcmil) | 28.8 (21.2)      |                                  |
| 500A, 630A            | 2 x M12 (2 x 1/2)          | 65 (2.55)               | 185 mm <sup>2</sup> (350Kcmil)  | 30 (22.1)        |                                  |

### Safety Earth Details

| Max. Load Current | Earth Terminal Size | Tightening Torque (Nm (lb. ft.)) |
|-------------------|---------------------|----------------------------------|
| 50A               | M6                  | 5 (3.7)                          |
| 100A              | M6                  | 5 (3.7)                          |
| 160A              | M6                  | 5 (3.7)                          |
| 250A              | M8                  | 12.5 (9.2)                       |
| 400A              | M10                 | 15 (11.1)                        |
| 500A              | M12                 | 25 (18.4)                        |
| 630A              | M12                 | 25 (18.4)                        |

### SK Connectors

- SK1: Standard I/O
- SK2: Predictive Load Management Option
- SK3: Optional I/O 1
- SK4: Optional I/O 2
- SK5: Optional I/O 3

### External feedback connections

- Load Current: I1, I2
- Load Voltage: V1, V2
- Neutral/phase reference (either pin)

\* ENABLE INPUT: For the power module thyristors to operate, the Enable input to the driver module must be valid. In the default configuration, this is done by shoring pins 8 and 10 of SK1 (Digital input 1). This default strategy can be adjusted with ITools.

### China RoHS Compliance - EPower 50A-630A

Epover DRV 50A-630A, EPower Module 1-4 phases 50A-630A

| Part Name                               | 有害物质 - Hazardous Substances |        |        |              |            |              |
|---|-----------------------------|--------|--------|--------------|------------|--------------|
|   | 铅 (Pb)                      | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 金属零件<br>Metal parts                     | X                           | O      | O      | O            | O          | O            |
| 塑料零件<br>Plastic parts                   | O                           | O      | O      | O            | O          | O            |
| 电子件<br>Electronic                       | X                           | O      | O      | O            | O          | O            |
| 触点<br>Contacts                          | O                           | O      | O      | O            | O          | O            |
| 电缆和电缆附件<br>Cables & cabling accessories | O                           | O      | O      | O            | O          | O            |

本表格依据SJ/T 11364的规定编制。  
X: 表示该有害物质在该零件所有均质材料中的含量均在GB/T 2657规定的限量要求以下。  
O: 表示该有害物质至少在该零件的某一均质材料中的含量超过GB/T 2657规定的限量要求。

This table is made according to SJ/T 11364.  
X: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 2657.  
O: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 2657.

## Manufacturing Address

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# EPower™ Controller



## Product Tools Update



<https://www.eurotherm.com/en/products/power-control-en/power-controllers-en/epower-controller/>

HA029490ENG005/12

12/2025



HA029490ENG005/12

## COMMUNICATIONS

### EtherNet/IP Connector Pinout

| Pin | Function |
|-----|----------|
| 1   | Tx+      |
| 2   | Tx-      |
| 3   | Rx+      |
| 4   | N/C      |
| 5   | N/C      |
| 6   | Rx-      |
| 7   | N/C      |
| 8   | N/C      |

### Profinet IO Connector Pinout

| Pin | Function |
|-----|----------|
| 1   | Tx+      |
| 2   | Tx-      |
| 3   | Rx+      |
| 4   | N/C      |
| 5   | N/C      |
| 6   | Rx-      |
| 7   | N/C      |
| 8   | N/C      |

### Modbus RTU Pinout

| Pin | Signal (EIA485) |
|-----|-----------------|
| 8   | Reserved        |
| 7   | Reserved        |
| 6   | N/C             |
| 5   | N/C             |
| 4   | N/C             |
| 3   | Isolated 0V     |
| 2   | A               |
| 1   | B               |

### DeviceNet Connector Pinout

| Pin | Function                         |
|-----|----------------------------------|
| 1   | V- (negative bus supply voltage) |
| 2   | CAN_L                            |
| 3   | Cable shield                     |
| 4   | CAN_H                            |
| 5   | V+ (positive bus supply voltage) |

### Profibus Connector Pinout

| Pin | Function        |
|-----|-----------------|
| 9   | N/C             |
| 8   | A (RxD-/TxD-)   |
| 7   | N/C             |
| 6   | +5 V (1)        |
| 5   | Isolated ground |
| 4   | RTS             |
| 3   | B (RxD+/TxD+)   |
| 2   | N/C             |
| 1   | N/C             |

### CC-Link Connector Pinout

| Pin | Function               |
|-----|------------------------|
| 1   | DA (Rx+/Tx+)           |
| 2   | DB (Rx-/Tx-)           |
| 3   | DG (Signal ground)     |
| 4   | SLD (Cable Shield)     |
| 5   | FG (Protective Ground) |

### Modbus TCP (Ethernet 10baseT) Pinout

| Pin | Function |
|-----|----------|
| 8   | N/C      |
| 7   | N/C      |
| 6   | Rx-      |
| 5   | N/C      |
| 4   | N/C      |
| 3   | Rx+      |
| 2   | Tx-      |
| 1   | Tx+      |

### Network Status LED

| LED State       | Description                               |
|-----------------|---|
| Off             | No power or no IP address                 |
| Green           | Module is in Process Active or Idle state |
| Green, flashing | Waiting for connections                   |
| Red             | Duplicate IP address or FATAL event       |
| Red, flashing   | Process Active Timeout.                   |

### Module Status LED

| LED State     | Description  |
|---------------|--|
| Off           | No power   |
| Green         | Normal operation   |
| Red           | Major fault: module is in state EXCEPTION (or FATAL event) |
| Red, flashing | Minor fault in diagnostic object IP conflict               |

### LINK/Activity LEDs

| LED State         | Description          |
|-------------------|----------------------|
| Off               | No link, no activity |
| Green             | Link established     |
| Green, flickering | Activity             |

### Notes:

1. A 110 Ohm (±5% 1/2 watt) terminating resistor should be connected across pins 1 and 2 of the connectors at each end of the transmission line.
2. The cable shield should be connected to pin 4 of each CC-Link connector. The shield and Protective earth terminals (pins 4 and 5) are internally connected.

**SPECIFICATION**

| INSTALLATION CATEGORIES                               |                       |                              |                               |  |
|---|-----------------------|------------------------------|-------------------------------|--|
|   | Installation category | Rated impulse voltage (Uimp) | Rated insulation voltage (Ui) | Maximum value of rated operational voltage to ground |
| Communications  | II                    | 0.5kV                        | 50V                           | 50V  |
| Standard/Optional I/O                                 | II                    | 0.5kV                        | 50V                           | 50V  |
| Driver module power supply and auxiliary (Fan) supply | II                    | 2.5kV                        | 230V                          | 300V   |
| Relays  | III                   | 4kV                          | 230V                          | 300V   |
| Power modules (up to 600V)                            | III                   | 6kV                          | 600V                          | 600V   |
| Power modules (690V)                                  | II                    | 6kV                          | 690V                          | 690V   |

| DRIVER  |   |
|---|---|
| Driver module power supply and auxiliary (fan) supply |   |
| Rated control supply voltage (Us)                     | 100 to 240 Vac (+10% - 15%)   |
| Frequency range                                       | 47 to 63Hz  |
| Power requirement                                     | 60W + Power Module fans (15 W each for 400 A/500 A/630A power modules, 10 W each for 160/250 A modules) |
| Installation Category                                 | Installation category II (category III for relays)  |

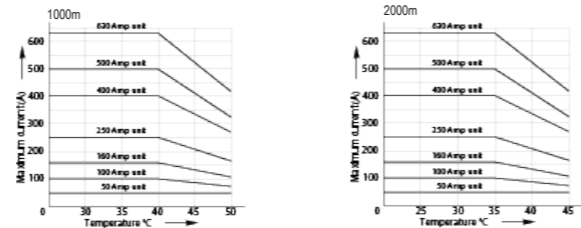
| POWER MODULE  |   |
|---|---|
| Number of modules   | Up to four identical units per driver unit  |
| Rated operational voltages (Ue)                                 | 100 to 600 Vac (+10% - 15%) (CE and UL units) or 100 to 690 Vac (+10% - 15%) (CE units only), as specified at time of order |
| Frequency range   | 47 to 63Hz  |
| Rated operational currents (Ie)                                 | 16 to 630A depending on power module  |
| Power dissipation   | 1.3W per Amp per phase  |
| Cooling   |   |
| Up to and including 100A  | Natural convection  |
| Above 100A  | Fan cooling. Fans are connected in parallel to driver module  |
| Fan supply voltage  | 115 or 230Vac, as specified at time of order (+10% - 15%)   |
| Fan power requirement   | 10W for 160/250A modules, 15W for 400, 500 and 630A modules   |
| Short circuit protection: High speed fuses (supplemental fuses) |   |

| EPower Module Rating | Eurotherm Spare Part Reference | Fuse Rating | Manufacturer Catalog Number | Manufacturer          | Fixing | Tightening Torque (Nm (lb.ft.)) |
|----------------------|--------------------------------|-------------|-----------------------------|-----------------------|--------|---------------------------------|
| 50A, 100A and 160A   | SUBEPWR/FUSE160A               | 315A        | DN000UB69V315L              | Mersen                | M8     | 12 (8.9)                        |
|                      |                                |             | 170M1322                    | Eaton Cooper Bussmann | M8     | 12 (8.9)                        |
| 250A                 | SUBEPWR/FUSE250A               | 350A        | 170M1373                    |                       | M8     | 12 (8.9)                        |
| 400A                 | SUBEPWR/FUSE400A               | 550A        | 170M3422                    |                       | M8     | 12 (8.9)                        |
| 500A                 | SUBEPWR/FUSE500A               | 630A        | 170M5412                    |                       | M10    | 15 (11.1)                       |
| 630A                 | SUBEPWR/FUSE630A               | 900A        | 170M6413                    |                       | M12    | 25 (18.5)                       |

Rated conditional short-circuit current CE: 92kA all modules except 98kA for 500A modules; 105kA for 630A modules; 690V maximum; coordination type 1  
 UL: UL SCCR Rated: 100kA RMS symmetrical amperes, 600Vac maximum; coordination type 1

| POWER MODULE           |  |
|------------------------|--|
| Utilisation categories | AC51: non inductive or slightly inductive loads, resistance furnaces<br>AC56a: switching of transformers   |
| Overload conditions    | AC51: 1 x le continuous<br>AC56a: 1 x le continuous  |
| Rated Duties           | Uninterrupted duty/continuous operation  |
| Form designation       | Form 4 (Semiconductor controller)  |
| Load types             | Single or multiphase control of resistive loads (low/high temperature coefficient and non-aging/aging types) and transformer primaries. Load voltage/current feedback either internal (standard) or external (option for use with transformer secondaries for example) |

| ENVIRONMENT        |  |
|--------------------|--|
| Temperature limits |  |
| Operating          | 0 to 40°C maximum at 1000m<br>0 to 35°C maximum at 2000m refer to derating curve for upper temperature |
| Storage            | -25 to 70°C  |
| Pollution degree   | Pollution degree 2 (EN60947-1)   |
| Atmosphere         | Non-explosive, non-corrosive and non-conductive  |
| Humidity limits    | 5 to 95% RH (non-condensing)   |
| Altitude (maximum) | 1000m maximum at 40°C, 2000m maximum at 35°C refer to derating curve for upper temperature             |

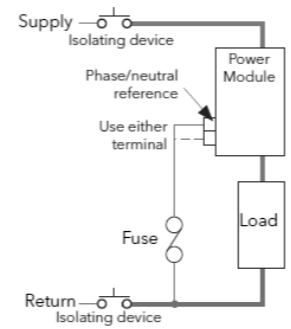


|                         |  |
|-------------------------|--|
| Shock (EN60068-2-29)    | 10g Pk, 6 ms duration, 100 bumps   |
| Vibration (EN60068-2-6) | 67 - 150 Hz at 1g  |
| Protection              | CE (according to EN60529) : IP10 With internal lug terminals of size as given in Line Load Termination details. IP00 with power connector adapter (see user manual for detail)<br>UL: Open type  |
| External wiring         | The cables must be rated 90 °C stranded copper only<br>CE: Must comply with IEC60364-5-52 and IEC60364-5-54 or applicable national standards<br>UL: Wiring must comply with NEC and all applicable local regulations. Connection must be made by using listed lugs |

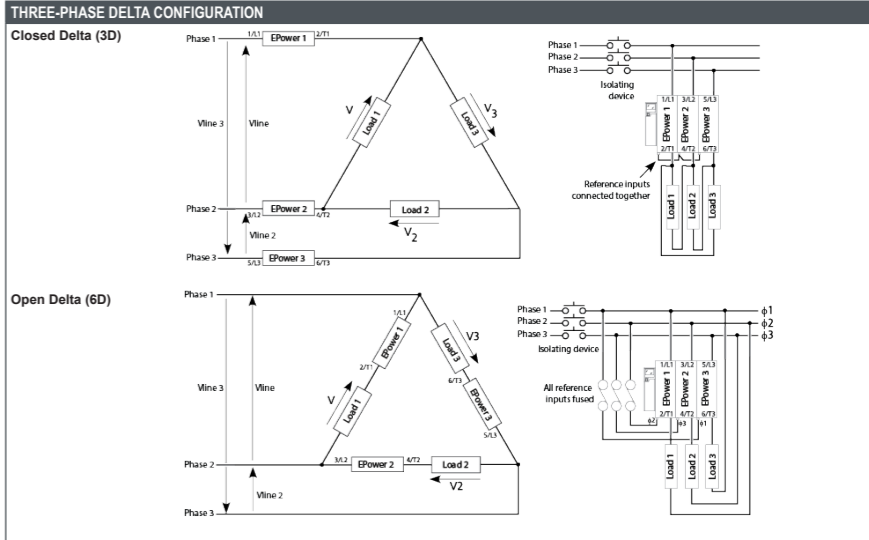
| PHYSICAL   |                    |             |             |             |              |
|--|--------------------|-------------|-------------|-------------|--------------|
| Dimensions and fixing centres                        | See Fixing Details |             |             |             |              |
| Weight (including 2kg for driver module)<br>kg (lbs) | Current            | 1 phase     | 2 phases    | 3 phase     | 4 phases     |
| Weights ± 50gm (2oz)                                 | 50A                | 6.5 (14.3)  | 11.0 (24.3) | 15.5 (34.2) | 20.0 (44.1)  |
|  | 100A               | 6.5 (14.3)  | 11.0 (24.3) | 15.5 (34.2) | 20.0 (44.1)  |
|  | 160A               | 6.9 (15.2)  | 11.8 (26.0) | 16.7 (36.8) | 21.6 (47.6)  |
|  | 250A               | 7.8 (17.2)  | 13.6 (30.0) | 19.4 (42.8) | 25.2 (55.6)  |
|  | 400A               | 11.8 (26.0) | 21.6 (47.6) | 31.4 (69.2) | 41.2 (90.8)  |
|  | 500A               | 14.0 (30.9) | 26.0 (57.3) | 38.0 (83.8) | 50.0 (110.2) |
|  | 630A               | 14.5 (32.0) | 39.5 (87.1) | 39.5 (87.1) | 52.0 (114.6) |

**EMC**  
 This product has been designed for environment A (Industrial), use of this product in environment B (domestic, commercial and light industrial) may cause unwanted electromagnetic disturbances in which cases the user may be required to take adequate mitigation measures  
 Standard EN60947-4-3:2014

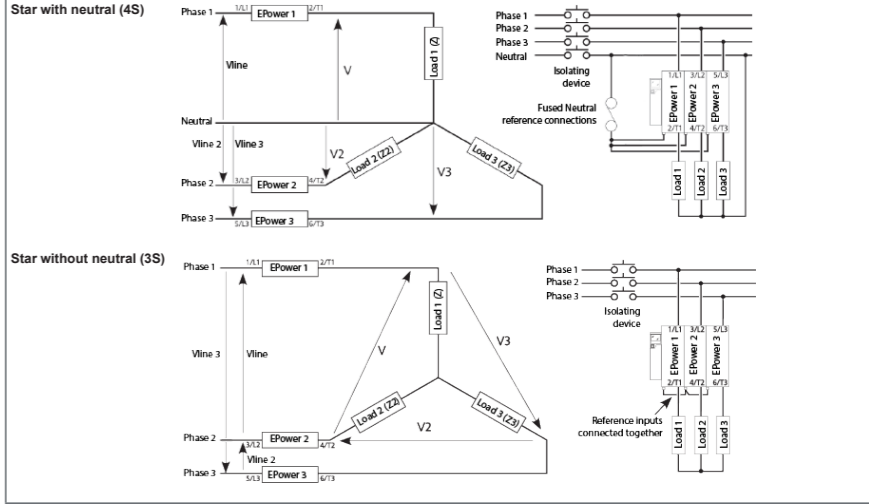
**LOAD COUPLING**  
**SINGLE PHASE INTERNAL FEEDBACK**



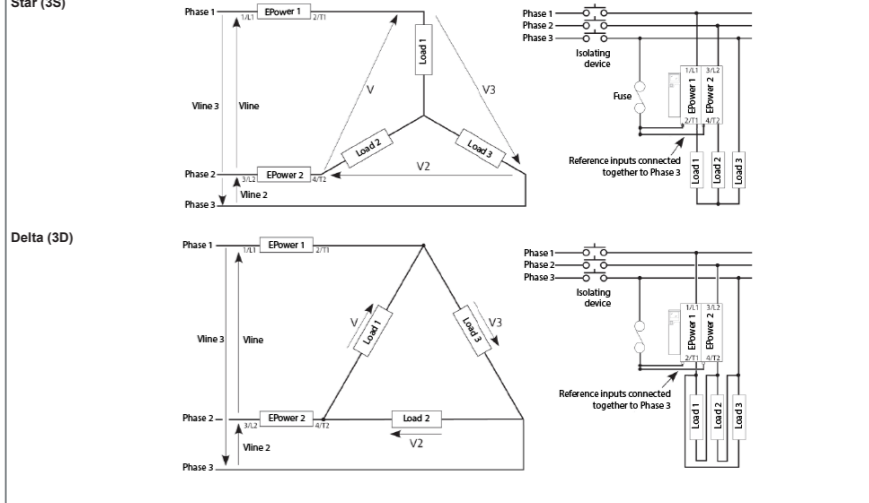
**LOAD COUPLING**



**THREE-PHASE STAR CONFIGURATION**



**TWO-LEG CONFIGURATION**



**FIXING DETAILS**  
 (dimensions mm (inches))  
 50Amps/100Amps/160Amps/250Amps/400Amps/500Amps/630Amps  
 Note: Units are shown with individual mounting brackets. Multi-phase units come supplied with 2, 3 or 4 brackets as appropriate. See table below for details.

| Bracket  | Upper           | Lower         |
|----------|-----------------|---------------|
| 2-phases | Use A & B       | Use E & F     |
| 3-phases | Use A, B & C    | Use E, F & G  |
| 4-phases | Use A, B, C & D | Use E, F, & H |

| 400 AMPS     | Overall Widths |               |               |               |
|--------------|----------------|---------------|---------------|---------------|
|              | 1              | 2             | 3             | 4             |
| No of phases | 1              | 2             | 3             | 4             |
| Door closed  | 189.5 (7.46)   | 314.5 (12.38) | 439.5 (17.30) | 564.5 (22.22) |
| Door open    | 251.0 (9.88)   | 376.0 (14.80) | 501.0 (19.72) | 626.0 (24.65) |

| 500/630 AMPS | Overall Widths |               |               |               |
|--------------|----------------|---------------|---------------|---------------|
|              | 1              | 2             | 3             | 4             |
| No of phases | 1              | 2             | 3             | 4             |
| Door closed  | 189.5 (7.46)   | 314.5 (12.38) | 439.5 (17.30) | 564.5 (22.22) |
| Door open    | 251.0 (9.88)   | 376.0 (14.80) | 501.0 (19.72) | 626.0 (24.65) |

