

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation. All connections should also be inspected periodically to ensure correct tightness.

DO NOT USE POWER TOOLS ON THESE PRODUCTS



## Star Delta Starters Operating Instructions

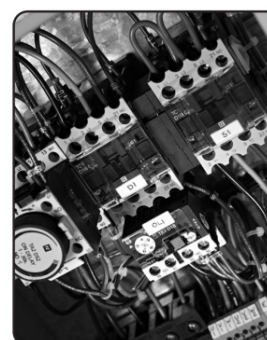
Some manufactures star delta starters are fitted with overload relays calibrated for full load current (**red scale**). Normal production overloads are calibrated for tripping / operating current (**black scale**).

Europa Components star delta starters are always fitted with black scale and the overload fitted should be set to the **full load motor current divided by 1.732**

The table below shows the correct overload value for the FLC of the motor.

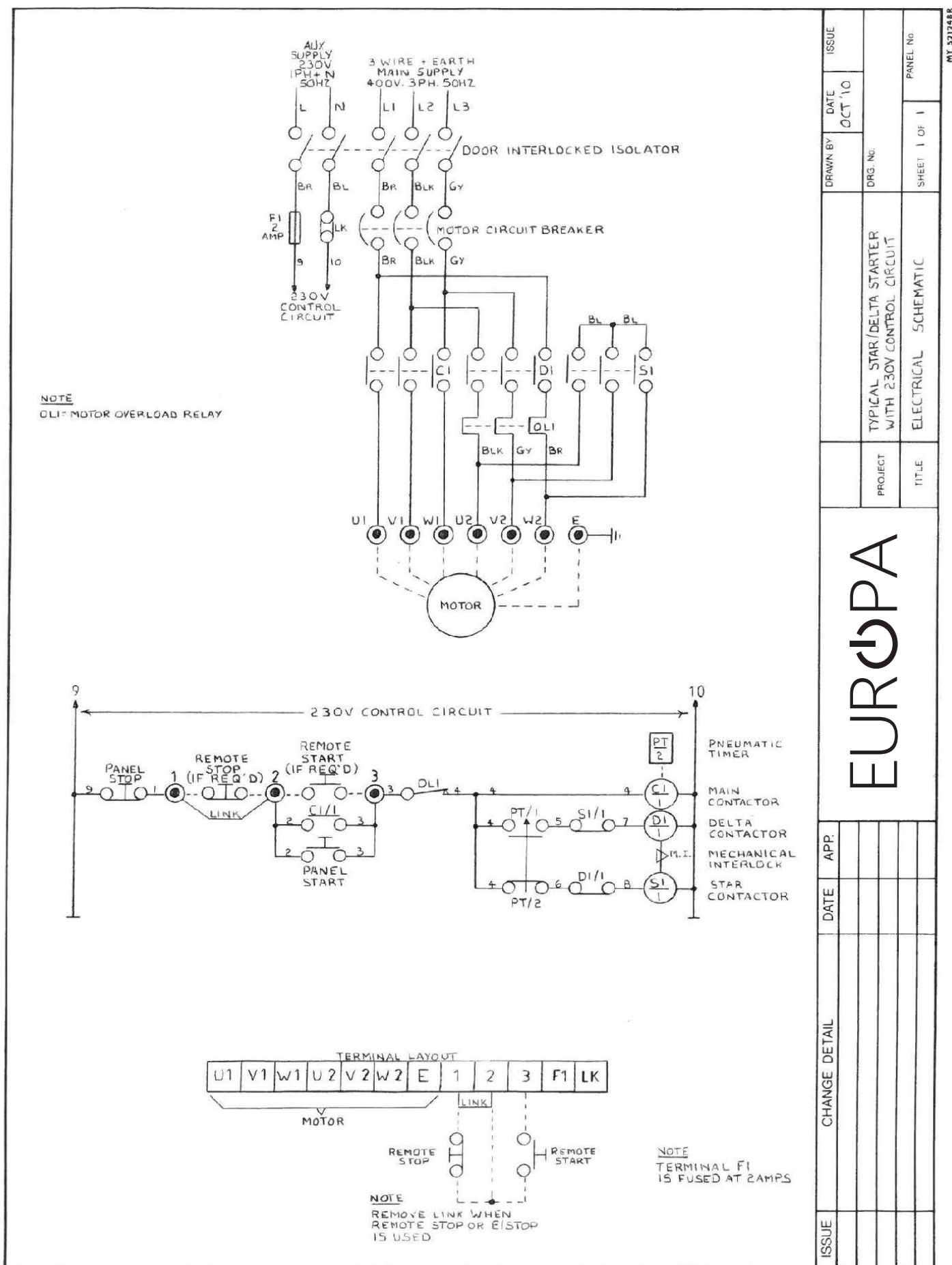
### Overload Selection Chart

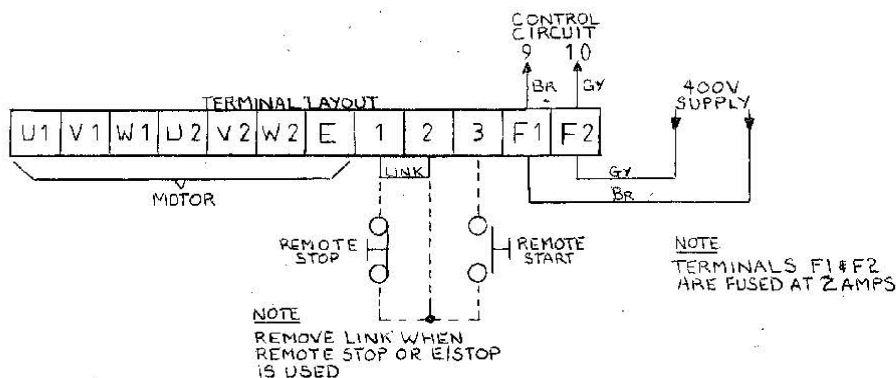
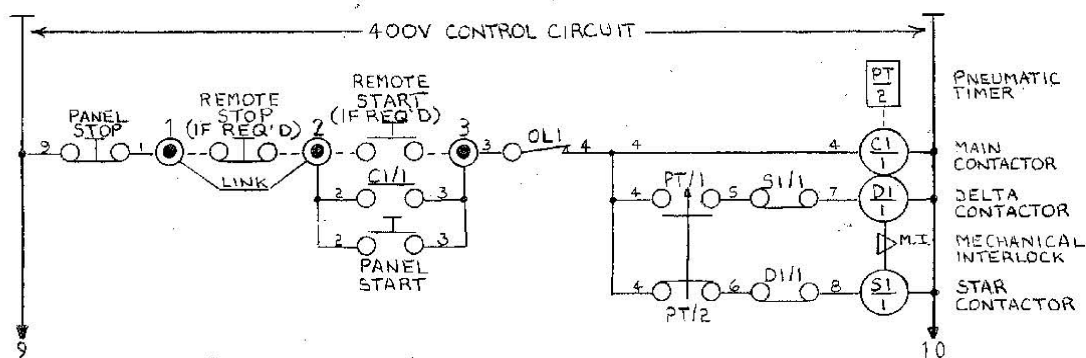
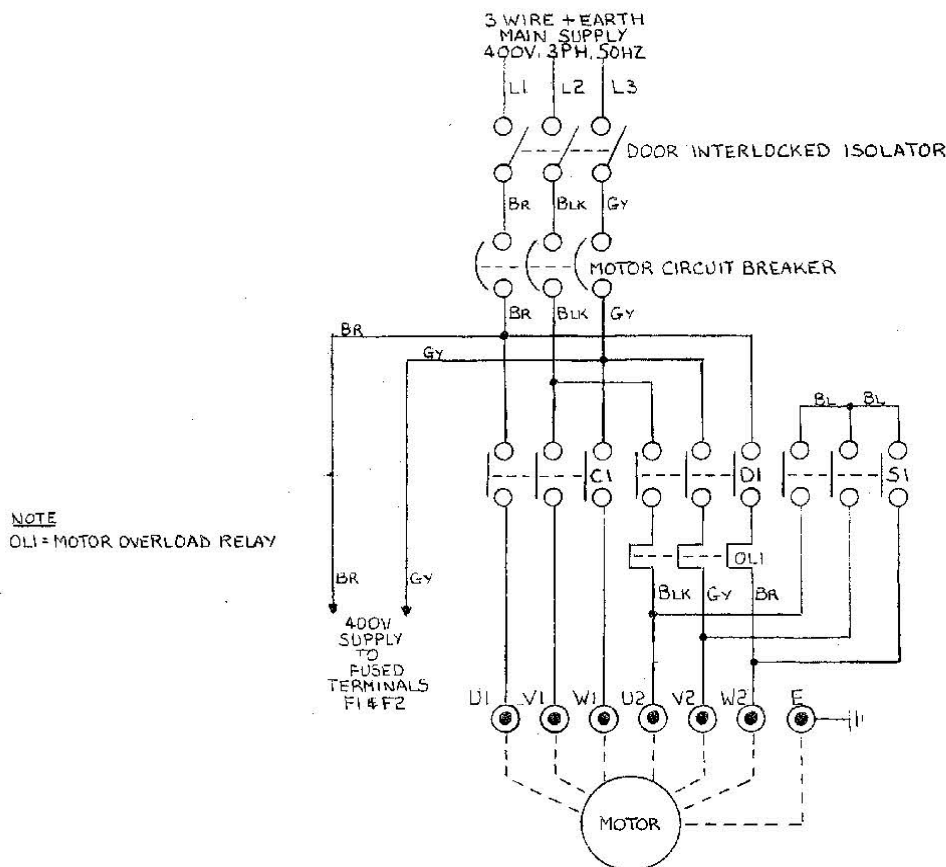
| Part Number | Overload Value (Black Scale) | Motor FLC (Red Scale) |
|-------------|------------------------------|-----------------------|
| TR2-D09305  | 0.63-1.00A                   | 1.09-1.73A            |
| TR2-D09306  | 1.00-1.65A                   | 1.73-2.86A            |
| TR2-D09307  | 1.60-2.50A                   | 2.8-4.33A             |
| TR2-D09308  | 2.5-4.0A                     | 4.3A-6.9A             |
| TR2-D09310  | 4.0-6.0A                     | 6.9-10.4A             |
| TR2-D09312  | 5.5-8.0A                     | 9.5-10.4A             |
| TR2-D09314  | 7.0-10.0A                    | 12.1-17.3A            |
| TR2-D12316  | 9.0-13.0A                    | 15.6-22.5A            |
| TR2-D18321  | 12.0-18.0A                   | 20.8-31.2A            |
| TR2-D25322  | 17.0-25.0A                   | 29.5-43.3A            |
| TR2-D32353  | 23.0-32.0A                   | 39.8-55.4A            |
| TR2-D32355  | 30.0-40.0A                   | 52.0-69.3A            |
| TR2-D40353  | 23.0-032.0A                  | 39.8-55.4A            |
| TR2-D40355  | 30.0-40.0A                   | 52.0-69.3A            |
| TR2-D65357  | 37.0-50.0A                   | 64.0-86.6A            |
| TR2-D65359  | 48.0-65.0A                   | 83.14-112.6A          |
| TR2-D65361  | 55.0-70.0A                   | 95.3-121.3A           |
| TR2-D80363  | 63.0-80.0A                   | 109.0-138.6A          |
| TR2-D95365  | 80.0-93.0A                   | 138.6-161.1A          |



### SDS Enclosure Dimensions

| KW Rating | Height mm | Width mm | Depth mm |
|-----------|-----------|----------|----------|
| 11KW      | 400mm     | 300mm    | 200mm    |
| 15KW      | 400mm     | 300mm    | 200mm    |
| 22KW      | 400mm     | 300mm    | 200mm    |
| 30KW      | 600mm     | 400mm    | 200mm    |
| 37KW      | 600mm     | 500mm    | 200mm    |
| 45KW      | 600mm     | 500mm    | 200mm    |
| 55KW      | 600mm     | 500mm    | 200mm    |





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| CUSTOMER             | PROJECT | EUROPA COMPONENTS          | ORG. No. |
|                      |         | TYPICAL STAR/DELTA STARTER |          |
| TITLE                | SHEET   | PANEL No.                  |          |
| ELECTRICAL SCHEMATIC | 1 OF 1  |                            |          |

EUROPA