

## /// BR930 Series - Electromechanical Signalling Relay

### TY155/GRP03

#### QCJ1 1F3B 50V

DC non-safety time delay relay nominally to BR949.



#### Features

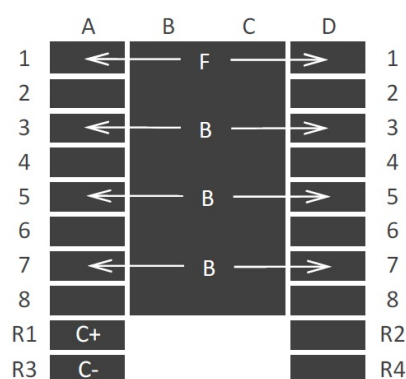
The TY155/GRP03 is a 1F 3B non-safety 12 second time delay relay unit for use in point control circuits operating a point contactor relay to BR943. The contacts within this relay unit are rated to carry no more than 300 mA.

It is used to disconnect the BR943 relay coil if the latter is not otherwise de-energised, within a predetermined time. The time delay provided is sufficient to allow the point machine to complete its normal operation.

Of compact modular plug-in design it is equipped with a safety interlocking system (pin code) for insertion into mating plugboards.

#### Contact arrangement

REAR VIEW OF RELAY



1F 3B CONTACTS

#### General characteristics

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| PADS Reference           | 0085/002512                                                                       |
| Pin code                 | 6047 ABDFGJ                                                                       |
| Contact arrangement      | 1F 3B                                                                             |
| Coil configuration       | Single wound single coil                                                          |
| Resistance of winding(s) | 1700Ω                                                                             |
| Rating                   | 50V DC                                                                            |
| Weight                   | 0.6 kg                                                                            |
| Plugboard                | TY081-001<br>PADS Ref 0085/002081<br>See plugboard datasheet for more information |

#### Specific characteristics

|                                                                                                                                                          |                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| AC Immunity<br>Coil RMS voltage at 50 Hz frequency that can be applied without generating the closing of any of the front (N/O - Normally Open) contacts | This relay is not AC immune |
| DC Biasing<br>Maximum supply which can be applied connected in reverse polarity and shall not result in the breaking of any back contact of the relay    | This relay is not DC biased |

#### Electrical characteristics

|                             |                                     |
|-----------------------------|-------------------------------------|
| Operate value               | Not specified in BR949              |
| Full operate value          | 40.0V                               |
| Release value               | Not specified in BR949              |
| Full release value          | Not specified in BR949              |
| Operate time                | 10-14s when powered by 40.0-60.0VDC |
| Release time                | Not specified in BR949              |
| Interrupt time              | Not specified in BR949              |
| Signalling contact pressure | 28 g (1 oz) min                     |

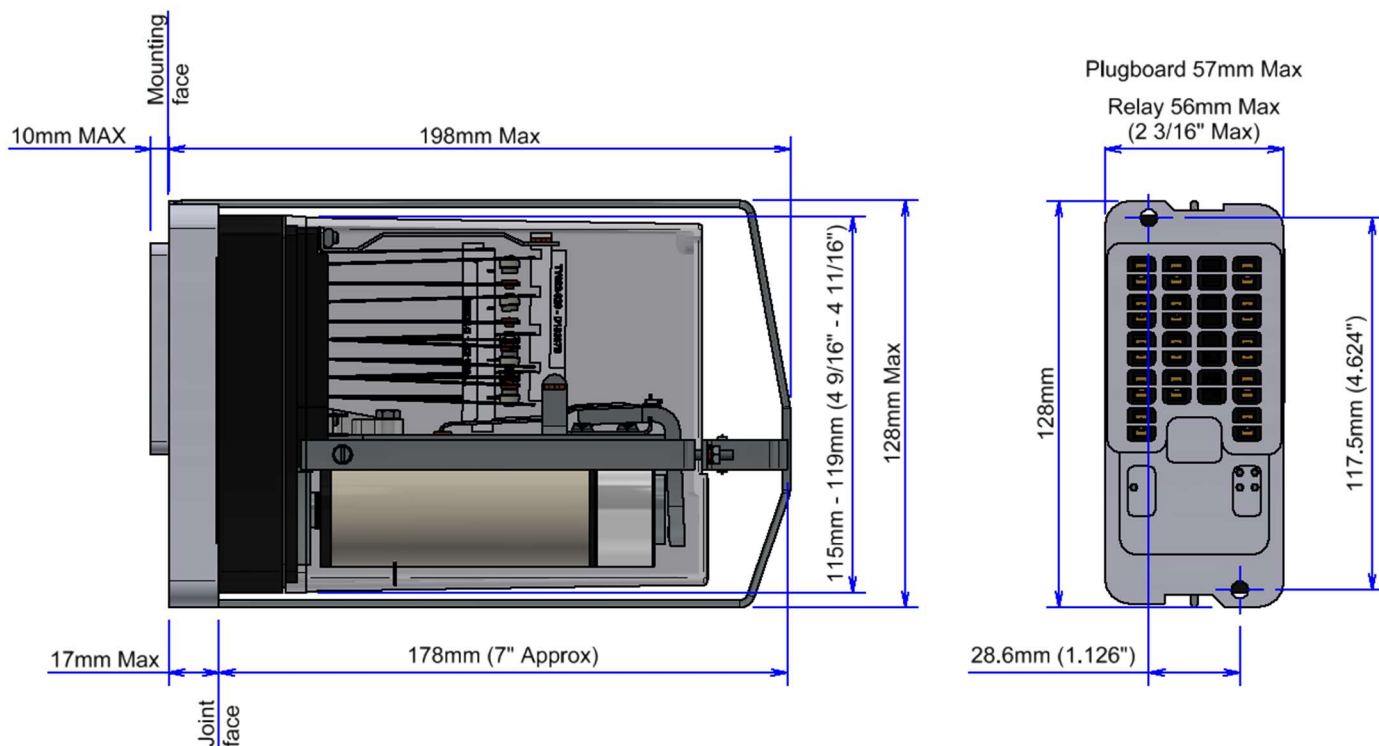
#### Product acceptance certification

Network Rail UK: PA05/04802

## Outline drawing

## DC non-safety time delay relay nominally to BR949

**TY155/GRP03**



Imperial dimensions in brackets are those specified in BR930  
 Dimensions illustration shows generic BR930 relay.

### Note

BR949 relays are a non-safety time delay relay designed to switch the operating circuit of a single BR943 relay. Furthermore, it is the operators' responsibility to ensure compliance with the requirements of clause 5.2 of BR930 and clauses 8.1, 8.2 and 11.6 of BR949.

 **Over 10 million Mors Smitt relays in use in rail transport applications worldwide!**

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