

## /// BR930 Series - Electromechanical Signalling Relay

### TY082/GRP13

#### QN1 8F4B 50V

DC neutral line relay to BR930.



#### Features

The TY082/GRP13 is an 8F 4B Neutral Line Relay for general railway trackside signalling applications where special characteristics such as AC immunity, slow release etc. are not required.

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

#### Contact arrangement

REAR VIEW OF RELAY

|    | A | B | C | D |    |
|----|---|---|---|---|----|
| 1  | F | F |   | F | 1  |
| 2  |   |   |   |   | 2  |
| 3  | F | F |   | F | 3  |
| 4  |   |   |   |   | 4  |
| 5  | B | F |   | B | 5  |
| 6  |   |   |   |   | 6  |
| 7  | B | F |   | B | 7  |
| 8  |   |   |   |   | 8  |
| R1 | C |   |   | C | R2 |
| R3 |   |   |   |   | R4 |

8F 4B CONTACTS

#### General characteristics

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| PADS Reference           | 0085/000420                                                                       |
| Pin code                 | 003 ABCEF                                                                         |
| Contact arrangement      | 8F 4B                                                                             |
| Coil configuration       | Single wound single coil                                                          |
| Resistance of winding(s) | 925Ω                                                                              |
| Rating                   | 50 VDC                                                                            |
| Weight                   | 1.3 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

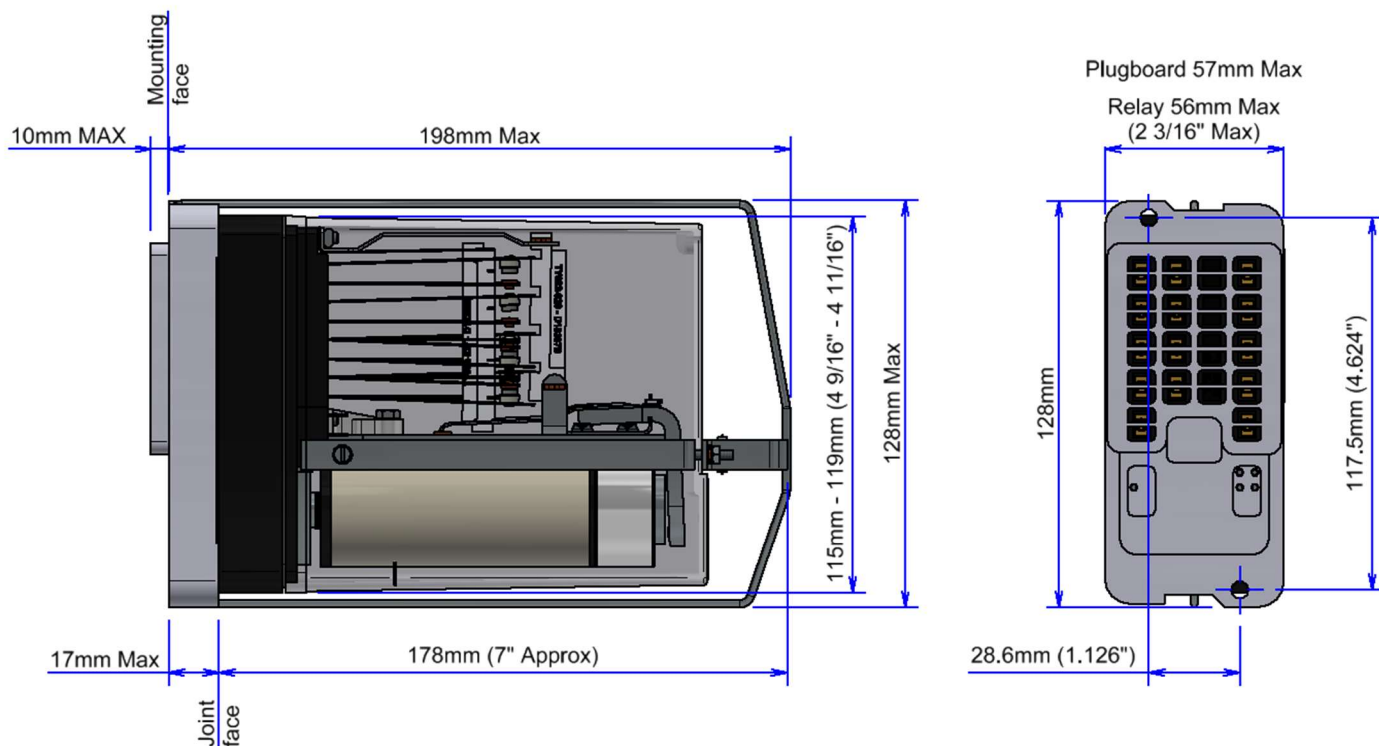
|                             |                        |
|-----------------------------|------------------------|
| Operate value               | Not specified in BR930 |
| Full operate value          | 40.0V                  |
| Release value               | 7.5V                   |
| Full release value          | 4.0V                   |
| Operate time                | Not specified in BR930 |
| Release time                | Not specified in BR930 |
| Interrupt time              | Not specified in BR930 |
| Signalling contact pressure | 28 g (1 oz) min        |

#### Product acceptance certification

Network Rail UK: PA05/04802

## Outline drawing

## DC neutral line relay to BR930 TY082/GRP13



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

### Note

BR930 relays are optimised to switch traditional signalling circuits consisting of the coils of other relays and incandescent lamps. Their contacts are non-weld, not weld-no-transfer. Signalling schemes using these relays must be designed to operate safely within these constraints. Furthermore, it is the operators' responsibility to ensure compliance with the requirements of clauses 1.2, 5.2, 8.1, 8.2 and 12.1 of BR930.

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

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