

## /// BR930 Series - Electromechanical Signalling Relay

### TY163/GRP06

#### QRJ1 3F1B 50V

DC Neutral Time Delay Relay.



#### Features

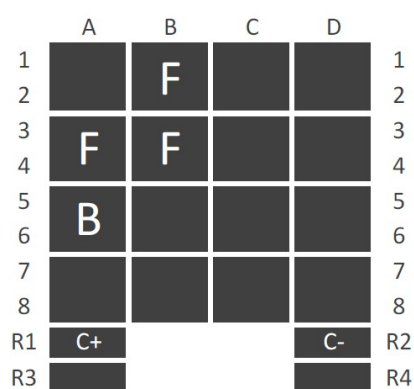
The TY163/GRP06 is a 3F 1B relay for use where a 10 second time delay is required upon de-energisation which is in excess of that obtainable conveniently from a relay with a slugged iron circuit.

The time delay is achieved via a resistor/capacitor circuit. The delay is not adjustable.

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



3F 1B CONTACTS

#### General characteristics

PADS Reference	0085/002509
Pin code	237 DEFGK
Contact arrangement	3F 1B
Coil configuration	Single wound single coil
Resistance of winding(s)	3600Ω
Rating	50 VDC
Weight	1.0 kg
Plugboard	TY081-001 PADS Ref 0085/002081 See plugboard datasheet for more information

#### Specific characteristics

AC Immunity 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 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 BR946
Full operate value	40.0V
Release value	7.6V
Full release value	4.0V
Operate time	Not specified in BR946
Release time	10s @ 60 VDC
Interrupt time	Not specified in BR946
Signalling contact pressure	28 g (1 oz) min

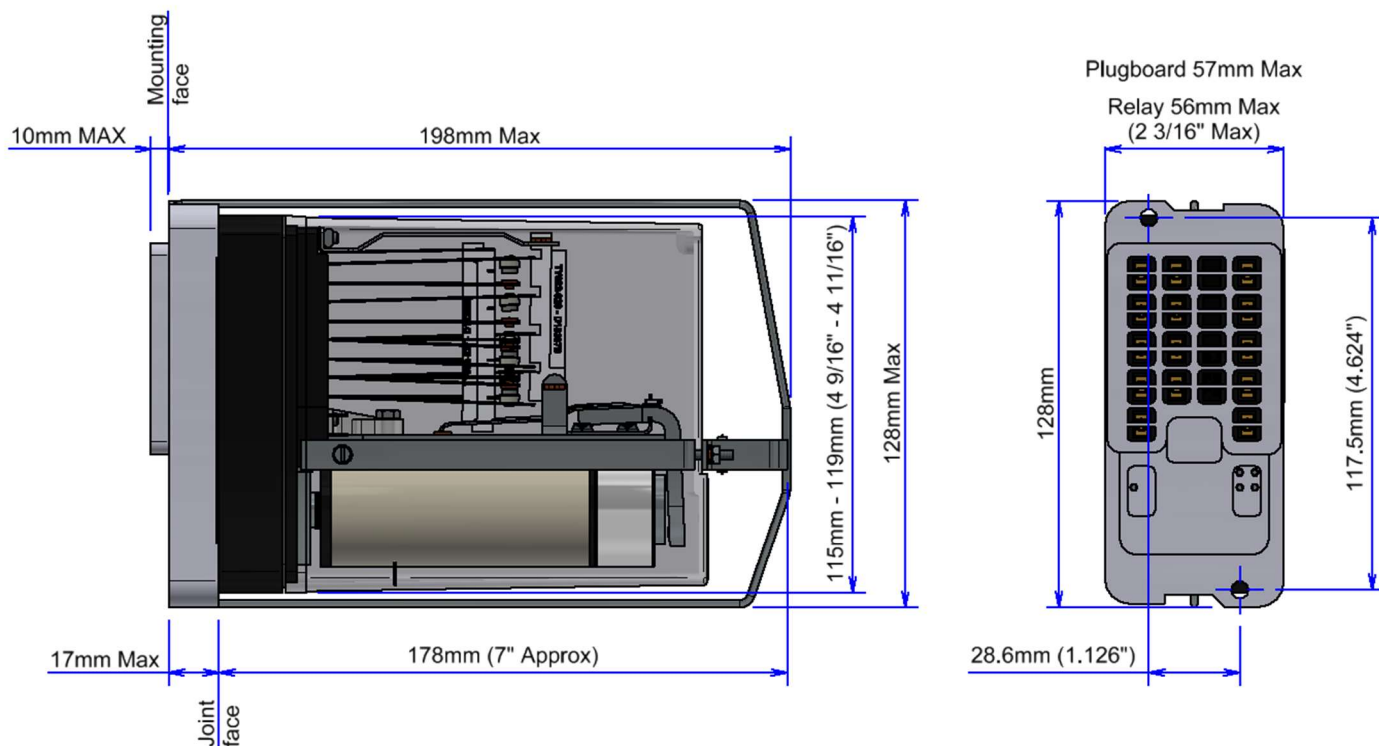
#### Product acceptance certification

Network Rail UK: PA05/04802

## Outline drawing

## DC Neutral Time Delay Relay

**TY163/GRP06**



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.

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