

## /// BR930 Series - Electromechanical Signalling Relay

### TY156/GRP05

#### QNN1 2x4F4B 24V

Twin DC Neutral Line Relay to BR960.



#### Features

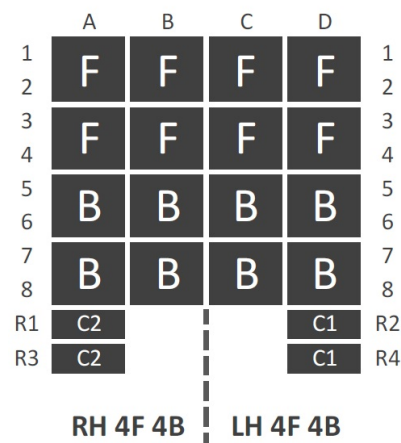
The TY156/GRP05 is a Twin 4F 4B Neutral Line Relay for general railway trackside signalling applications where special characteristics such as AC immunity, slow release etc. are not required.

Twin relays consist of two relays which in effect are electrically and mechanically independent, housed in a single enclosure to the dimensions of a single relay to BR930.

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



#### General characteristics

PADS Reference	0085/001600
Pin code	057 ACEHJ
Contact arrangement	4F 4B LH&RH
Coil configuration	Single wound twin coil
Resistance of winding(s)	250Ω
Rating	24V DC
Weight	1.2 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

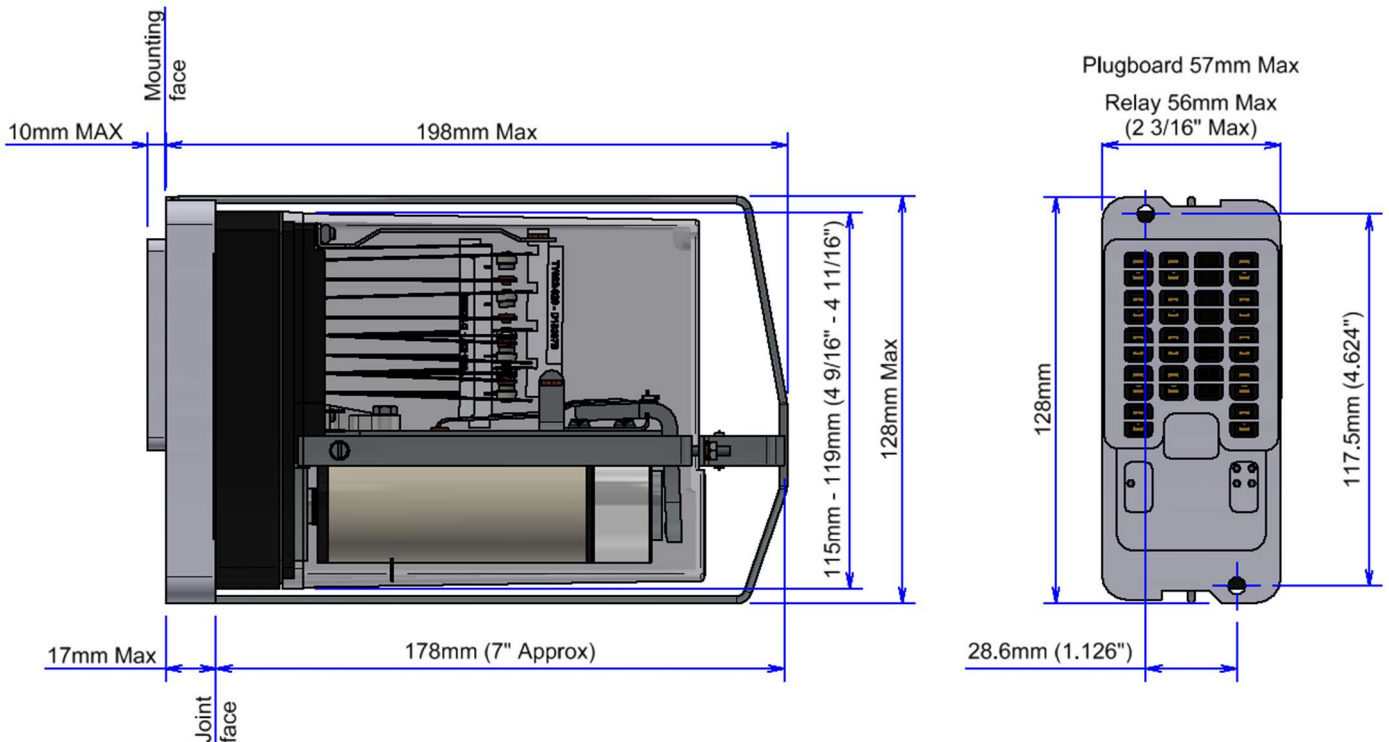
Operate value	Not specified in BR960
Full operate value	19.2V
Release value	3.6V
Full release value	2.0V
Operate time	Not specified in BR960
Release time	Not specified in BR960
Interrupt time	Not specified in BR960
Signalling contact pressure	28 g (1 oz) min

#### Product acceptance certification

Network Rail UK: PA05/04802

## Outline drawing

## Twin DC Neutral Line Relay to BR960 TY156/GRP05



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!

**Mors Smitt Asia Ltd.**  
 26/F., Casey Aberdeen House  
 38 Heung Yip Road, Wong Chuk Hang  
 Hong Kong  
 Tel: +852 2343 555  
 sales.msa@wabtec.com

**Mors Smitt France SAS**  
 2 Rue de la Mandinière  
 72300 Sablé-sur-Sarthe, France  
 Tel: +33 (0) 243 92 82 00  
 sales.msf@wabtec.com

**Mors Smitt UK**  
 Graycar Business Park,  
 Burton on Trent, DE13 8EN, UK  
 Tel: +44 (0)1283 357 263  
 sales.msuk@wabtec.com

**Wabtec Netherlands B.V.**  
 Darwinstraat 10,  
 6718 XR Ede, Netherlands  
 Tel: +31 (0)88 600 4500  
 sales.msbv@wabtec.com

**Mors Smitt Technologies Ltd.**  
 1010 Johnson Drive,  
 Buffalo Grove, IL 60089-6918, USA  
 mst\_salesupport@wabtec.com.

**RMS Mors Smitt**  
 19 Southern Court,  
 Keysborough, VIC 3173, Australia  
 Tel: +61 (0)3 8544 1200  
 sales.rms@wabtec.com

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