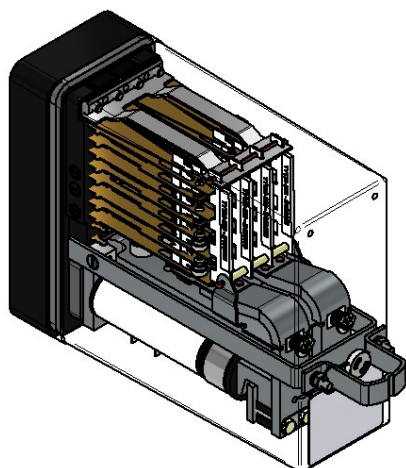


/// BR930 Series - Electromechanical Signalling Relay

TY157/GRP09

QBBA1 2×4F4B 12V

Twin AC Immune DC Biased Line
Relay nominally to BR961.



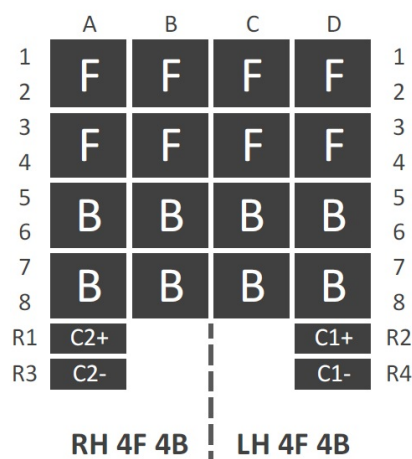
Features

The TY157/GRP09 is a Twin 4F 4B AC Immune DC Biased Line Relay for general railway trackside signalling applications where special characteristics such as 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	-
Pin code	S013 ABDKS
Contact arrangement	4F 4B LH&RH
Coil configuration	Single wound twin coil
Resistance of winding(s)	50Ω
Rating	12 VDC
Weight	1.3 kg
Plugboard	TY081-001 PADS Ref 0085/002081 See plugboard datasheet for more information

Specific characteristics

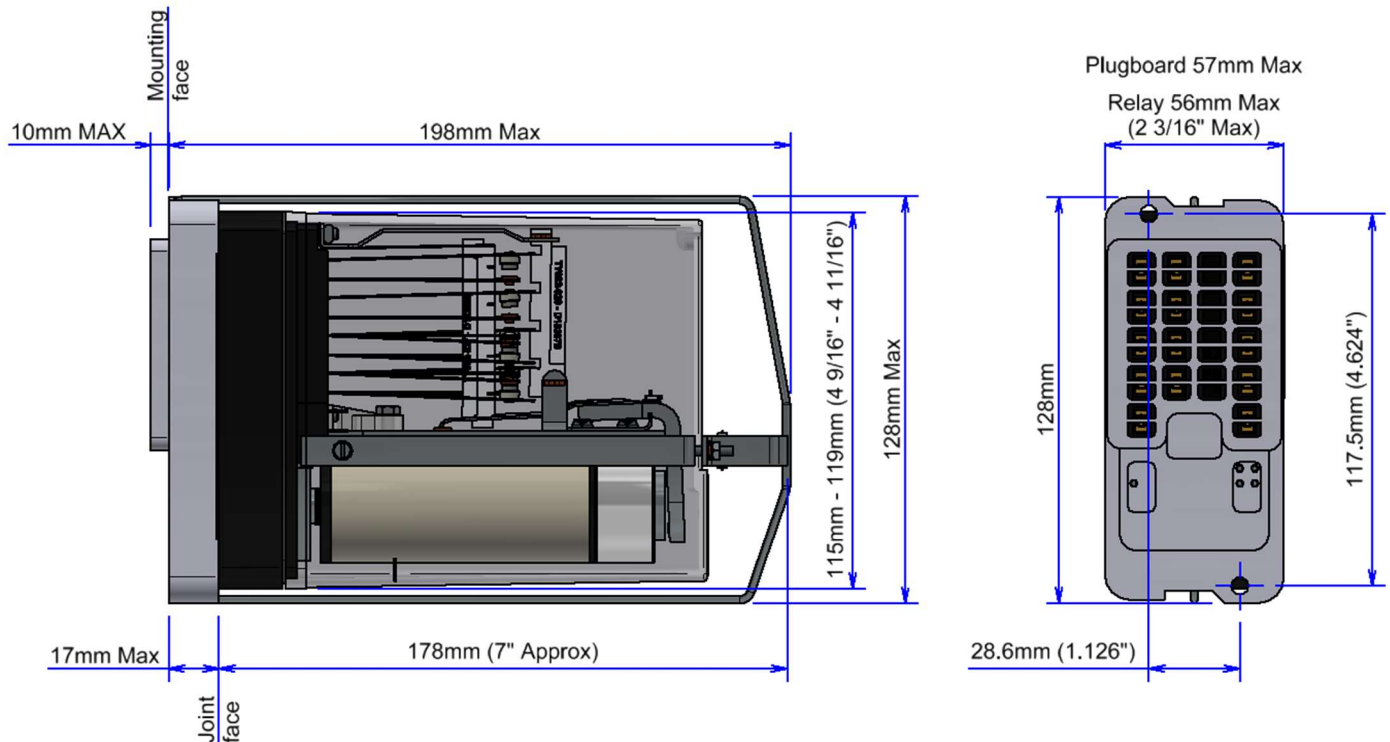
AC Immunity Coil RMS voltage at 50 Hz frequency that can be applied without generating the closing of any of the front (N/O - Normally Open) contacts	AC immune to 1000V 50hz
DC Biasing Maximum supply which can be applied connected in reverse polarity and shall not result in the breaking of any back contact of the relay	Immune to 240VDC applied in the reverse sense.

Electrical characteristics

Operate value	Not specified in BR961A
Full operate value	9.1V
Release value	2.4V
Full release value	2.4V
Operate time	Not specified in BR961A
Release time	Not specified in BR961A
Interrupt time	Not specified in BR961A
Signalling contact pressure	28 g (1 oz) min

Outline drawing

Twin AC Immune DC Biased Line Relay nominally to BR961 TY157/GRP09



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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