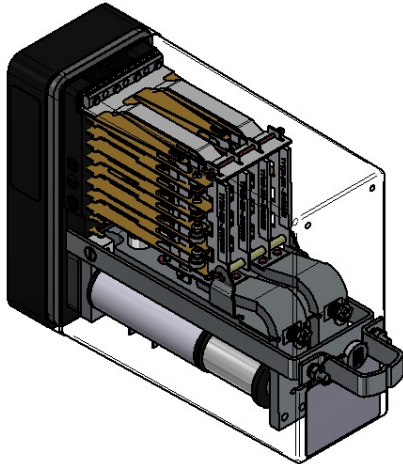


/// BR930 Series - Electromechanical Signalling Relay

TY160/GRP07

QNNA1 2×4F4B 110V

Twin AC immune DC neutral line relay nominally to BR966 F6.

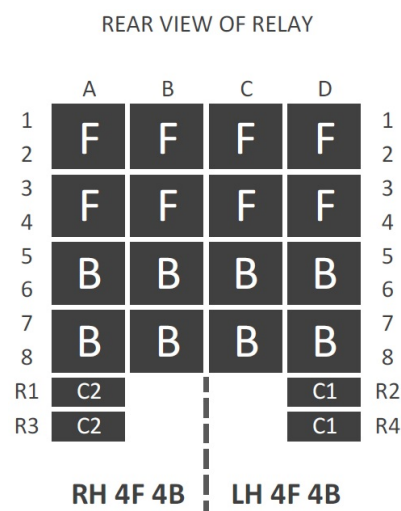


Features

The TY160/GRP07 is a Twin 4F 4B AC Immune DC neutral 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



General characteristics

PADS Reference	-
Pin code	T013 AFGHT
Contact arrangement	4F 4B LH&RH
Coil configuration	Single wound twin coil
Resistance of winding(s)	3200Ω
Rating	110V DC
Weight	1.3 kg
Plugboard	TY081-001 PADS Ref 0085/002081 See plugboard datasheet for more information

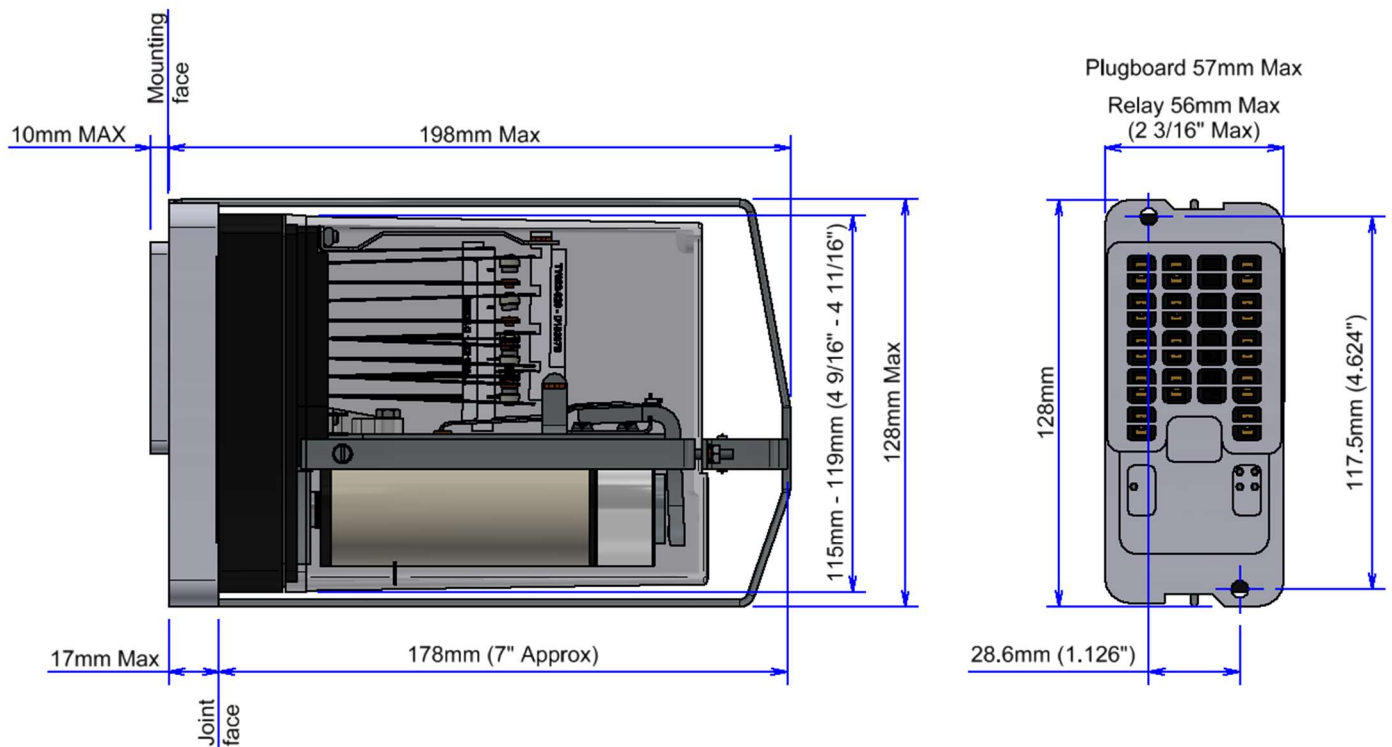
Specific characteristics

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	This relay is not DC biased

Electrical characteristics

Operate value	Not specified in BR966 F6
Full operate value	60.0V
Release value	9.0V
Full release value	4.5V
Operate time	<200ms @ 80% of Nominal Voltage
Release time	<200ms @ 120% of Nominal Voltage
Interrupt time	Not specified in BR966 F6
Signalling contact pressure	28 g (1 oz) min

Outline drawing

**Twin AC immune DC neutral line relay nominally to BR966
 F6**
TY160/GRP07


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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