

/// BR930 Series - Electromechanical Signalling Relay

TY153/GRP04

QTA2 2F 10V

AC Immune DC Neutral Track Relay
to BR966 F9.



Features

The TY153/GRP04 is a 2F AC Immune DC Track Relay used for proving the absence of a train on tracks. It is suitable for use in 50hz electrified traction areas. These relays must be used in conjunction with a slow pick-up repeat relay. 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	1
2					2
3					3
4					4
5					5
6					6
7					7
8					8
R1	C			C	R2
R3					R4

2F CONTACTS

General characteristics

PADS Reference	0085/000230
Pin code	104 ACGHK
Contact arrangement	2F
Coil configuration	Single wound single coil
Resistance of winding(s)	70Ω
Rating	10 VDC
Weight	1.7 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 momentary application of 750 VAC to not make front contacts for longer than 250ms.
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

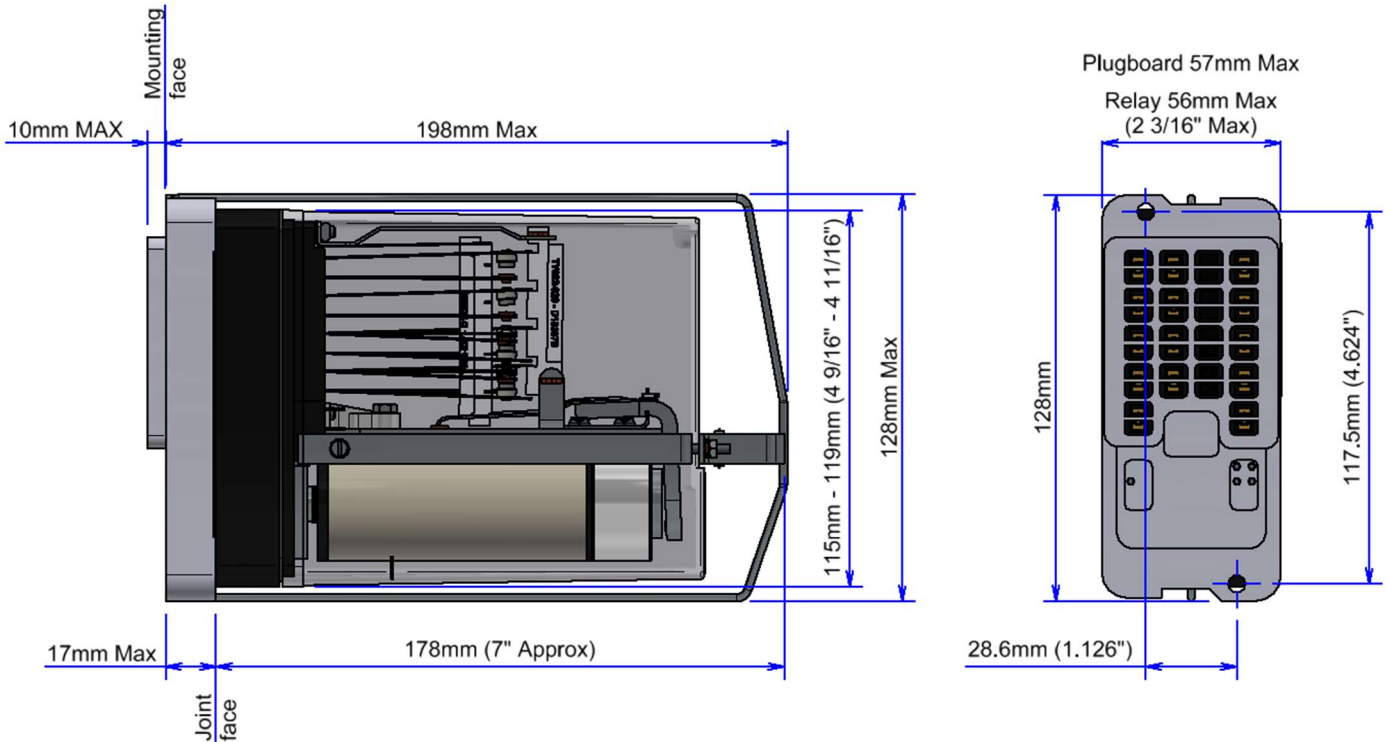
Operate value	4.0V - 2.8V
Full operate value	5.0V
Release value	0.68 × Operating Voltage
Full release value	Not specified in BR966 F9
Operate time	Not specified in BR966 F9
Release time	Not specified in BR966 F9
Interrupt time	Not specified in BR966 F9
Signalling contact pressure	28 g (1 oz) min

Product acceptance certification

Network Rail UK: PA05/04802

Outline drawing

AC Immune DC Neutral Track Relay to BR966 F9 TY153/GRP04



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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