

/// BR930 Series - Electromechanical Signalling Relay

TY084/GRP10

QBA1 4F4B 50V

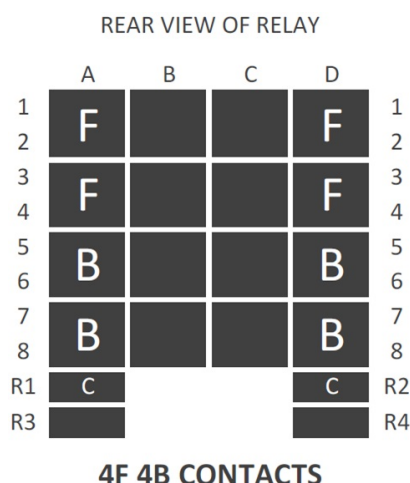
AC Immune DC Biased Line Relay
to BR932A.



Features

The TY084/GRP10 is a 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. 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	0085/000900
Pin code	028 ACDGH
Contact arrangement	4F 4B
Coil configuration	Single wound single coil
Resistance of winding(s)	950Ω
Rating	50 VDC
Weight	1.4 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 1000VDC applied in the reverse sense.

Electrical characteristics

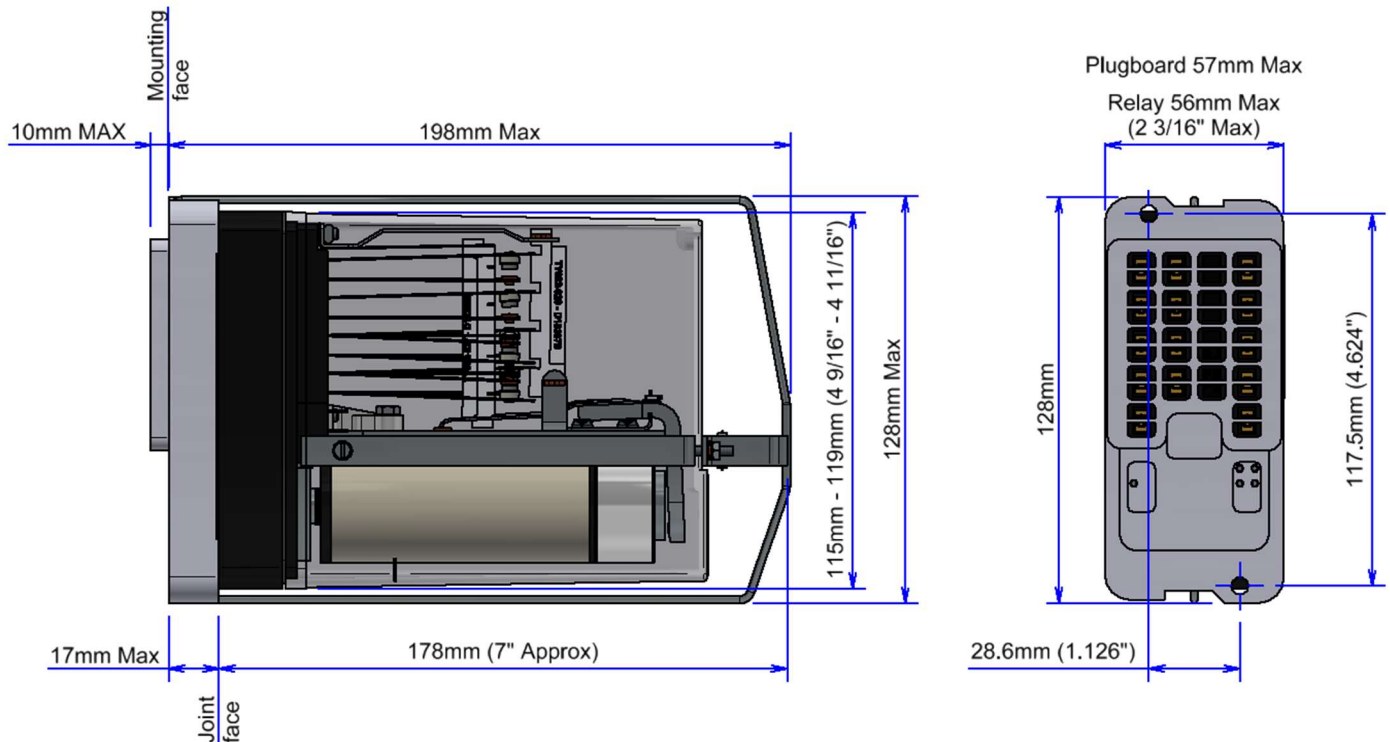
Operate value	Not specified in BR932A
Full operate value	40.0V
Release value	7.5V
Full release value	4.0V
Operate time	Not specified in BR932A
Release time	Not specified in BR932A
Interrupt time	Not specified in BR932A
Signalling contact pressure	28 g (1 oz) min

Product acceptance certification

Network Rail UK: PA05/04802

Outline drawing

AC Immune DC Biased Line Relay to BR932A TY084/GRP10



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

Wabtec Netherlands B.V.
 Darwinstraat 10,
 6718 XR Ede, Netherlands
 Tel: +31 (0)88 600 4500
 sales.msbv@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 Technologies Ltd.
 1010 Johnson Drive,
 Buffalo Grove, IL 60089-6918, USA
 mst_salesupport@wabtec.com.

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

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

(c) Copyright 2025

All rights reserved. Nothing from this edition may be multiplied, or made public in any form or manner, either electronically, mechanically, by photocopying, recording, or in any manner, without prior written consent from Mors Smitt. This also applies to accompanying drawings and diagrams. Due to a policy of continuous development Mors Smitt reserves the right to alter the equipment specification and description outlined in this datasheet without prior notice and no part of this publication shall be deemed to be part of any contract for the equipment unless specifically referred to as an inclusion within such contract. Mors Smitt does not warrant that any of the information contained herein is complete, accurate, free from potential errors, or fit for any particular purpose. Mors Smitt does not accept any responsibility arising from any party's use of the information in this document.