

## /// BR930 Series - Electromechanical Signalling Relay

### TY155/GRP05

#### QCJ1 1F3B 50V

DC non-safety time delay relay nominally to BR949.



#### Features

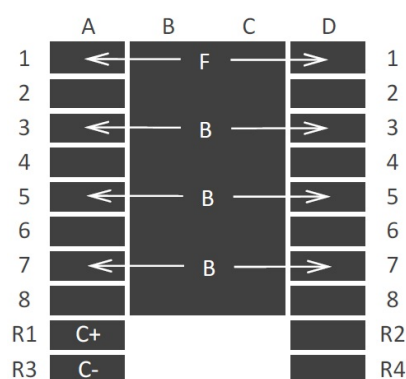
The TY155/GRP05 is a 1F 3B non-safety 10 second time delay relay unit for use in point control circuits operating a point contactor relay to BR943. The contacts within this relay unit are rated to carry no more than 300 mA.

It is used to disconnect the BR943 relay coil if the latter is not otherwise de-energised, within a predetermined time. The time delay provided is sufficient to allow the point machine to complete its normal operation.

Of compact modular plug-in design it 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	X196 EFGHX
Contact arrangement	1F 3B
Coil configuration	Single wound single coil
Resistance of winding(s)	1700Ω
Rating	50V DC
Weight	0.6 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

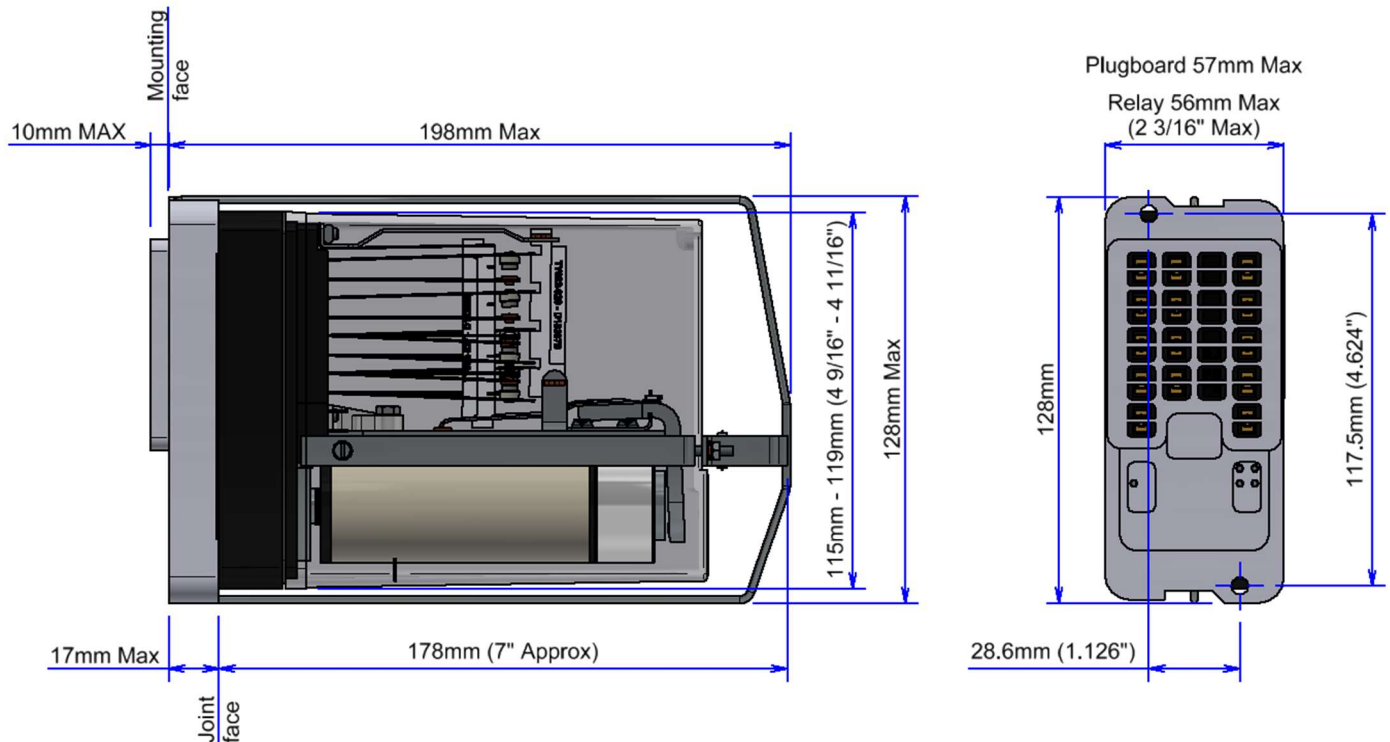
#### Electrical characteristics

Operate value	Not specified in BR949
Full operate value	40.0V
Release value	Not specified in BR949
Full release value	Not specified in BR949
Operate time	8-12s when powered by 40.0-60.0VDC
Release time	Not specified in BR949
Interrupt time	Not specified in BR949
Signalling contact pressure	28 g (1 oz) min

## Outline drawing

## DC non-safety time delay relay nominally to BR949

**TY155/GRP05**



Imperial dimensions in brackets are those specified in BR930  
 Dimensions illustration shows generic BR930 relay.

### Note

BR949 relays are a non-safety time delay relay designed to switch the operating circuit of a single BR943 relay. Furthermore, it is the operators' responsibility to ensure compliance with the requirements of clause 5.2 of BR930 and clauses 8.1, 8.2 and 11.6 of BR949.

 **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.