



SERVING
SAFETY

Mors Smitt Railway Technology

RelayDoc - BR930 signalling relay tester



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RelayDoc - Q-Style - BR930 signalling relay tester

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RelayDoc

The Mors Smitt RelayDoc is designed and customised to provide controlled auditable testing of customer specific BR930/Q-Style signalling relays in accordance with their original BRB design specifications. Most BR930/Q-Style relays can be tested easily and quickly using an intuitive touch screen interface allowing immediate pass/fail results.

Test profiles are stored locally on each RelayDoc which is updated from a web-server. These profiles can only be modified by MSUK on a global basis ensuring that relays are always tested to the correct specification.

RelayDoc automatically detects the pin code and contact configuration of relays to be tested and records and saves all test results. Reports are displayed on the touch screen and stored on-board for later viewing or retrieval to a USB storage device.

Reports are also synchronised to a cloud database via LAN or optional Wi-Fi providing analysis and reporting tools.

RelayDoc can be supplied in a rugged portable case which is ideal for workshop or trackside use. Optional extras include a USB barcode reader used for entering relay serial numbers.

Standard power supply voltage is 100 - 240V A.C. fed via an IEC 60320 C5 mains lead when wall mounted and an IEC 63320 C13 mains lead when mounted in the illustrated case.

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Mors Smitt is part of Wabtec Corporation, the NYSE stock exchange listed, global supplier of highly engineered components and solutions for rail and selected industrial markets. Operations in 17 countries and world wide sales in over 100 countries.

Wabtec Corporation holds over 1.200 patents and has world class internal processes based on lean manufacturing and continuous improvement principles (Wabtec Performance System).

Within the Wabtec group Mors Smitt has its own name & identity and is focused on satisfying the needs of customers in the rail, power grid, industry and installation sectors.

Utrecht, July 2014

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View	Serial Num	TimeStamp	Relay Type	Code Pins	Select
	TYUJ	01/01/2012 22:22:28	QBA1 50V 8F8B	ACDGH	<input type="checkbox"/>
	RRGEFG	01/01/2012 22:42:38	QBA1 50V 4F4B	ACDGH	<input type="checkbox"/>
	TRGTY	01/01/2012 22:18:46	QBA1 50V 4F4B	ACDGH	<input type="checkbox"/>



RelayDoc - Q-Style - BR930 signalling relay tester



Key Product features

- User-friendly relay test procedure
- Multiple relay types supported
- TouchScreen
- 5" colour display
- Automatic pin code detection
- Contact conditioning at 100mA
- LAN/USB and optional Wi-Fi / 3G
- Cloud database
- Wall mount or portable protective case
- Automatic test report creation on local and remote web server
- On-site test report view, search and save
- Built-in web configuration tool
- Automatic test profiles upgrade

Mors Smitt Railway Technology
RelayDoc Test Report

RelayDoc Test Report

Report Number: 612
 Date: 16/07/2014 16:25:30
 RelayDoc ID: 00006188801A
 Relay Type: QN1 24V 8F88
 Test Specification: BR930
 Contact Config: 8F88
 Coil Type: SINGLE
 Coil Voltage(V): 24
 Coil Resistance(Ω): 250
 Code: 2
 Code Hole: ABCDF
 Serial Number: 4020124
 Comments:

Parameter	Min	Max	Mat	PASS/FAIL
Operate Contact Resistance (AC)	0	1	See table below	PASS
Release Contact Resistance (AC)	0	1	See table below	PASS

Contact Type	Operate Contact Resistance (A Supply)	Operate Contact Resistance (B Supply)	Operate Contact Resistance (W Supply)	Release Contact Resistance (A Supply)	Release Contact Resistance (B Supply)	Release Contact Resistance (W Supply)
A1A2 Front	0.013	0.013	0.014	OPEN	OPEN	OPEN
A3A4 Front	0.023	0.025	0.027	OPEN	OPEN	OPEN
A5A6 Back	OPEN	OPEN	OPEN	0.018	0.018	0.018
A7A8 Back	OPEN	OPEN	OPEN	0.018	0.018	0.018
B1B2 Front	0.038	0.041	0.043	OPEN	OPEN	OPEN
B3B4 Front	0.028	0.029	0.031	OPEN	OPEN	OPEN
B5B6 Back	OPEN	OPEN	OPEN	0.027	0.028	0.028
B7B8 Back	OPEN	OPEN	OPEN	0.033	0.034	0.037
C1C2 Front	0.038	0.041	0.043	OPEN	OPEN	OPEN
C3C4 Front	0.023	0.023	0.023	OPEN	OPEN	OPEN
C5C6 Back	OPEN	OPEN	OPEN	0.028	0.028	0.028
C7C8 Back	OPEN	OPEN	OPEN	0.021	0.022	0.023
D1D2 Front	0.018	0.02	0.023	OPEN	OPEN	OPEN
B9D4 Front	0.018	0.018	0.018	OPEN	OPEN	OPEN
D5D6 Back	OPEN	OPEN	OPEN	0.023	0.028	0.033
D7D8 Back	OPEN	OPEN	OPEN	0.023	0.023	0.023

Description: This is a miniature, d.c. neutral, inactive armature, line relay designed primarily for use in railway signalling circuits. Typical applications include repeater, control and indication functions. The Style QN1 forms the basis of the 'Q' range of relays.

Approved by: _____ Signature: _____

Benefits

- Automatic testing of relays
- Simple and intuitive to use - no training required
- Stand-alone operation - no computer required
- Know the condition of your relays
- Asset monitoring and preventative maintenance

Technical Specifications

Test Range:

- Coil Voltage: 0 – 110V DC
- Coil Current: 0 – 1800 mA DC
- Coil Type: Single, Dual (Twin), Latch and Current
- All 16 contact pairs testable

Relay Test Parameters:

- Coil Resistance
- Coil Power
- Operate & Release Voltage & Current
- Contact Resistance
- Contact Conditioning
- Contact Switch Time
- Contact Configuration Check
- Pin Code Match

Display:

- 5" Colour TFT (800x480)
- Capacitive touch screen

Mechanical:

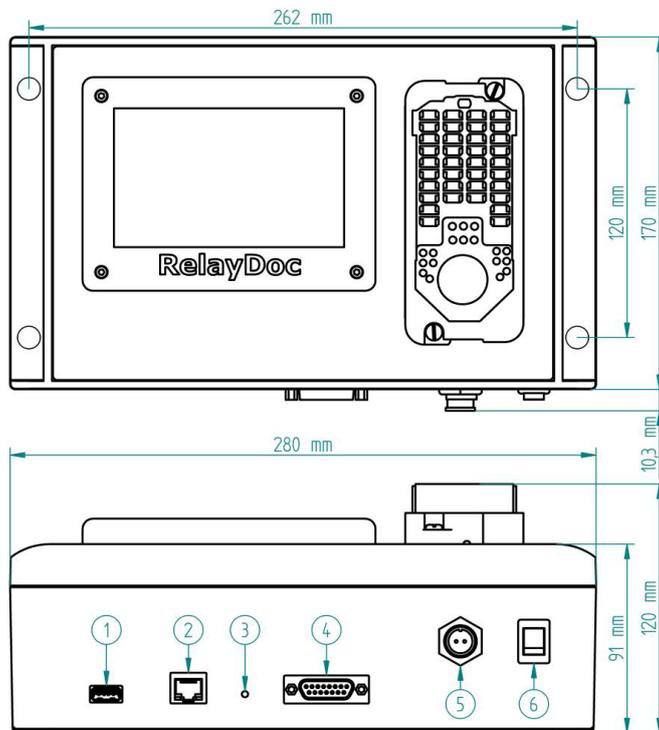
- Mounting: Wall mounted or portable case
- Weight: 2.7kg
- Dimension (W x H x D): 280x180x100 (mm)
- Environment: -20 to 60 DegC
- Compliances: CE, EN 50121

Ordering Codes

- TY373-GRP04 - Relay Doc Wall Mount, LAN
- TY373-GRP14 - Relay Doc Portable Case, LAN
- TY373-250 - Test Reference Base - Compact Profile
- TY373-300 - Miniature Barcode Reader
- TY373-350 - Calibration Kit

RelayDoc - Q-Style - BR930 signalling relay tester

Dimensions and panel layout



- 1 - USB port
- 2 - Ethernet connector
- 3 - Reset button
- 4 - Calibration kit connector
- 5 - Power input (12-20 V DC) 10W Max power consumption
- 6 - Power switch



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