

Certificate No.	NESA-S069	Version No.1.0
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Approval date	08 April 2021
Approved by	GM Technical Standards
Report no.	NESA-S069 (v1.0)
Report date	07/04/2021

This certificate is issued to

Supplier	Wabtec Control Systems Pty Ltd Ground Floor, 371 Macarthur Ave Hamilton QLD 4007
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In respect of

Manufacturer	Mors Smitt Pty Ltd
Product description	BR930 Spec 'Q' relays
Item identification	Refer to Approved Item List in Table 1
Application	ARTC Network Wide
Relevant Standards	SPS 02 Environmental Conditions SPS 04 General Requirements for Labelling of Equipment SPS 05 Electrical & Electronic Components (Ratings & Construction Requirements) SPS 10 Relays, Plug-in Vital SPS 22 Power Supply Units for Signalling Equipment – General Requirements

Conditions of Approval

General	1. There are no field serviceable components within the units, any failed units shall be replaced. Units shall only be repaired and overhauled by certified workshops.
	2. The relays are a replacement for those produced by Siemens (including Westinghouse and Invensys) and SelectRail.
Supplier	3. The supplier or manufacturer must advise ARTC of any changes made to the product or system which may alter its identification, performance characteristics, form, fit, function or

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	<p>processes required for correct usage so that this approval can be revised or reviewed.</p> <p>4. The supplier must immediately report to ARTC any relay design or manufacturing defect likely to affect quality, functionality or product performance.</p> <p>5. A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS19001:2003.</p> <p>6. Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid updated certificate.</p>
Designer	<p>1. Designer to ensure that relays used in particular application are fit for purpose and refer relevant BRB spec as applicable to provide SFAIRP design.</p>

Note/Comments None

Issue date 08/04/2021

Expiry date NA

Issued by

ARTC Manager Signalling Standards

Table 1 - Approved Item List – Mors Smitt BR930 Spec relays

Mors Smitt Part Number	Pin code (BRB)	Description – contact & (Coil) Configuration	Conditions of use
TY084/GRP06	027	QBA1 – 12F/4B (50v DC)	
TY084/GRP08	028	QBA1 – 8F/8B (50v DC)	
TY084/GRP02	025	QBA1 - 8F/4B (24V DC)	
TY084/GRP02	025	QBA1 - 8F/4B (24V DC)	
TY157/GRP01	049	QBBA1 – 2x6F/2B (50v DC)	
TY157/GRP02	017	QBBA1 – 2x4F/4B (50v DC)	
TY157/GRP09	ABDKS	QBBA1 – 2x4F/4B (12v DC)	
TY154/GRP03	172	QBCA1 – 2HF/4B (50v DC)	
TY154/GRP06	160	QBCA1 – 2HF/4F/4B (50v DC)	
TY154/GRP09	ABCKS	QBCA1 – 2HF/4F/4B (12v DC)	
TY133/GRP02	ABDJK	QEC1 4F/2B (12v DC)	16W LEDs = 100ms (slow to drop) 24W LEDs = 200ms (slow to drop)
TY132/GRP16	071	QECX1 – 4F/2B (180mA)	
TY087/GRP02	011	QL1 – 11F/4B (50v DC)	
TY087/GRP04	008	QL1 – 8F/6B (50v DC)	
TY082/GRP11	003	QN1 – 12F/4B (50v DC)	
TY082/GRP15	004	QN1 – 8F/8B (50v DC)	
TY082/GRP30	ABCFX	QN1 – 8F/8B (12v DC)	
TY182/GRP26	ACFJX	QN1 - 12F/4B (12V DC)	
TY083/GRP06	023	QNA1 – 12F/4B (50v DC)	
TY083/GRP08	024	QNA1 – 8F/8B (50v DC)	
TY192/GRP01	029	QNHX1 – 8F/4B (110v AC)	Not immune to DC current
TY156/GRP01	212	QNN1 – 2x6F/2B (50v DC)	
TY156/GRP02	211	QNN1 - 2x4F/4B (50v DC)	
TY156/GRP04	092	QNN1 - 6F/2B (24V DC)	

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TY156/GRP05	057	QNN1 - 4F/4B (24V DC)	
TY156/GRP15	BDHKX	QNN1 - 6F/2B (12V DC)	
TY160/GRP01	209	QNNA1 – 2x6F/2B (50v DC)	
TY160/GRP02	210	QNNA1 - 4F/4B (50V DC)	
TY370/GRP21	CDFKX	QR5 – Capacitor Unit	Use in flashing circuit
TY085/GRP02	043	QSPA1 – 8F/4B (50v DC)	
TY086/GRP01	061	QSRA1 – 8F/4B (24v DC)	
TY086/GRP02	063	QSRA1 – 8F/4B (50v DC)	
TY153/GRP05	110	QTA2 – 2F/2B (9?)	
TY303/GRP01	ABCDJK	QXR1 – T/J (110v AC/50v DC)	
TY155/GRP01	ABDFGH	QCJ1 – 1F/3B – 24v DC	
TY155/GRP02	ABDFGJ	QCJ1 – 1F/3B – 50v DC	
TY163/GRP01	232 (DEFGH)	QRJ1 – 1F 1B – 22-30v DC	3 sec time delay
TY163/GRP02	233 (DEFGJ)	QRJ1 – 1F 1B – 22-30v DC	5 sec time delay
TY163/GRP03	234 (DEFHJ)	QRJ1 – 1F 1B – 22-30v DC	6 sec time delay
TY163/GRP04	235 (DEGHJ)	QRJ1 – 1F 1B – 22-30v DC	7.5 sec time delay
TY163/GRP05	236 (DFGHJ)	QRJ1 – 1F 1B – 22-30v DC	10 sec time delay
TY163/GRP06	237 (DEFGK)	QRJ1 – 3F 1B – 50v DC	10 sec time delay
Plugboard			
TY081-S-xxxxx-C			Xxxxx is the relay pin code. For example, TY 081-S-004-C is the plugboard for the TY 082/GRP15 relay (QN1 – 8F/8B 50v DC)