

# TY160/GRP01-06 - BRB966 F6 - QNNA1

## Datasheet

### A.C. Immune D.C. Neutral line relay



#### Description

The twin relays covered by this data sheet are for use in line circuits where alternating current at industrial frequency may be present in the circuit.

#### Mors Smitt Relays.

- Modular plug in design
- Non weld contacts
- Silver and carbon impregnated with silver contact tips
- Proven reliability
- Low life cycle cost

Mors Smitt Catalogue Number	Mors Smitt Reference (Westinghouse Reference)	Rated Voltage	Contacts	Pin Code (Pins)	Network Rail Acceptance Number	Specification
TY160/GRP01	SNNA1 (QNNA1)	50 V D.C.	6F 2B x 2	209 (C, E, F ,H, J)	PA05/04802	BRB966 F6
TY160/GRP02	SNNA1 (QNNA1)	50 V D.C.	4F 4B x 2	210 (C, E, G, H, J)	PA05/04802	BRB966 F6
TY160/GRP03	SNNA1 (QNNA1)	50 V D.C.	2F 2B x 2	210 (C, E, G, H, J)	N/A	BRB966 F6
TY160/GRP04	SNNA1 (N/A)	24 V D.C.	6F 2B x 2	962 (C, F, K ,L, M)	N/A	(BRB966 F6) <sup>†</sup>
TY160/GRP05	SNNA1 (N/A)	24 V D.C.	4F 4B x 2	963 (C, G, H, J, M)	N/A	(BRB966 F6) <sup>†</sup>
TY160/GRP06	SNNA1 (N/A)	24 V D.C.	2F 2B x 2	963 (C, G, H, J, M)	N/A	(BRB966 F6) <sup>†</sup>

NOTE:

<sup>†</sup> Specification in brackets where the relay is nominally to that specification but with specific characteristics modified to suit special applications.

Mors Smitt Catalogue Number	Coil Resistance	Power Consumption	Full Operate	Release	Full Release	Contact Rating	Contact Resistance	Weight
TY160/GRP01 TY160/GRP02 TY160/GRP03	935 Ω	2.7 W	40.0 V	7.5 V	4.0 V	3 A	0.2 Ω	1.3 kg
TY160/GRP04 TY160/GRP05 TY160/GRP06	235 Ω	2.3 W	19.2 V	3.6 V	2.0 V	3 A	0.2 Ω	1.3 kg

## Contact Arrangements

REAR VIEW OF RELAY

	A	B	C	D	
1	F	F	F	F	1
2	F	F	F	F	2
3	F	F	F	F	3
4	F	F	F	F	4
5	B	F	F	B	5
6	B	F	F	B	6
7	B	F	F	B	7
8	B	F	F	B	8
R1	COIL 1			COIL 2	R2
R3	COIL 1			COIL 2	R4

**6F 2B x 2**

TY160/GRP01 & TY160/GRP04

REAR VIEW OF RELAY

	A	B	C	D	
1	F	F	F	F	1
2	F	F	F	F	2
3	F	F	F	F	3
4	F	F	F	F	4
5	B	B	B	B	5
6	B	B	B	B	6
7	B	B	B	B	7
8	B	B	B	B	8
R1	COIL 1			COIL 2	R2
R3	COIL 1			COIL 2	R4

**4F 4B x 2**

TY160/GRP02 & TY160/GRP05

REAR VIEW OF RELAY

	A	B	C	D	
1	F			F	1
2	F			F	2
3	F			F	3
4	F			F	4
5	B			B	5
6	B			B	6
7	B			B	7
8	B			B	8
R1	COIL 1			COIL 2	R2
R3	COIL 1			COIL 2	R4

**2F 2B x 2**

TY160/GRP03 & TY160/GRP06

**F = Front contact**, which is made when the relay is energised. This is a normally open contact.

**B = Back contact**, which is made when the relay is de-energised and the armature has completed its maximum travel. This is a normally closed contact.



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