

ZS - BRB930, 931A, 933A & 934A

Datasheet

D.C. Neutral line relay



Description

The relays covered by BRB930 are for general railway signalling purposes.

The relays covered by BRB931A are for use in line circuits where alternating current at industrial frequency may be present in the circuit.

The relays covered by BRB933A are for use as DC repeater relays, having a delayed pick-up characteristic to bridge a gap due to loss of shunt or slow drop away of a track relay. These relays are suitable for use where alternating current at industrial frequency may be present in the circuit.

The relays covered by BRB934A are for use where a slow release, neutral line relay is required and 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.

Specification	Network Rail Acceptance Number	Pin Code (Pins)	Contacts	Rated Voltage	Reference	Mors Smitt Catalogue Number	GEC Catalogue Number
ZS3512	TY082/GRP03	N	24 V D.C.	8F 4B	001 (A, B, C, D & E)	PA05/04802	BRB930
ZS3522	TY083/GRP02	NA	24 V D.C.	8F 4B	021 (A, B, D, F & H)	PA05/04802	BRB931A
ZS3531	TY085/GRP01	SPA	24 V D.C.	8F 4B	041 (A, B, D, E & J)	PA05/04802	BRB933A
ZS3542	TY086/GRP01	SRA	24 V DC	8F 4B	061 (A, D, E, F & J)	PA05/04802	BRB934A
ZS3612	TY082/GRP13	N	50 V D.C.	8F 4B	003 (A, B, C, E & F)	PA05/04802	BRB930
ZS3622	TY083/GRP07	NA	50 V D.C.	8F 4B	023 (A, B, E, F & H)	PA05/04802	BRB931A
ZS3631	TY085/GRP02	SPA	50 V D.C.	8F 4B	043 (A, B, D, G & J)	PA05/04802	BRB933A
ZS3642	TY086/GRP02	SRA	50 V D.C.	8F 4B	063 (A, D, E, H & J)	PA05/04802	BRB934A
ZS3651	TY085/GRP06	SPA	50 V D.C.	8F 4B	373 (A, C, D, E & M)	N/A	(BRB933A) [†]
ZS4512	TY082/GRP05	N	24 V D.C.	8F 8B	002 (A, B, C, D & F)	PA05/04802	BRB930
ZS4522	TY083/GRP03	NA	24 V D.C.	8F 8B	022 (A, B, D, G & H)	PA05/04802	BRB931A
ZS4612	TY082/GRP15	N	50 V D.C.	8F 8B	004 (A, B, D, E & F)	PA05/04802	BRB930
ZS4622	TY083/GRP08	NA	50 V D.C.	8F 8B	024 (A, B, E, G & H)	PA05/04802	BRB931A
ZS5512	TY082/GRP01	N	24 V D.C.	12F 4B	001 (A, B, C, D & E)	PA05/04802	BRB930
ZS5522	TY083/GRP01	NA	24 V D.C.	12F 4B	021 (A, B, D, F & H)	PA05/04802	BRB931A
ZS5612	TY082/GRP11	N	50 V D.C.	8F 8B	003 (A, B, C, E & F)	PA05/04802	BRB930
ZS5622	TY083/GRP06	NA	50 V D.C.	12F 4B	023 (A, B, E, F & H)	PA05/04802	BRB931A

NOTE:

[†] Specification in brackets where the relay is nominally to that specification but with specific characteristics modified to suit special applications.

Weight	1.4 kg						
Contact Resistance	0.2 Ω						
Contact Rating	3 A						
Coil Interruption	-						
Release Delay	<200 ms						
Full Release	2.0 V	3.6 V	3.6 V	3.6 V	3 A	0.2 Ω	
Release	-	-	-	-	250 ms ¹	1.6 kg	
Operate Delay	19.2 V	19.2 V	>400 ms + Release Delay	2.0 V	3 A	0.2 Ω	
Full Operate	2.1 W	2.1 W	2.3 W	2.3 W	250 ms ¹	1.5 kg	
Power Consumption	2.3 W	2.7 W	4.0 W	4.0 W	3 A	0.2 Ω	
Coil Resistance	250 Ω	925 Ω	1000 Ω	1200 Ω	1200 Ω	1.4 kg	
GEC Catalogue Number	ZS3531	ZS3542	ZS3612	ZS4612	ZS3631	ZS3642	ZS3651
	ZS3522	ZS4512	ZS4522	ZS5512	ZS5522	ZS5622	ZS5622
	ZS4522	ZS4522	ZS5612	ZS622	ZS622	ZS642	ZS651
	ZS5522	ZS5522	ZS612	ZS622	ZS631	ZS642	ZS651

¹ @ 80 % of Rated Voltage.

REAR VIEW OF RELAY

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

12F 4B

ZS5512, ZS5612, ZS5522 & ZS5622

REAR VIEW OF RELAY

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

8F 4B

ZS3512, ZS3522, ZS3542, ZS3612,
ZS3622 & ZS3642

REAR VIEW OF RELAY

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

8F 8B

ZS4512, ZS4522, ZS4612 & ZS4622

REAR VIEW OF RELAY

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

8F 4B

ZS3531, ZS3631 & ZS3651

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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