

# ZJ - BRB935A & BRB936A

## Datasheet

### D.C. Polarised magnetic stick line relay



#### Description

The relays covered by BRB935A are for use where a self latching relay with a separate release winding is required.

The relays covered by BRB936A are for use in line circuits where operation of the relay is required to be dependant upon the polarity of the energising current and the contacts are to remain in their last position until the relay is re-energised in the opposite sense.

#### Mors Smitt Relays

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

GEC Catalogue Number	Mors Smitt Catalogue Number	Reference	Rated Voltage	Contacts	Pin Code (Pins)	Network Rail Acceptance Number	Specification
ZJ1511	ZJ1511	PS	24 V D.C.	4N 4R	014 (A, C, E, F, G)	PA05/05248	BRB936A
ZJ1611	ZJ1611	PS	50 V D.C.	4N 4R	016 (A, B, C, D, H)	PA05/05248	BRB936A
ZJ4511	ZJ4511	PS	24 V D.C.	8N 8R	014 (A, C, E, F, G)	PA05/05248	BRB936A
ZJ4611	ZJ4611	PS	50 V D.C.	8N 8R	016 (A, B, C, D, H)	PA05/05248	BRB936A
ZJ5511	ZJ5511	PS	24 V D.C.	12N 4R	013 (A, C, D, F, G)	PA05/05248	BRB936A
ZJ5611	ZJ5611	PS	50 V D.C.	12N 4R	015 (A, D, E, F, G)	PA05/05248	BRB936A
ZJ7511	TY087/GRP01	L	24 V D.C.	11F 4B	009 (A, B, D, E, G)	PA05/04802	BRB935A
ZJ7611	TY087/GRP02	L	50 V D.C.	11F 4B	011 (A, B, E, F, G)	PA05/04802	BRB935A

GEC Catalogue Number	Coil #1 Resistance	Coil #2 Resistance	Power Consumption	Operate	Release	Contact Rating	Contact Resistance	Weight
ZJ1511	240Ω	240Ω	2.8W	9.6-19.2V	9.6-19.2V	3A	0.2Ω	1.3Kg
ZJ4511 ZJ5511	320Ω	290Ω	2.0W					
ZJ1611	810Ω	9000Ω	3.3W	20.0- 40.0V	20.0– 40.0V	3A	0.2Ω	1.3Kg
ZJ4611 ZJ5611	1200Ω	1200Ω	2.1W					
ZJ7511	240 Ω	325 Ω	1.8 W & 2.4 W	19.2 V	9.6 - 19.2 V	3 A	0.2 Ω	1.2 kg
ZJ7611	950 Ω	1100 Ω	2.3 W & 2.7 W	40.0 V	20.0 - 40.0 V	3 A	0.2 Ω	1.2 kg

## Contact Arrangements.

REAR VIEW OF RELAY

	A	B	C	D	
1	N	N	N	N	1
2	N	N	N	N	2
3	N	N	N	N	3
4	N	N	N	N	4
5	R	N	N	R	5
6	R	N	N	R	6
7	R	N	N	R	7
8	R	N	N	R	8
R1	OP +			OP -	R2
R3	REL +			REL -	R4

**12N 4R**

ZJ5511 & ZJ5611

REAR VIEW OF RELAY

	A	B	C	D	
1	N	N	N	N	1
2	N	N	N	N	2
3	N	N	N	N	3
4	N	N	N	N	4
5	R	R	R	R	5
6	R	R	R	R	6
7	R	R	R	R	7
8	R	R	R	R	8
R1	OP +			OP -	R2
R3	REL +			REL -	R4

**8N 8R**

ZJ4511 & ZJ4611

REAR VIEW OF RELAY

	A	B	C	D	
1	N			N	1
2	N			N	2
3	N			N	3
4	N			N	4
5	R			R	5
6	R			R	6
7	R			R	7
8	R			R	8
R1	OP +			OP -	R2
R3	REL +			REL -	R4

**4N 4R**

ZJ1511 & ZJ1611

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	C	F	B	7
8	B	C	F	B	8
R1	OP +			OP -	R2
R3	REL +			REL -	R4

**11F 4B**

TY087/GRP01 & TY087/GRP02

**N = Normal contact**, which is made when the armature is in the operate position.

**R = Reverse contact**, which is made when the armature is in the release position.

**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.

**C = Cut-off contact**, which is internally wired in the relay to prevent the release winding from being energised unless the relay is in the operate position.



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