

RR SERIES

RR2010

2 CHANGE OVER CONTACTS, 8 FASTON, DPDT.

TYPE

RR2010 ... V
Relay for Railway applications
2 CO

MAX. CONTACT LOAD

10 A / 250 V AC1
10 A / 30 V DC1

CONTACT

Material	Standard	AgNi
	Optional	AgNi + 0,2 μ Au
	Optional	AgNi + 10 μ Au
Rated current / Max. peak current		10 A / 30 A
Rated voltage / Max. switching voltage AC-1		250 V / 250 V
Rated load AC15 (250 V)		750 VA
Min. switching load		10 mA / 10 V 5 mA / 5 V (10 μ Au)

COIL

Operation range	$0,7 \times U_N \dots 1,25 \times U_N$
Rated power (AC/DC)	1,07 W
Release voltage	$\geq 0,1 \times U_N$
Coil resistance	$\pm 10\%$

Coil data

VDC	Ω	mA
24	535	45
48	2K	24
72	4K7	15
110	11K3	10

INSULATION (Vrms, 1 min)

Contact open	1,5 KV / 850 V
Coil / Contacts	4 KV / 2200 V
Insulation IEC 61810-1	2,5 KV/3
Between contacts	4 KV / 2200 V

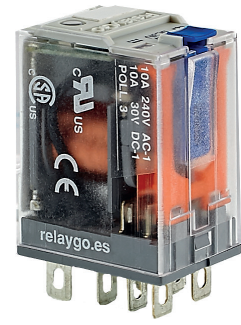
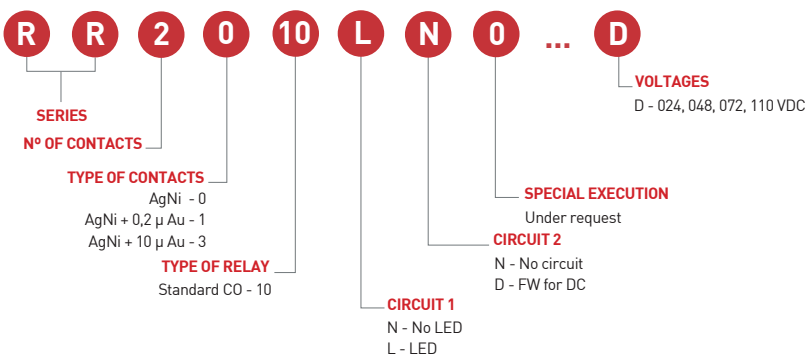
SPECIFICATIONS

Ambient temperature	- 40 °C ... + 80 °C
Operation / Release time	10 ms / 5 ms
Protection category	IP40
Electrical life DC / Mechanical life	1·10 ⁵ op / 10·10 ⁶ op (AC) 20·10 ⁶ op (DC)
Weight	35 g

ACCESSORIES

Sockets	SQB20D, SQW20X, SQP20X, SQP20F, SQB20I
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ORDERING CODE



CONNECTION DIAGRAM

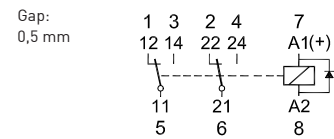


FIG. 1 ELECTRICAL LIFE AC LOAD

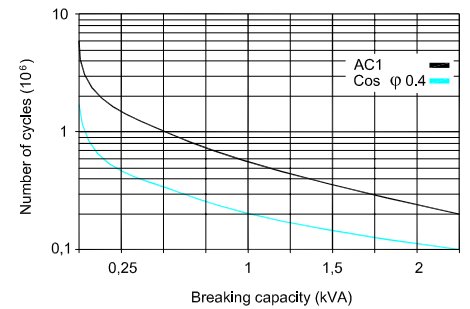
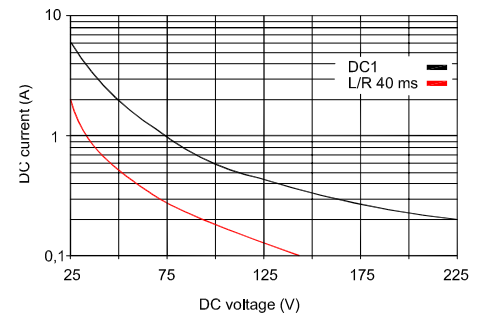
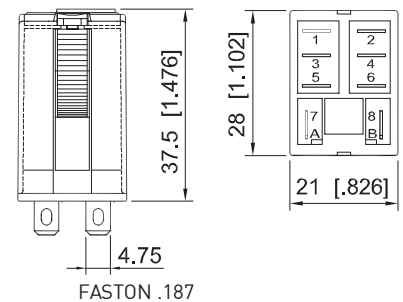


FIG. 2 MAX. DC BREAKING CAPACITY



DIMENSIONS mm [inch]



TECHNICAL APPROVALS



In process In process In process In process

IEC 61810; EN 60947

RR SERIES

RR2117

2 CHANGE-OVER BIFURCATED CONTACTS, 8 FASTON, DPDT.

TYPE

RR2110 ... V
Relay for Railway applications
2 CO

MAX. CONTACT LOAD

6 A / 250 V AC1
6 A / 30 V DC1

CONTACT

Material	Standard	AgNi + 0,2 μ Au
	Optional	AgNi + 10 μ Au

Rated current / Max. peak current	6 A / 15 A
Rated voltage / Max. switching voltage AC-1	250 V / 250 V
Rated load AC15 (250 V)	350 VA
Min. switching load	5 mA / 5 V
	1 mA / 5 V (10 μ Au)

COIL

Operation range	$0,7 \times U_N \dots 1,25 \times U_N$
Rated power (AC/DC)	1,07 W
Release voltage	$\geq 0,1 \times U_N$
Coil resistance	$\pm 10\%$

Coil data

VDC	Ω	mA
24	535	45
48	2K	24
72	4K7	15
110	11K3	10

INSULATION (Vrms, 1 min)

Contact open	1,5 KV / 850 V
Coil / Contacts	4 KV / 2200 V
Insulation IEC 61810-1	2,5 KV/3
Between contacts	4 KV / 2200 V

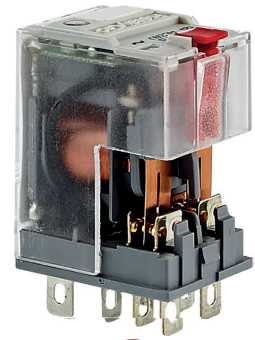
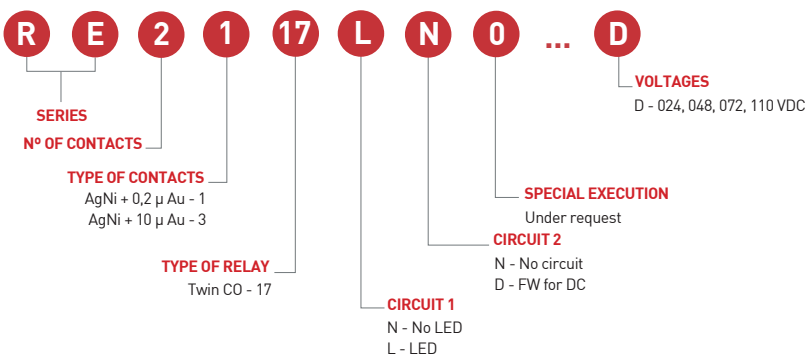
SPECIFICATIONS

Ambient temperature	- 40 °C ... + 80 °C
Operation / Release time	10 ms / 15 ms
Protection category	IP40
Electrical life DC / Mechanical life	1·10 ⁵ op / 10·10 ⁶ op (AC) 20·10 ⁶ op (DC)
Weight	35 g

ACCESSORIES

Sockets SQB20D, SQW20X, SQP20X, SQP20F, SQB20I

ORDERING CODE



CONNECTION DIAGRAM

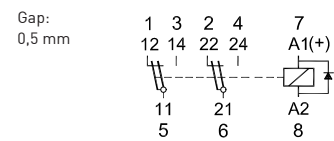


FIG. 1 ELECTRICAL LIFE AC LOAD

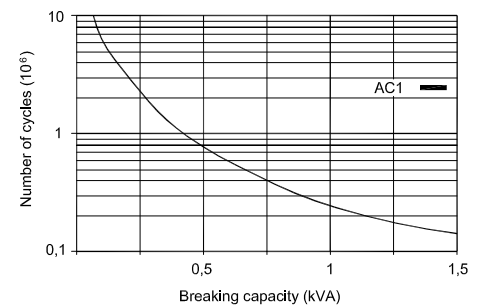
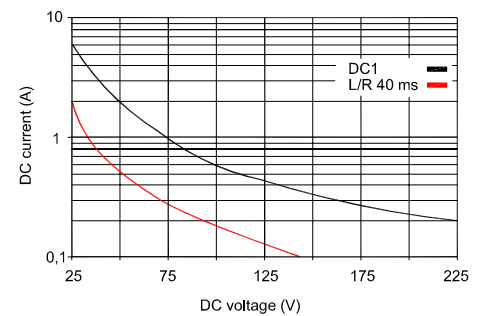
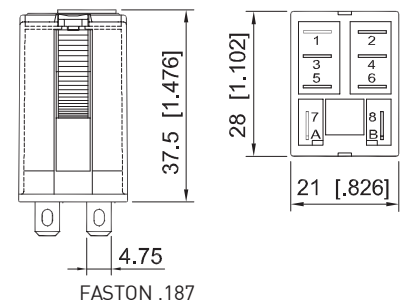


FIG. 2 MAX. DC BREAKING CAPACITY



DIMENSIONS mm [inch]



TECHNICAL APPROVALS



IEC 61810; EN 60947

RR SERIES

RR3010

3 CHANGE-OVER CONTACTS, 11 PINS, TPDT.

TYPE

RR3010 ... V
Relay for Railway
3 CO

MAX. CONTACT LOAD

6 A / 250 V AC1
6 A / 30 V DC1

CONTACT

Material	Standard	AgNi
	Optional	AgNi + 0,2 μ Au
	Optional	AgNi + 10 μ Au
Rated current / Max. peak current		6 A / 15 A
Rated voltage / Max. switching voltage AC-1		250 V / 250 V
Rated load AC15 (250 V)		750 VA
Min. switching load		10 mA / 10 V 5 mA / 5 V (10 μ Au)

COIL

Operation range	$0,7 \times U_N \dots 1,25 \times U_N$
Rated power (AC/DC)	1,07 W
Release voltage	$\geq 0,1 \times U_N$
Coil resistance	$\pm 10\%$

Coil data

VDC	Ω	mA
24	535	46
48	2K	22
72	4K7	15
110	11K3	10

INSULATION (Vrms, 1 min)

Contact open	1,5 KV / 850 V
Coil / Contacts	4 KV / 2200 V
Insulation IEC 61810-1	2,5 KV/3
Between contacts	4 KV / 2200 V

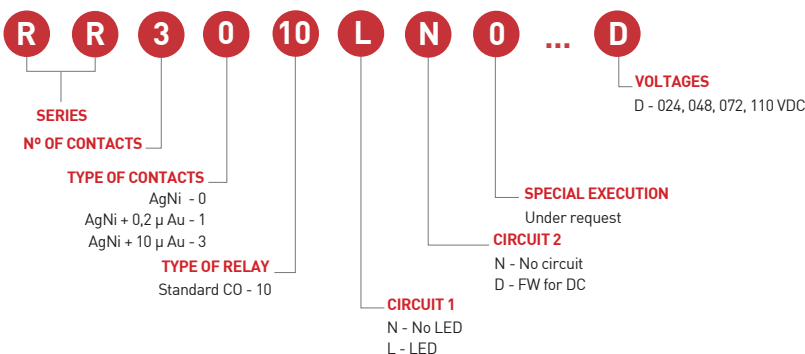
SPECIFICATIONS

Ambient temperature	- 40 °C ... + 80 °C
Operation / Release time	18 ms / 35 ms
Protection category	IP40
Electrical life DC / Mechanical life	1·10 ⁵ op / 10·10 ⁶ op (AC) 20·10 ⁶ op (DC)
Weight	90 g

ACCESSORIES

Sockets	SMB30D, SMT30D, SMB30P, SMB30S, SMW30F, SMP30F
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ORDERING CODE



CONNECTION DIAGRAM

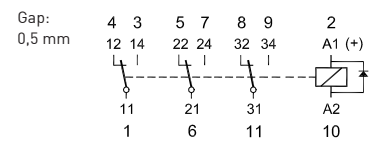


FIG. 1 ELECTRICAL LIFE AC LOAD

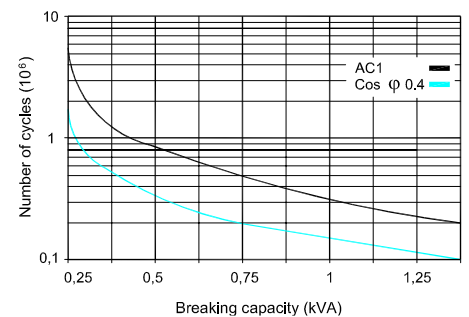
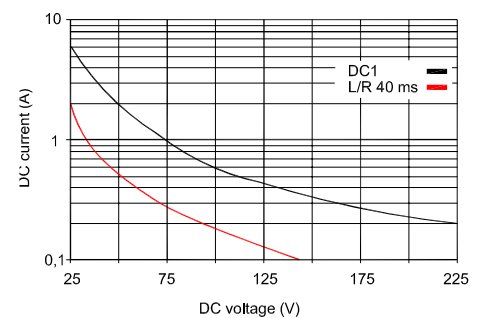
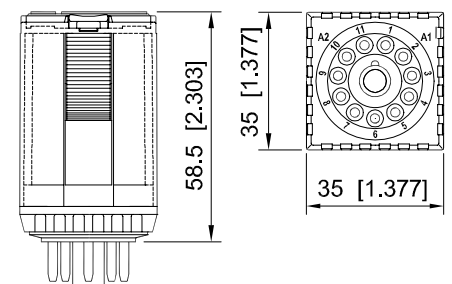


FIG. 2 MAX. DC BREAKING CAPACITY



DIMENSIONS mm [inch]



TECHNICAL APPROVALS



In process In process In process In process

IEC 61810; EN 60947

RR SERIES

RR4010

4 CHANGE-OVER CONTACTS, 14 PINS, FPDT.

TYPE

RR4010 ... V
Relay for Railway
4 CO

MAX. CONTACT LOAD

6 A / 250 V AC1
6 A / 30 V DC1

CONTACT

Material	Standard	AgNi
	Optional	AgNi + 0,2 μ Au
	Optional	AgNi + 10 μ Au
Rated current / Max. peak current		6 A / 15 A
Rated voltage / Max. switching voltage AC-1		250 V / 250 V
Rated load AC15 (250 V)		350 VA
Min. switching load		10 mA / 10 V 5 mA / 5 V (10 μ Au)

COIL

Operation range	$0,7 \times U_N \dots 1,25 \times U_N$
Rated power (AC/DC)	1,4 W
Release voltage	$\geq 0,1 \times U_N$
Coil resistance	$\pm 10\%$

Coil data

VDC	Ω	mA
24	426	56
48	1K5	32
72	3K4	21
110	8K2	13

INSULATION (Vrms, 1 min)

Contact open	1,5 kV / 850 V
Coil / Contacts	4 kV / 2200 V
Insulation IEC 61810-1	2,5 kV/3
Between contacts	4 kV / 2200 V

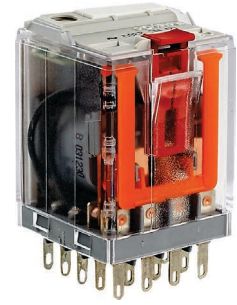
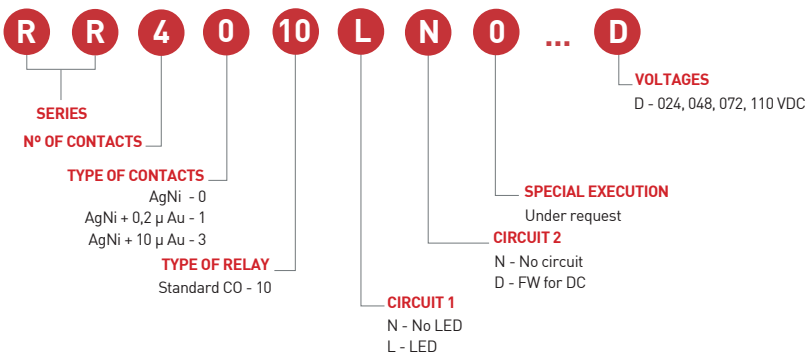
SPECIFICATIONS

Ambient temperature	- 40 °C ... + 80 °C
Operation / Release time	20 ms / 15 ms
Protection category	IP40
Electrical life DC / Mechanical life	1·10 ⁵ op / 10·10 ⁶ op (AC) 20·10 ⁶ op (DC)
Weight	90 g

ACCESSORIES

Sockets SMT40D, SMW40F, SMP40X, SMP40F

ORDERING CODE



CONNECTION DIAGRAM

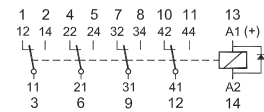


FIG. 1 ELECTRICAL LIFE AC LOAD

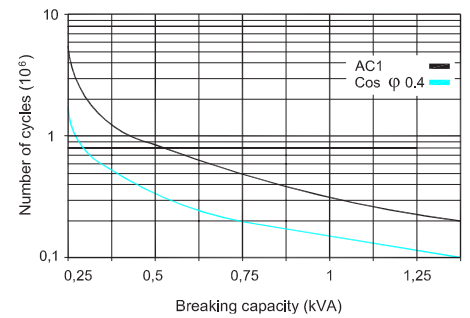
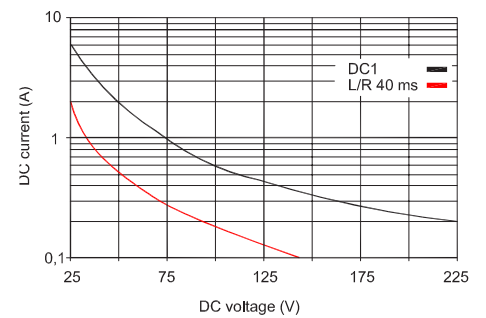
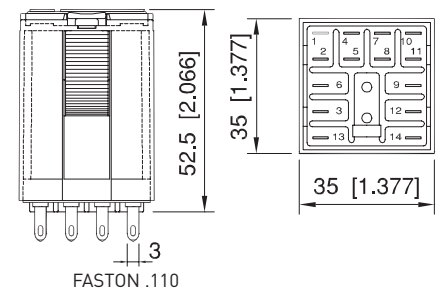


FIG. 2 MAX. DC BREAKING CAPACITY



DIMENSIONS mm [inch]



TECHNICAL APPROVALS



In process In process In process In process

IEC 61810; EN 60947



Kühn Controls AG

Notes:

You want more information about this product, please call us: tel: +49 (0)7082-940000 or send us a fax: +49 (0)7082-940001, or email: sales@kuehn-controls.de or visit our Website: www.kuehn-controls.de