

Type	C3-A3x/ ... V Standard relays, 3 change-over contacts			
Maximum contact load	10 A/250	AC-1	0,5 A/110 V	DC-1
	10 A/30	DC-1	0,2 A/220 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 0, 9		
	5 mA/5 V	Code 8		

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 8	AgNi + 10 µ Au
	Optional	Code 9	AgNi + 0,2 µ Au
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max.			250 V
AC load (Fig 1)			2,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	≤ 0,8 × U _N
Release voltage	≥ 0,1 × U _N
Nominal power	2,2 VA (AC)/1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	mA
24	67	92	24	443
48	296	46	48	1K8
115	1K7	19	110	9K2
230	7K1	9,5	220	36K1

Insulation

	Volt rms, 1 min
Contact open	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2,5 kV/3

Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	16 ms/≤ 3 ms
Release time/bounce time	8 ms/≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	90 g

Standard types

VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)

LED

RC Suppressor

VDC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V, 60 V

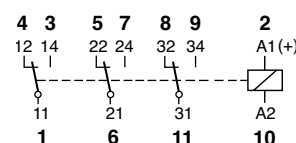
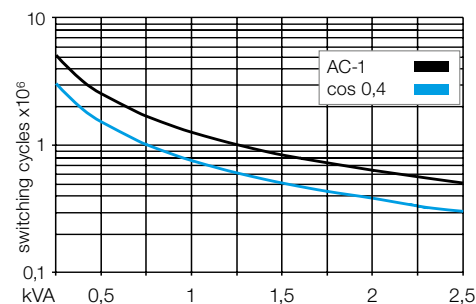
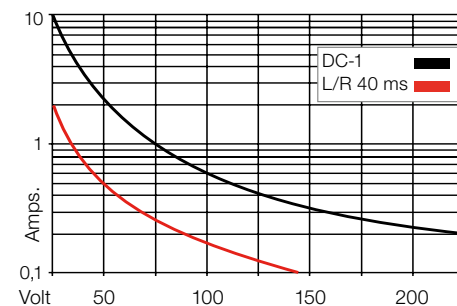
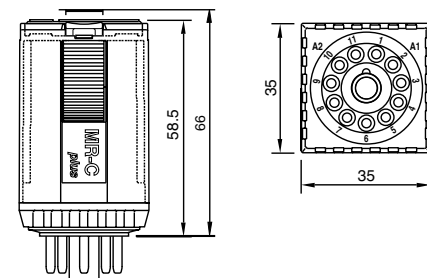
C3-A30/AC ... V	C3-A38/AC ... V	C3-A39/AC ... V
C3-A30X/AC ... V	C3-A38X/AC ... V	C3-A39X/AC ... V
C3-A30R/AC ... V	C3-A38R/AC ... V	C3-A39R/AC ... V
C3-A30/DC ... V	C3-A38/DC ... V	C3-A39/DC ... V
C3-A30X/DC ... V	C3-A38X/DC ... V	C3-A39X/DC ... V
C3-A30DX/DC ... V	C3-A38DX/DC ... V	C3-A39DX/DC ... V
C3-A30FX/DC ... V	C3-A38FX/DC ... V	C3-A39FX/DC ... V
C3-A30BX/UC ... V	C3-A38BX/UC ... V	C3-A39BX/UC ... V

"... " Enter the voltage for full type designation

Accessories

Socket:

Optional accessories (blanking plug):

S3-B, S3-S, S3-L, S3-P, S3-P0
SO-NP, SO-OP
**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**
 Lloyd's



IEC 61810; EN 60947

Type	C3-T3x/ ... V Standard relays for low level 3 change-over twin contacts			
Maximum contact load	6 A/250 V	AC-1	6 A/30 V	DC-1
Recommended minimum contact load	5 mA/5 V	Code 1		
	1 mA/5 V	Code 2		

Contacts

Material	Standard	Code 1	AgNi + 0,2 µ Au
	Optional	Code 2	AgNi + 10 µ Au
Rated current			6 A
Switch-on current max. (20 ms)			15 A
Switching voltage max.			250 V
AC load (Fig 1)			1,2 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	≤ 0,8 × U _N
Release voltage	≥ 0,1 × U _N
Nominal power	2,2 VA (AC)/1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	67	92	24	443	54
48	296	46	48	1K8	27
115	1K7	19	110	9K2	12
230	7K1	9,5	220	36K1	6

Insulation

	Volt rms, 1 min
Contact open	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, EN 61810-1	2,5 kV/3

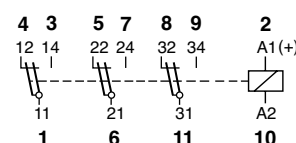
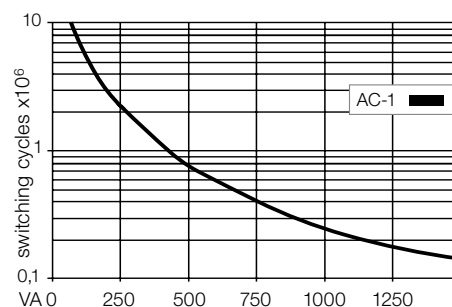
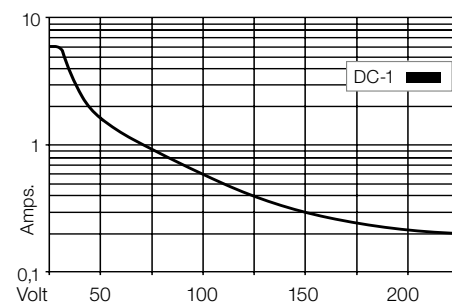
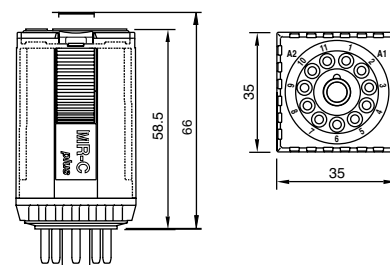
Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	16 ms/≤ 3 ms
Release time/bounce time	8 ms/≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	90 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC Suppressor****VDC 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V**
C3-T31/AC ... V
C3-T31X/AC ... V
C3-T31R/AC ... V
C3-T31/DC ... V
C3-T31X/DC ... V
C3-T31DX/DC ... V
C3-T31FX/DC ... V
C3-T31BX/UC ... V
C3-T32/AC ... V
C3-T32X/AC ... V
C3-T32R/AC ... V
C3-T32/DC ... V
C3-T32X/DC ... V
C3-T32DX/DC ... V
C3-T32FX/DC ... V
C3-T32BX/UC ... V

"..." Enter the voltage for full type designation

Accessories
 Socket:
 Optional accessories (blanking plug):

S3-B, S3-S, S3-L, S3-P, S3-P0
SO-NP, SO-OP
**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-G3x/ ... V Standard relays, DC application 3 open contacts		
-------------	--	--	--

Maximum contact load	10 A 250 V AC-1	1,2 A/110 V DC-1
	10 A 30 V DC-1	0,4 A/220 V DC-1

Contacts

Material	Standard	Code 0	AgNi
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max.			250 V
AC load (Fig 1)			2,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,6 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	24	360	66
48	286	50	48	1K4	34
115	1K7	21	110	7K6	15
230	6K8	10	220	30K3	7,5

Insulation

	Volt rms, 1 min
Contact open	2000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-1	2,5 kV/3

Specifications

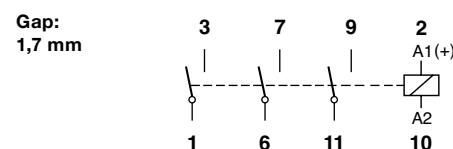
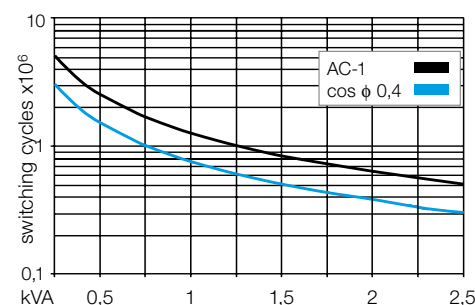
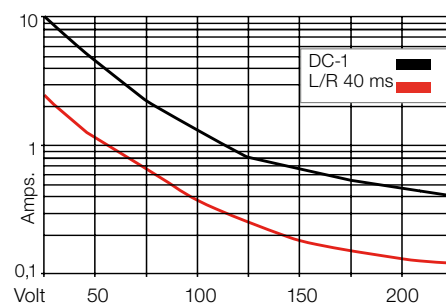
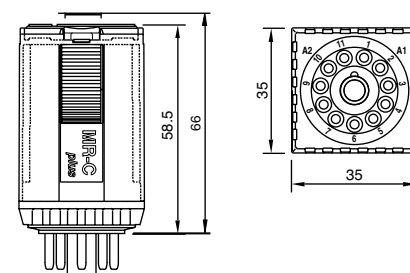
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	8 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200 /ops/ h
Protection class	IP40
Weight	90 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC Suppressor****VDC 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V**
C3-G30/AC ... V
C3-G30X/AC ... V
C3-G30R/AC ... V
C3-G30/DC ... V
C3-G30X/DC ... V
C3-G30DX/DC ... V
C3-G30FX/DC ... V
C3-G30BX/UC ... V

"... " Enter the voltage for full type designation

Accessories

Socket:	S3-B, S3-S, S3-L, S3-P, S3-P0
Optional accessories (blanking plug):	SO-NP, SO-OP

**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-M1x/ ... V Power relays, DC, application 1 pole, magnetic blow out
-------------	--

Maximum contact load	10 A 250 V AC-1 10 A 220 V DC-1 3,6 A 110 V L/R 40ms 2 A 220 V L/R 40ms
-----------------------------	--

Contacts

Material	Standard	Code 0	AgNi
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max.			250 V
AC load (Fig 1)			2,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC) / 1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	24	443	54
48	286	50	48	1K7	27
115	1K7	21	110	9K2	12
230	6K8	10	220	36K1	6

Insulation

	Volt rms, 1 min
Contact open	2500 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-1:	2,5 KV / 3

Specifications

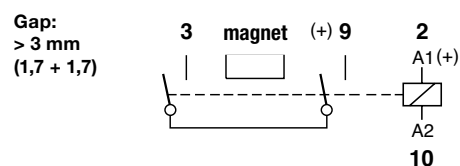
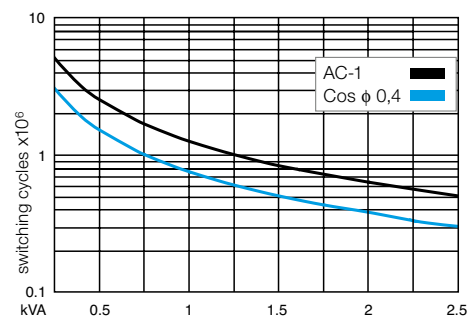
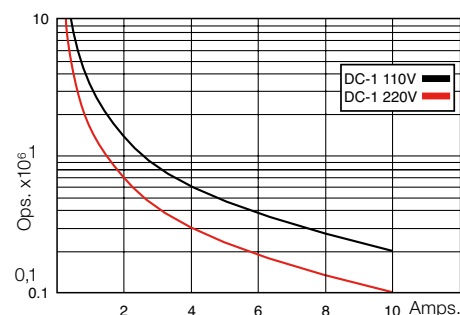
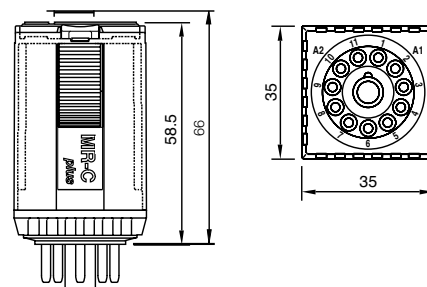
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Nominal coil power	2,4 VA (AC), 1,3 W (DC)
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Isolation: EN 60947, pollution rate 3, Gr C	250 V
Dielectric strength, Contact/Coil	2,5 KV

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC Suppressor**
C3-M10/AC ... V
C3-M10X/AC ... V
C3-M10R/AC ... V
VDC 24, 48, 110, 220**LED****Free wheeling diode****Polarity and free wheeling diode**
C3-M10/DC ... V
C3-M10X/DC ... V
C3-M10DX/DC ... V
C3-M10FX/DC ... V
AC/DC bridge rectifier 24 V, 48 V, 60 V**C3-M10BX/UC ... V**

"... " Enter the voltage for full type designation

Accessories

Socket:	S3-B, S3-S, S3-L, S3-P, S3-P0
Optional accessories (blanking plug):	SO-NP, SO-OP

**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC voltage endurance****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-X1x/ ... V Power relays for DC application 1 pole, NO, double make			
-------------	--	--	--	--

Maximum contact load	10 A/250 V AC-1	7 A/110 V DC-1
	10 A/30 V DC-1	1,2 A/220 V DC-1

Contacts

Material	Standard	Code 0	AgNi
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max.			250 V
AC load (Fig 1)			2,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	24	443	54
48	286	50	48	1K7	27
115	1K7	21	110	9K2	12
230	6K8	10	220	36K1	6

Insulation

	Volt rms, 1 min
Contact open	2500 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-1	2,5 kV/3

Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200 /ops/h
Protection class	IP40
Weight	90 g

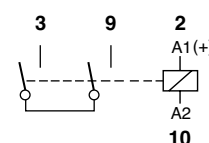
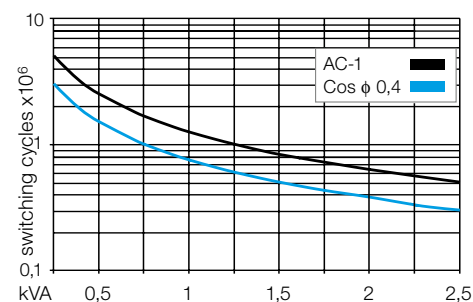
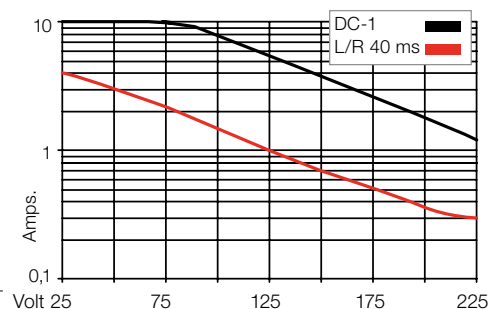
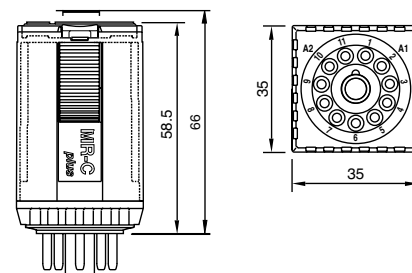
Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC Suppressor****VDC 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V****C3-X10/AC ... V****C3-X10X/AC ... V****C3-X10R/AC ... V****C3-X10/DC ... V****C3-X10X/DC ... V****C3-X10DX/DC ... V****C3-X10FX/DC ... V****C3-X10BX/UC ... V**

"..." Enter the voltage for full type designation

Accessories

Socket:

Optional accessories (blanking plug):

S3-B, S3-S, S3-L, S3-P, S3-P0**SO-NP, SO-OP****Connection diagram**Gap:
> 3 mm
(1,7 + 1,7)**Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

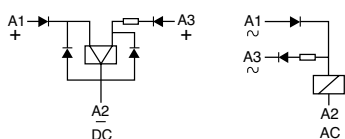
Type	C3-R2x/ ... V Remanence plug-in relays, 2 change-over contacts			
Maximum contact load	10 A/250 V	AC-1	0,5 A/110 V	DC-1
	10 A/30 V	DC-1	0,2 A/220 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 0, 9		
	5 mA/5 V	Code 8		

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 8	AgNi + 10 µ Au
	Optional	Code 9	AgNi + 0,2 µ Au
Rated current			10 A
Switch-on current max. (20 ms)			30 A
Switching voltage max.			250 V
AC load (Fig 1)			2,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
ON pulse power	1,5 VA/W
OFF pulse power	0,5 VA/W
Pull-in ON/OFF	≤ 0,8 x U _N

Internal Diagram:**Coil table**

VAC	mA ON	mA OFF	VDC	mA ON	mA OFF
24	75	12	12	125	41
48	38	6	24	63	21
115	16	2,5	48	31	10
230	8	1,3	110	14	4,5

Insulation

Contact open	Volt rms, 1 min
Contact/contact	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2,5 kV/3

Specifications

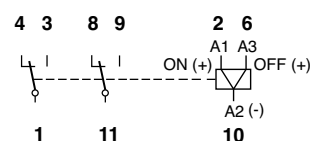
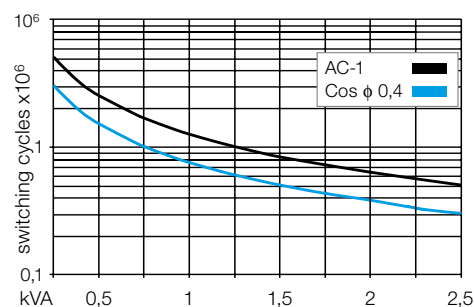
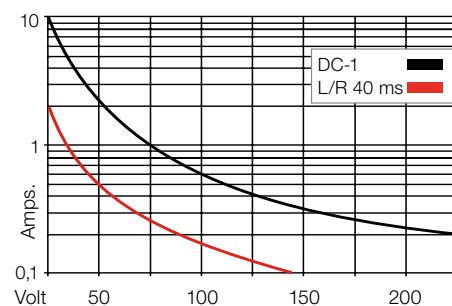
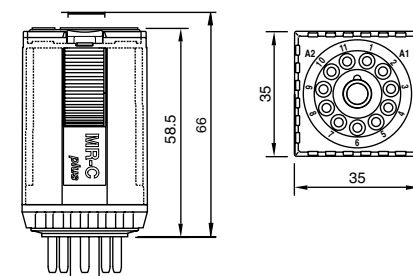
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Minimum pulse length for ON/OFF	50 ms
Mechanical life ops	10 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	95 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****C3-R20/AC ... V****C3-R28/AC ... V****C3-R29/AC ... V****VDC 12, 24, 48, 110****C3-R20/DC ... V****C3-R28/DC ... V****C3-R29/DC ... V**

"..." Enter the voltage for full type designation

Accessories

Socket:	S3-B, S3-S, S3-L, S3-P, S3-P0
Optional accessories (blanking plug):	SO-NP, SO-OP

**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-S1x/ DC... V Sensitive relays, 250 mW, 1 change-over contacts			
Operating range	0,8 ... 2,5 x Un			
Maximum contact load	6 A/250 V	AC-1	6 A/30 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 4		
	5 mA/5 V	Code 8		

Contacts

Material	Standard,	Code 4	AgNi + 0,2 µ Au
	Optional,	Code 8	AgNi + 10 µ Au
Rated current			6 A
Switch-on current max. (20 ms)			15 A
Switching voltage max.			250 V
AC load (Fig 1)			1,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	≤ 0,8 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	250 mW

Coil table

VDC	Ω	mA
6	140	43
12	536	22
24	2164	11
48	8651	5,5

Insulation

	Volt rms, 1 min
Contact open	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2,5 kV/3

Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	18 ms/≤ 3 ms
Release time/bounce time	10 ms/≤ 1 ms
Mechanical life ops	DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	73 g

Standard types**VDC 12, 24, 48****Free wheeling diode****Polarity and free wheeling diode****C3-S14/DC ... V****C3-S14D/DC ... V****C3-S14F/DC ... V****C3-S18/DC ... V****C3-S18D/DC ... V****C3-S18F/DC ... V****Connection of diodes to the coil will increase the release time.****LED available upon request.**

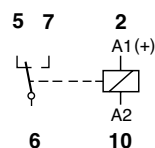
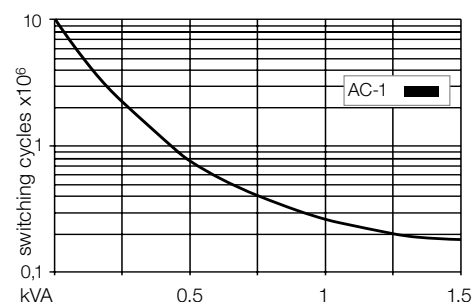
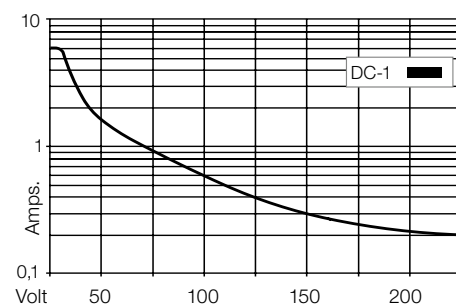
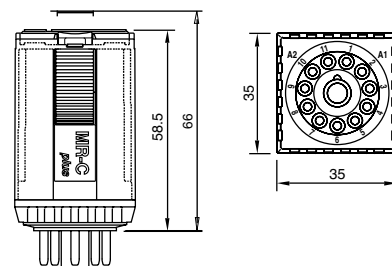
"..." Enter the voltage for full type designation

Accessories

Socket:

S3-B, S3-S, S3-L, S3-P, S3-PO

Optional accessories (blanking plug):

SO-NP, SO-OP**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-E2x/ DC... V Sensitive relays, 500 mW, 2 change-over contacts			
Operating range	0,8 ... 1,7 x U_n			
Maximum contact load	6 A/250 V	AC-1	6 A/30 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 4		
	5 mA/5 V	Code 8		

Contacts

Material	Standard,	Code 4	AgNi + 0,2 µ Au
	Optional,	Code 8	AgNi + 10 µ Au
Rated current			6 A
Switch-on current max. (20 ms)			15 A
Switching voltage max.			250 V
AC load (Fig 1)			1,5 kVA
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	≤ 0,8 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	500 mW

Coil table

VDC	Ω	mA
24	1K1	21
48	4K6	10
60	7K2	8,3
110	24K2	4,5

Insulation

Coil resistance	see table; tolerance ± 10 %
Contact open	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2,5 kV/3

Specifications

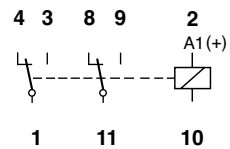
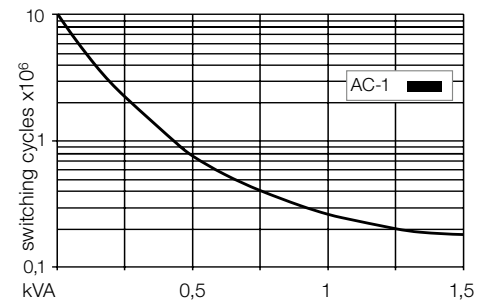
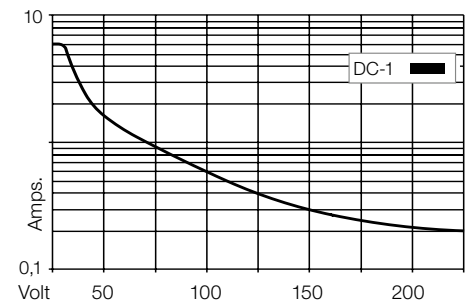
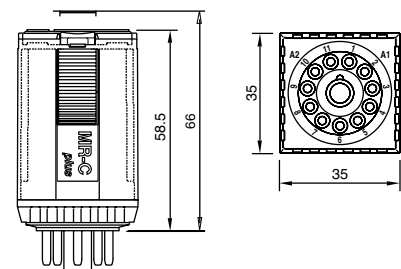
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	18 ms/≤ 3 ms
Release time/bounce time	10 ms/≤ 1 ms
Mechanical life ops	DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	90 g

Standard types**VDC 24, 48, 60, 110****Free wheeling diode****Polarity and free wheeling diode****C3-E24/DC ... V****C3-E24D/DC ... V****C3-E24F/DC ... V****C3-E28/DC ... V****C3-E28D/DC ... V****C3-E28F/DC ... V****Connection of diodes to the coil will increase the release time.****LED available upon request.**

"... " Enter the voltage for full type designation

Accessories

Socket:	S3-B, S3-S, S3-L, S3-P, S3-P0
Optional accessories (blanking plug):	SO-NP, SO-OP

**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

Type	C3-N3x/DC ... V Sensitive relays, 800 mW 3 change-over contacts			
Operating range	0,8 ... 1,4 x Un			
Maximum contact load	6 A/250 V	AC-1	6 A/30 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 4		
	5 mA/ 5 V	Code 8		

Contacts			
Material	Standard	Code 4	AgNi + 0,2 µ Au
	Optional	Code 8	AgNi + 10 µ Au
Rated current	6 A		
Switch-on current max. (20 ms)	15 A		
Switching voltage max.	250 V		
AC load (Fig 1)	1,5 kVA		
DC load	see Fig. 2		

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	≤ 0,8 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	800 mW

Coil table

VDC	Ω	mA
24	720	33
48	2K8	17
60	4K5	13
110	15K	7

Insulation	Volt rms, 1 min
Contact open	1000 V
Contact/contact	2,5 kV
Contact/coil	2,5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-5	2,5 kV/3

Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	18 ms/≤ 3 ms
Release time/bounce time	10 ms/≤ 1 ms
Mechanical life ops	DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	90 g

Standard types**VDC 24, 48, 60, 110**

Free wheeling diode

Polarity and free wheeling diode

C3-N34/DC ... V**C3-N34D/DC ... V****C3-N34F/DC ... V****C3-N38/DC ... V****C3-N38D/DC ... V****C3-N38F/DC ... V****Connection of diodes to the coil will increase the release time.****LED available upon request.**

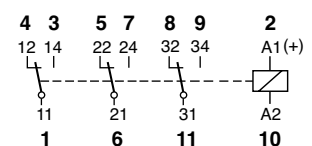
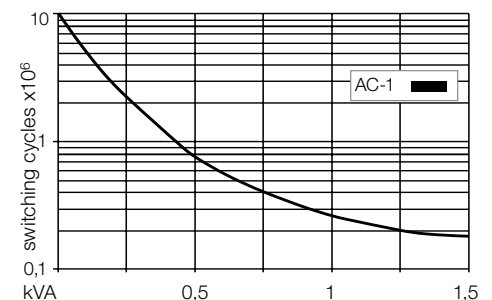
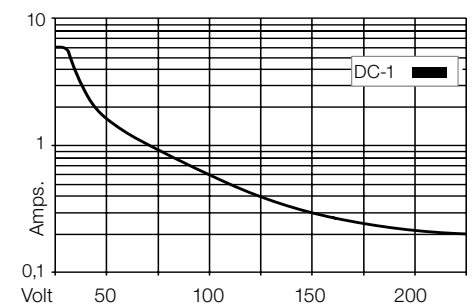
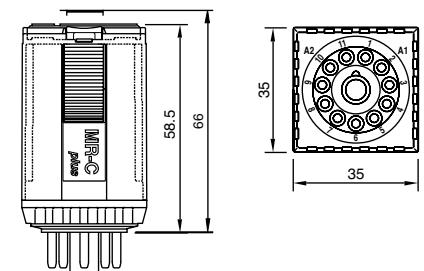
"..." Enter the voltage for full type designation

Accessories

Socket:

S3-B, S3-S, S3-L, S3-P, S3-P0

Optional accessories (blanking plug):

SO-NP, SO-OP**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 61810; EN 60947

R3-N3xD**11-pin, special relay, 3-pole, according to IEC 67-I-18a****Relay approval: EN 60077-1-2/99 - EN 61373/99 for Railway application**

Type	R3-NxD/ ... V Relays for Railway application 3 change-over contacts special wide range voltage			
Maximum contact load	6 A 250 V	AC-1	6 A 30 V	DC-1
Recommended minimum contact load	10 mA/10 V	Code 0, 4		
	5 mA/5 V	Code 8		

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 4	AgNi + 0,2µ Au
	Optional	Code 8	AgNi + 10µ Au
Rated current			6 A
Switch-on current max. (20 ms)			15 A
Switching voltage max.			250 V
Max. AC load			see Fig. 1
DC load			see Fig. 2

Coil

Coil resistance	see table; tolerance $\pm 10\%$
Operation range	$0,7 U_N \dots 1,25 U_N$
Nominal power	1,1 W

Coil table

VDC	Ω	mA
24	525	46
48	2133	22
72	4844	15
110	12900	9

Insulation

Pollution grade	PD3
With pulse (1,2 / 50 µs)/Dielectric strenght (1Minute/V rms)	
Contact/coil	4 kV / 2220 V
Contact/contact	4 kV / 2220 V
Between contact and the same pole	1550 V / 850 V

Specifications

Ambient temperature operation/storage	-25 (no ice)....70 °C / -40 ... 80 °C
Number of mechanical operations	≥ 10 millions
Thermic class	B (130 °C)
Vibration : category / class	1 / B Body mounted
	5 - 150 Hz (3 axes)
Shock	5 g (3 axes)
Pick-up time/bounce time	18 ms/ ≤ 3 ms
Release time/bounce time (D version)	35 ms/ ≤ 1 ms
Weight	95 g
Weight avg. Relay + Socket (S3-B)	150 g
Protection class	IP 40

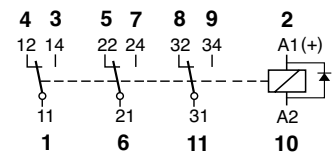
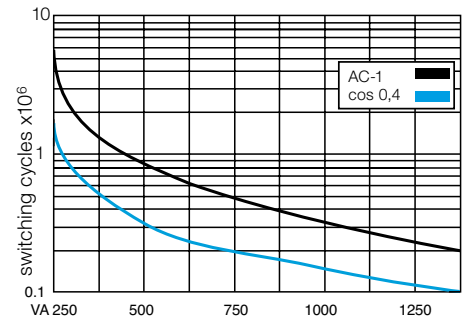
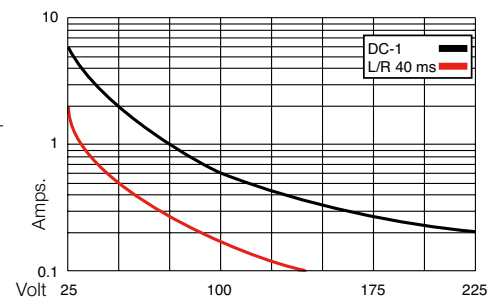
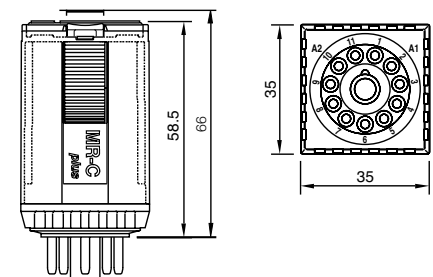
Standard types**DC 24, 48, 72, 110****Free wheeling diode****LED****LED + free wheeling diode**

R3-N30/DC ... V	R3-N34/DC ... V	R3-N38/DC ... V
R3-N30D/DC ... V	R3-N34D/DC ... V	R3-N38D/DC ... V
R3-N30X/DC ... V	R3-N34X/DC ... V	R3-N38X/DC ... V
R3-N30DX/DC ... V	R3-N34DX/DC ... V	R3-N38DX/DC ... V*

"... " Enter the voltage for full type designation

Accessories

Socket:	S3-B, S3-S, S3-L, S3-P, S3-P0
Optional accessories (blanking plug):	SO-NP, SO-OP

**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

IEC 60077/EN60077-1-2/99; EN61373/99