

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	480
	48	296	46	48	1K8
	115	1K7	19	110	9K
	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	81 g

Standard types	C3-A30/AC ... V	C3-A38/AC ... V	C3-A39/AC ... V
VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)	C3-A30X/AC ... V	C3-A38X/AC ... V	C3-A39X/AC ... V
LED			
VDC 24, 48, 110, 220	C3-A30/DC ... V	C3-A38/DC ... V	C3-A39/DC ... V
LED	C3-A30X/DC ... V	C3-A38X/DC ... V	C3-A39X/DC ... V
Free wheeling diode	C3-A30DX/DC ... V	C3-A38DX/DC ... V	C3-A39DX/DC ... V
Polarity and free wheeling diode	C3-A30FX/DC ... V	C3-A38FX/DC ... V	C3-A39FX/DC ... V
AC/DC bridge rectifier 24 V, 48 V, 60 V	C3-A30BX/UC ... V	C3-A38BX/UC ... V	C3-A39BX/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
Retaining clip, plastic:	S30-CM



Connection diagram

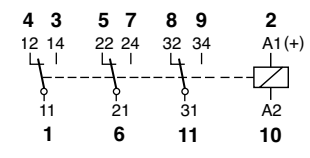


Fig. 1 AC voltage endurance

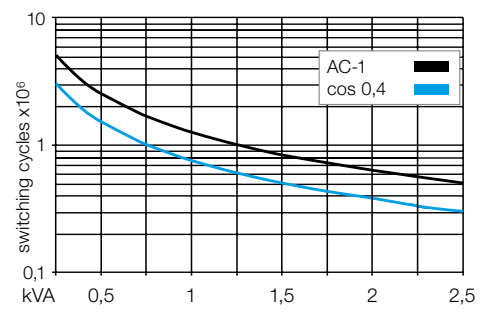
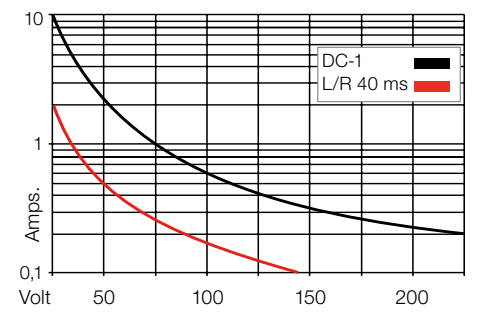
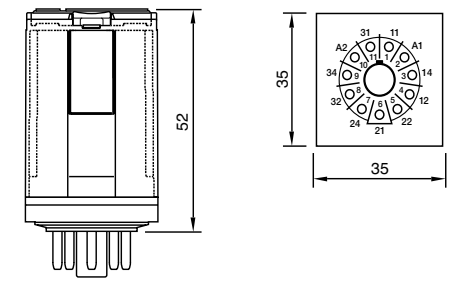


Fig. 2 DC load limit curve



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	480	50
48	296	46	48	1K8	26
115	1K7	19	110	9K	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 ... 70 °C / -40 ... 80 °C
Pick-up time/bounce time	8 ms/≤ 3 ms
Release time/bounce time	18 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	81 g

Standard types		
VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240) LED	C3-T31/AC ... V C3-T31X/AC ... V	C3-T32/AC ... V C3-T32X/AC ... V
VDC 24, 48, 110, 220 LED	C3-T31/DC ... V C3-T31X/DC ... V	C3-T32/DC ... V C3-T32X/DC ... V
Free wheeling diode	C3-T31DX/DC ... V C3-T31FX/DC ... V	C3-T32DX/DC ... V C3-T32FX/DC ... V
Polarity and free wheeling diode		
AC/DC bridge rectifier 24 V, 48 V, 60 V	C3-T31BX/UC ... V	C3-T32BX/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
Retaining clip, plastic:	S30-CM



Connection diagram

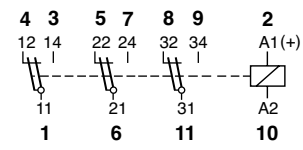


Fig. 1 AC voltage endurance

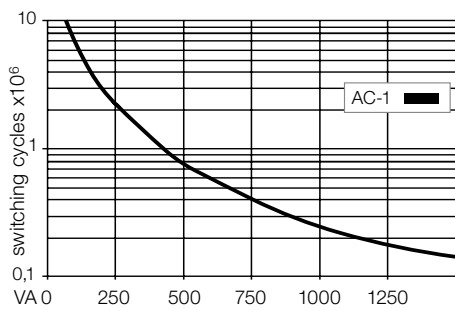
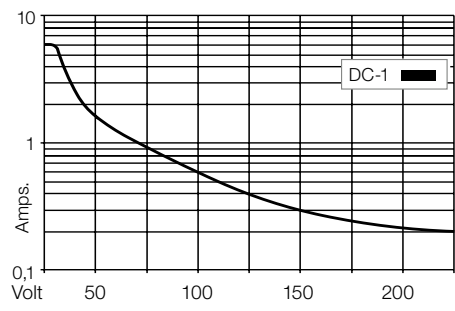
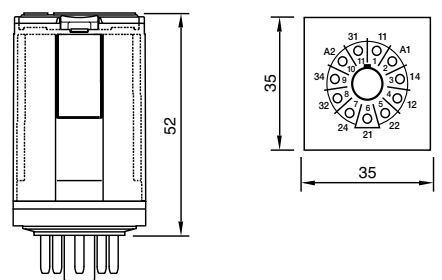


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



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 ± 10 %
Pick-up voltage	≤ 0,8 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	2,4 VA (AC)/1,6 W (DC)

Coil table																															
	<table border="1"> <thead> <tr> <th>VAC</th> <th>Ω</th> <th>mA</th> <th>VDC</th> <th>Ω</th> <th>mA</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>65</td> <td>100</td> <td>24</td> <td>360</td> <td>66</td> </tr> <tr> <td>48</td> <td>286</td> <td>50</td> <td>48</td> <td>1K4</td> <td>34</td> </tr> <tr> <td>115</td> <td>1K7</td> <td>21</td> <td>110</td> <td>7K6</td> <td>15</td> </tr> <tr> <td>230</td> <td>6K8</td> <td>10</td> <td>220</td> <td>30K3</td> <td>7,5</td> </tr> </tbody> </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
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	≥ 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	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	81 g

Standard types	
VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240) LED	C3-G30/AC ... V C3-G30X/AC ... V
VDC 24, 48, 110, 220 LED	C3-G30/DC ... V C3-G30X/DC ... V
Free wheeling diode	C3-G30DX/DC... V C3-G30FX/DC ... V
Polarity and free wheeling diode	
AC/DC bridge rectifier 24 V, 48 V, 60 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
Retaining clip, plastic:	S30-CM



Connection diagram

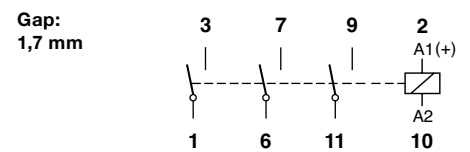


Fig. 1 AC voltage endurance

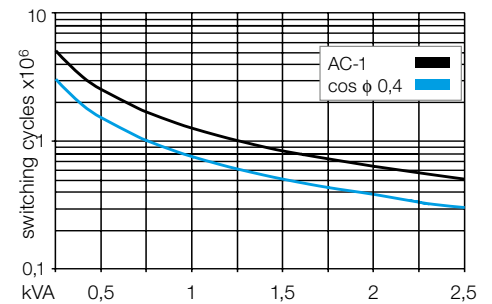
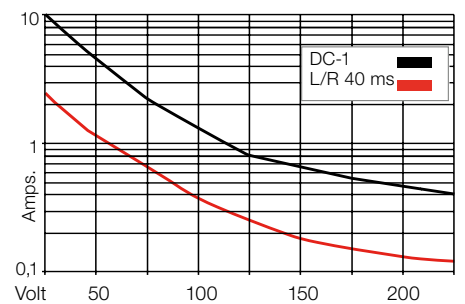
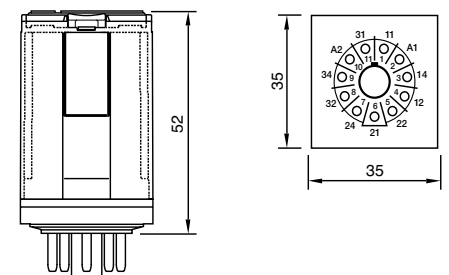


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



IEC 61810; EN 60947

C3-M1x

11-pin power relay, 1-pole, magnetic blow out, according to IEC 60067



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
-----------------------------	---

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 ± 10 %
Pick-up voltage	≤ 0,8 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	2,4 VA (AC) / 1,3 W (DC)

Coil table																															
	<table border="1"> <thead> <tr> <th>VAC</th> <th>Ω</th> <th>mA</th> <th>VDC</th> <th>Ω</th> <th>mA</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>65</td> <td>100</td> <td>24</td> <td>480</td> <td>50</td> </tr> <tr> <td>48</td> <td>286</td> <td>50</td> <td>48</td> <td>1K8</td> <td>26</td> </tr> <tr> <td>115</td> <td>1K7</td> <td>21</td> <td>110</td> <td>9K</td> <td>12</td> </tr> <tr> <td>230</td> <td>6K8</td> <td>10</td> <td>220</td> <td>29K</td> <td>7,5</td> </tr> </tbody> </table>	VAC	Ω	mA	VDC	Ω	mA	24	65	100	24	480	50	48	286	50	48	1K8	26	115	1K7	21	110	9K	12	230	6K8	10	220	29K	7,5
VAC	Ω	mA	VDC	Ω	mA																										
24	65	100	24	480	50																										
48	286	50	48	1K8	26																										
115	1K7	21	110	9K	12																										
230	6K8	10	220	29K	7,5																										

Insulation	Volt rms, 1 min
Contact open	2500 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 ... 70 °C (55° C AC) / -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	C3-M10/AC ... V C3-M10X/AC ... V
VDC 24, 48, 110, 220 LED	C3-M10/DC ... V C3-M10X/DC ... V
Free wheeling diode	C3-M10DX/DC ... V
Polarity and free wheeling diode	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
Retaining clip, plastic:	S30-CM



Connection diagram

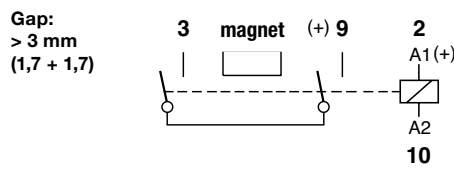


Fig. 1 AC voltage endurance

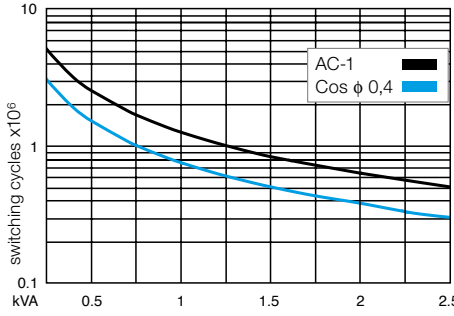
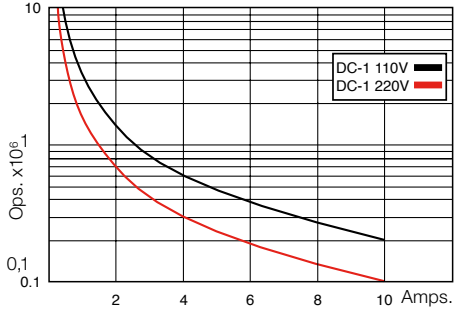
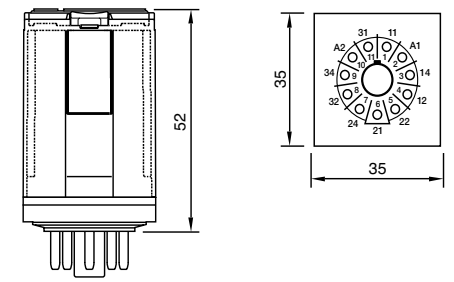


Fig. 2 DC voltage endurance



Dimensions [mm]



Technical approvals, conformities



C3-X1x

11-pin power relay, 1-pole, double make, according to IEC 60067

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 ± 10 %
Pick-up voltage	≤ 0,8 × U _N
Release voltage	≥ 0,1 × U _N
Nominal power	2,4 VA (AC)/1,3 W (DC)

Coil table						
VAC	Ω	mA	VDC	Ω	mA	
24	65	100	24	480	54	
48	286	50	48	1K8	26	
115	1K7	21	110	9K	12	
230	6K8	10	220	29K	7,5	

Insulation		Volt rms, 1 min
Contact open		2500 V
Contact/contact		2,5 kV
Contact/coil		2,5 kV
Insulation resistance at 500 V		≥ 1 G.Ω
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	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	83 g

Standard types	C3-X10/AC ... V C3-X10X/AC ... V
VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240) LED	C3-X10/DC ... V C3-X10X/DC ... V C3-X10DX/DC ... V C3-X10FX/DC ... V
VDC 24, 48, 110, 220 LED	C3-X10BX/UC ... V
Free wheeling diode	
Polarity and free wheeling diode	
AC/DC bridge rectifier 24 V, 48 V, 60 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
Retaining clip, plastic:	S30-CM



Connection diagram

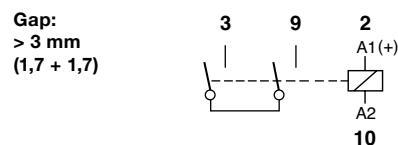


Fig. 1 AC voltage endurance

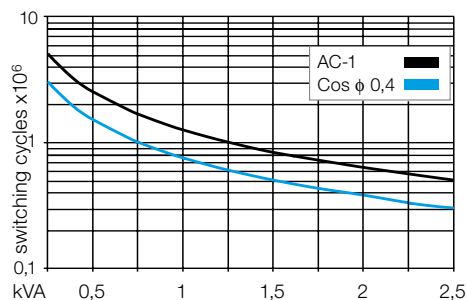
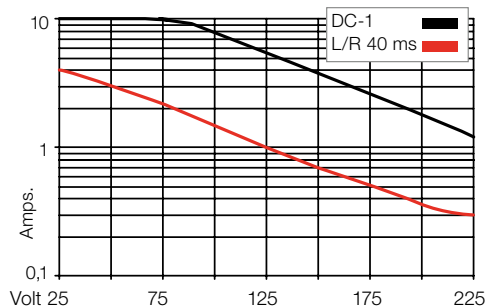
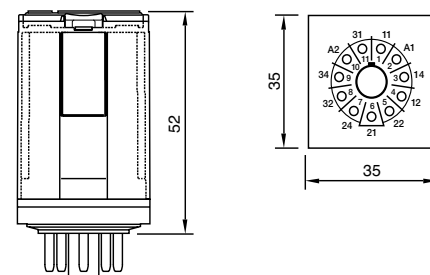


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



C3-R2x

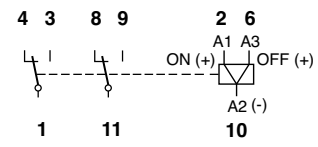
11-pin remanence relays, 2-pole, according to IEC 60067

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			



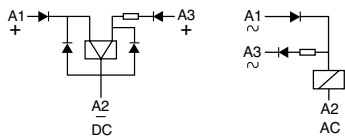
Contacts			
Material	Standard	Code 0	AgNi
	Optional	Code 8	AgNi + 10 μ Au
	Optional	Code 9	AgNi + 0,2 μ Au
Rated current	10 A		
Switch-on current max. (20 ms)	30 A		
Switching voltage max.	250 V		
AC load (Fig 1)	2,5 kVA		
DC load	see Fig. 2		

Connection diagram



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

Fig. 1 AC voltage endurance

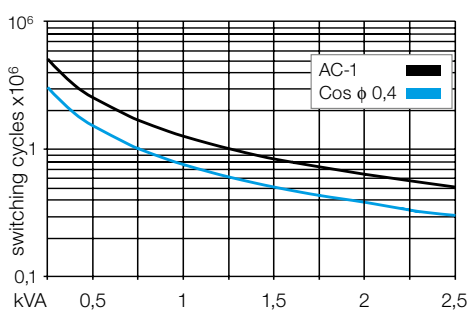
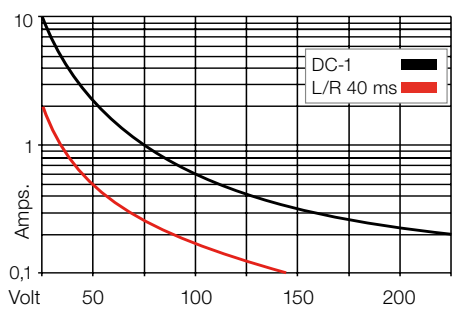


Fig. 2 DC load limit curve



Insulation	
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

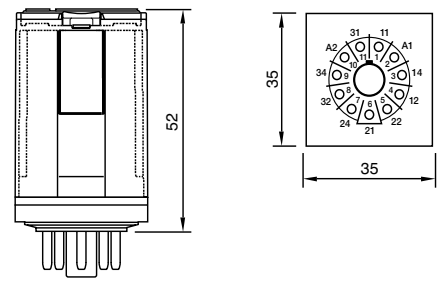
Specifications	
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Minimum pulse length for ON/OFF	50 ms
Mechanical life ops	10 Mill.
DC voltage endurance at rated load	≥100000 switching cycles
Switching frequency at rated load	≤ 1200/ops/h
Protection class	IP40
Weight	81 g

Standard types	C3-R20/AC ... V	C3-R28/AC ... V	C3-R29/AC ... V
VAC 50 Hz/60 Hz: 24, 48, 115, 230			
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
Retaining clip, plastic:	S30-CM

Dimensions [mm]



Technical approvals, conformities



IEC 61810; EN 60947