

C2-A2x

2 pole | changeover contact

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	
	5 mA/5 V Code 8	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
Max. switching current	10 A		
Max. peak inrush current (20 ms.)	30 A		
Max. switching voltage	250 V		
Max. AC load fig. 1	2.5 kVA		
Max. DC load	See fig. 2		

Coils

Coil resistance	see table; tolerance ± 10 %
Pick up voltage	≤ 0.8 × U _N
Pick up voltage	≥ 0.1 × U _N
Nominal power	2.2 VA (AC)/1.3 W (DC)

Coil Table

V AC	Ω	mA	V DC	Ω	mA
24	67	92	24	443	54
48	296	46	48	1K8	27
115	1K7	19	110	9K	12
230	7K1	9.5	220	36K1	6

Insulation

	Volt rms / 1 min
Open contact	1000 V
Between adjacent poles	2.5 kV
Between contacts and coil	2.5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 ops. switching cycles
Max. switching frequency at rated load	1200/h
Weight	79 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

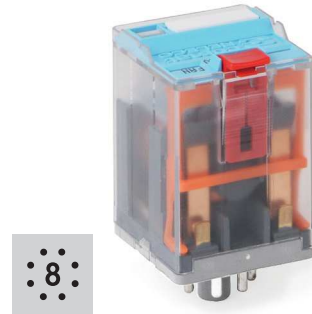
C2-A20/AC ... V	C2-A28/AC ... V
C2-A20X/AC ... V	C2-A28X/AC ... V
C2-A20R/AC ... V	C2-A28R/AC ... V
C2-A20/DC ... V	C2-A28/DC ... V
C2-A20X/DC ... V	C2-A28X/DC ... V
C2-A20DX/DC ... V	C2-A28DX/DC ... V
C2-A20FX/DC ... V	C2-A28FX/DC ... V
C2-A20BX/UC ... V	C2-A28BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories (See also Section Sockets)

Socket
Blanking Plug

S2-B, S2-PO
SO-NP (BAG 10 PCS)



Connection diagram

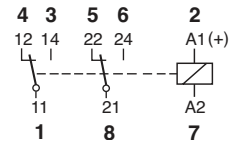


fig. 1 AC voltage endurance

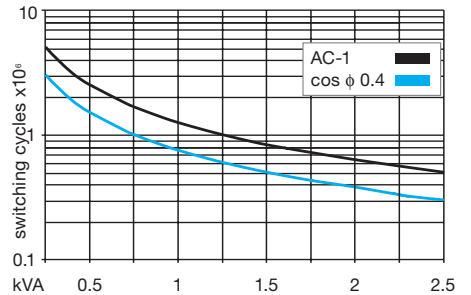
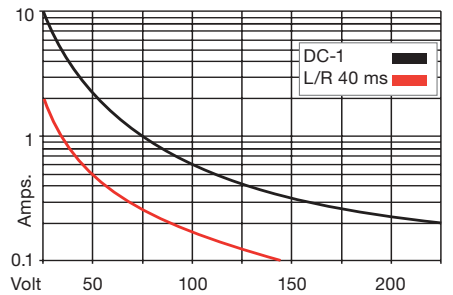
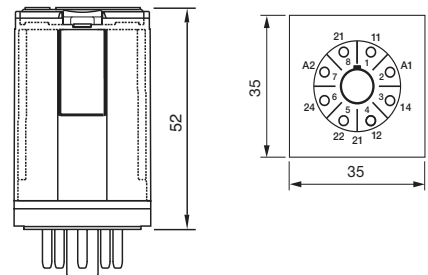


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-A3x

3 pole | changeover contact

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 + 5 μ Au
	Optional	Code 9	⚡ AgNi + 0.2 μ Au
Rated Load			10 A
Max. inrush current (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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	81 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

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

"..." List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

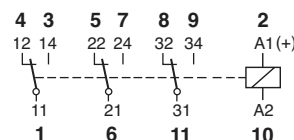


fig. 1 AC voltage endurance

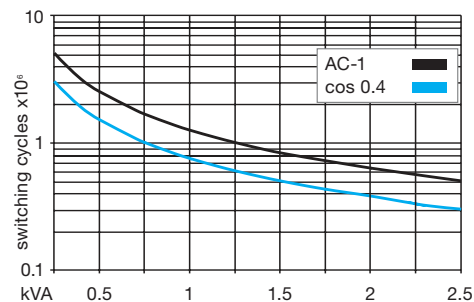
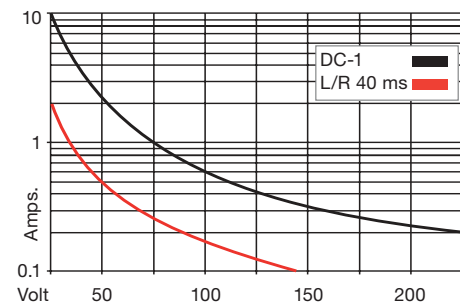
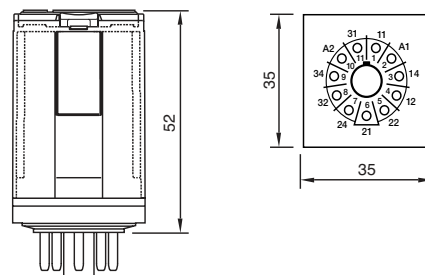


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



C3-G3x

3 pole | normally open contact

Maximum contact load	10 A/250 V AC-1	1.2 A/110 V DC-1
Recommended minimum contact load	10 A/30 V DC-1	0.4 A/220 V DC-1

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			10 A
Max. inrush current (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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	$\geq 100\,000$ switching cycles
Max. switching frequency at rated load	1200/h
Weight	81 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

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

"..." List Coil Voltage to complete Product References

Accessories

Socket

S3-B, S3-S, S3-PO, S3-M, S3-M0,
S3-M1

Blanking Plug

SO-NP (BAG 10 PCS)



Connection diagram

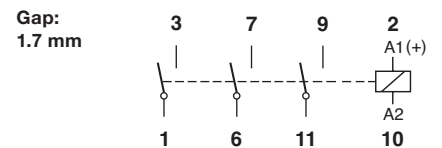


fig. 1 AC voltage endurance

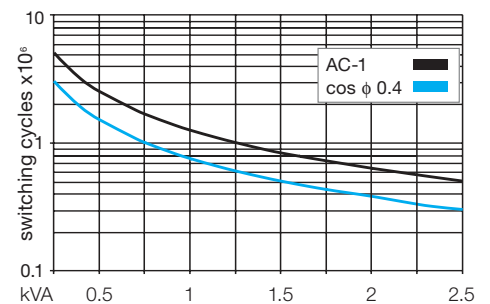
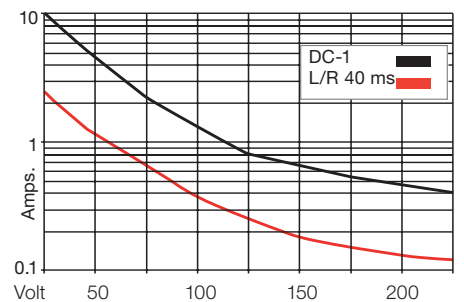
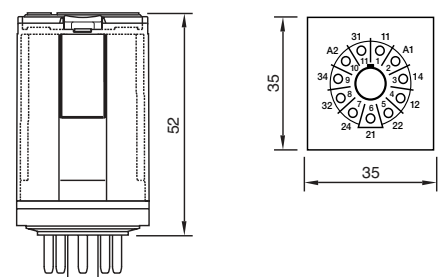


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-M1x

1 pole | normally open serial contact with blow magnet

Maximum contact load **10 A /250 V AC-1** **10 A/220 V DC-1**

Contacts

Material	Standard	Code 0	AgNi
Rated Load			10 A
Max. inrush current (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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40 ... 70 °C (55° C AC) /-40 ... 80 °C (no ice)
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	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

V AC 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

V DC 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

Other voltages on request

C3-M10BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

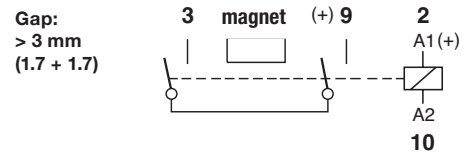


fig. 1 AC voltage endurance

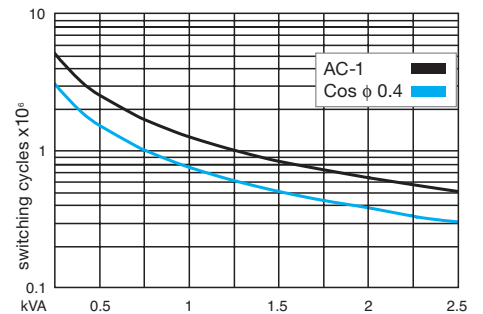
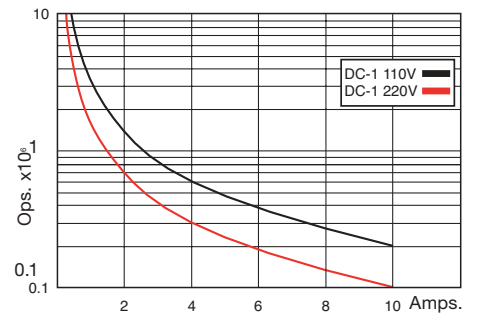
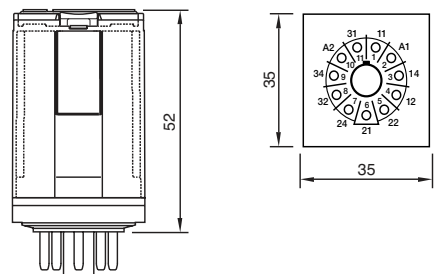


fig. 2 DC voltage endurance



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-N3x

3 pole | changeover contact | sensitive coil

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 + 5 μ Au
Rated Load			5 A
Max. inrush current (20 ms)			30 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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

V DC 24, 48, 60, 110

Free wheeling diode

Polarity and free wheeling diode

Other voltages on request

C3-N34/DC ... V	C3-N38/DC ... V
C3-N34D/DC ... V	C3-N38D/DC ... V
C3-N34F/DC ... V	C3-N38F/DC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

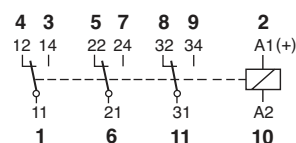


fig. 1 AC voltage endurance

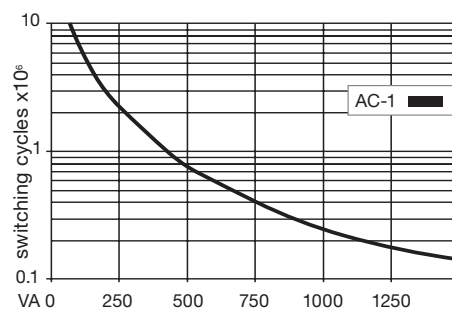
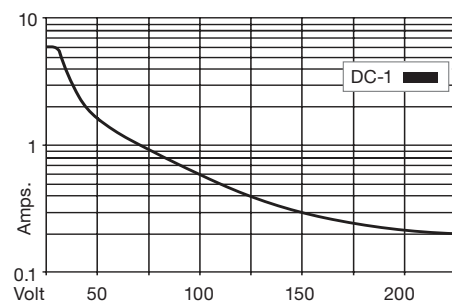
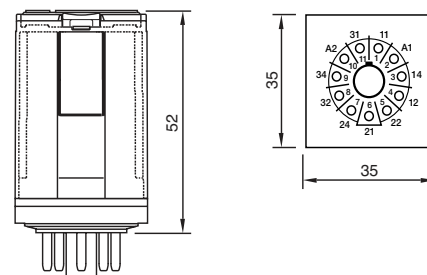


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-R2x

2 pole | changeover contact | remanance

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	
	5 mA/5 V Code 8	

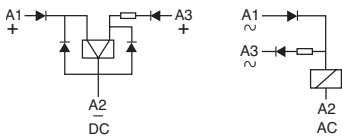
Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
Rated Load	10 A		
Max. inrush current (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

V AC	mA ON	mA OFF	V DC	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	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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Minimum pulse length for ON OFF	50 ms
Mechanical life ops	10 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	81 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, 230

C3-R20N/AC ... V C3-R28N/AC ... V

V DC 12, 24, 48, 110

C3-R20N/DC ... V C3-R28N/DC ... V

Other voltages on request

"..."List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

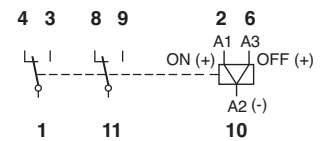


fig. 1 AC voltage endurance

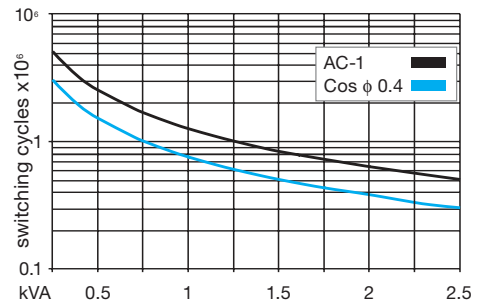
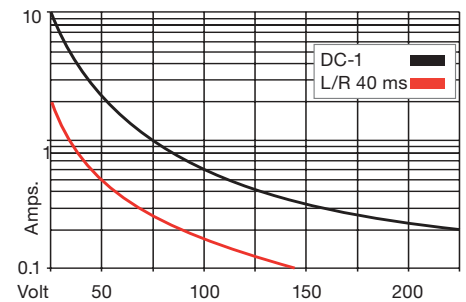
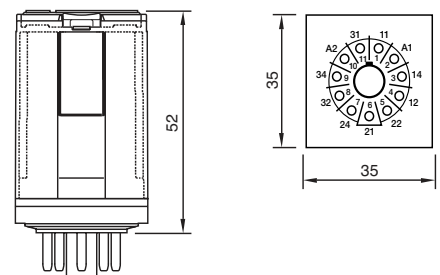


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-T3x

3 pole | changeover twin contact

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 + 5 μ Au
Rated Load			6 A
Max. inrush current (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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40 ... 70 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	81 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

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

"..." List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

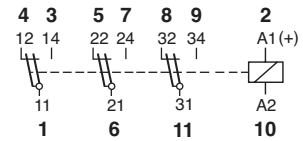


fig. 1 AC voltage endurance

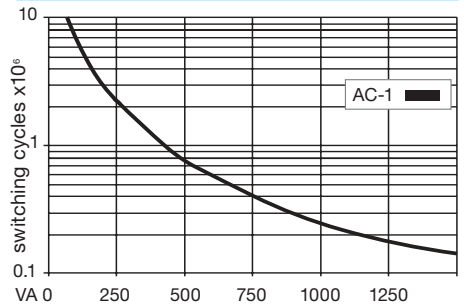
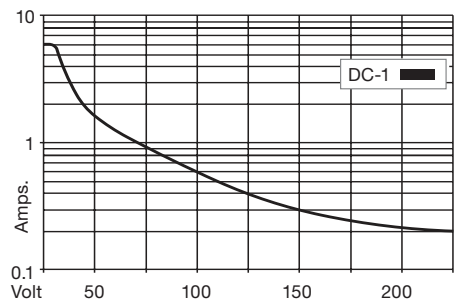
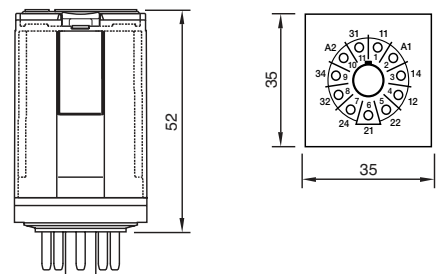


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C3-X1x

1 pole | normally open serial contact

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 Load			10 A
Max. inrush current (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

V AC	Ω	mA	V DC	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

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	83 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S3-B, S3-S, S3-PO, S3-M, S3-M0, S3-M1
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

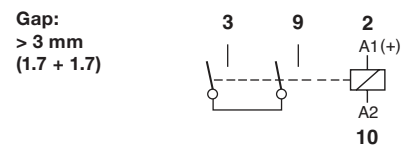


fig. 1 AC voltage endurance

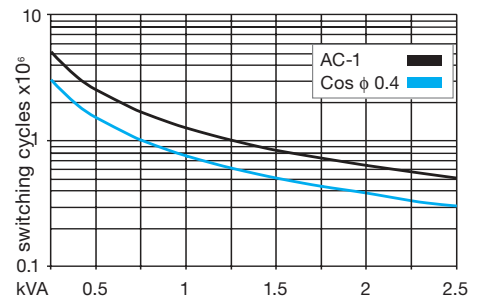
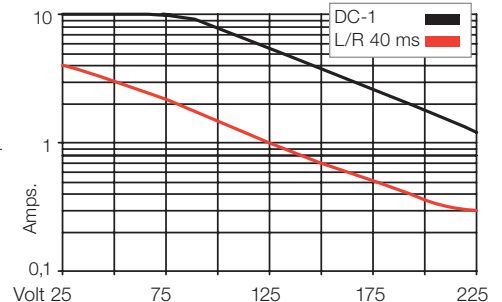
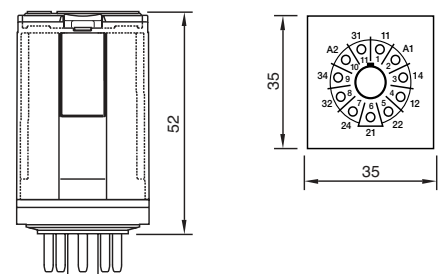


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C4-A4x

4 pole | changeover contact | Faston

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/5 V	Code 0		
	5 mA/5 V	Code 8		

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 8	AgNi + 5 µ Au
Rated Load			10 A
Max. inrush current (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)/1.4 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	65	100	24	414	58
48	286	50	48	1K6	30
115	1K7	21	110	8K1	13
-	-	-	120-125	10K	12.3
230	6K8	10	220	35K7	6.2

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

C4-A40/AC ... V

C4-A40X/AC ... V

C4-A40R/AC ... V

C4-A40/DC ... V

C4-A40X/DC ... V

C4-A40DX/DC ... V

C4-A40FX/DC ... V

C4-A40BX/UC ... V

C4-A48/AC ... V

C4-A48X/AC ... V

C4-A48R/AC ... V

C4-A48/DC ... V

C4-A48X/DC ... V

C4-A48DX/DC ... V

C4-A48FX/DC ... V

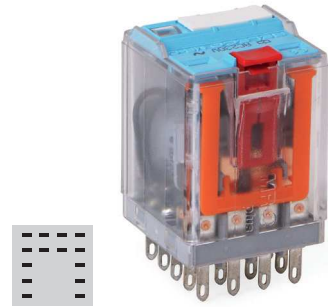
C4-A48BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket
Wall Mounting Adapter
Blanking Plug

S4-J, S4-L, S4-P
S5-R (BAG 5 PCS)
SO-NP (BAG 10 PCS)



Connection diagram

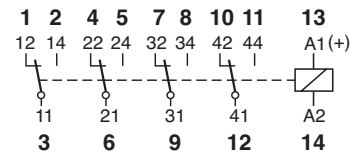


fig. 1 AC voltage endurance

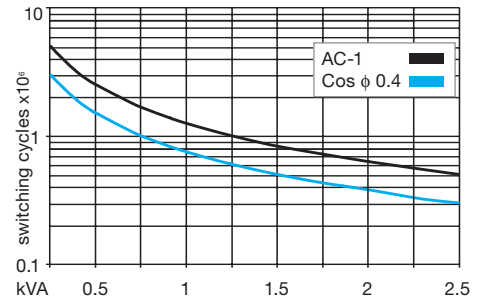
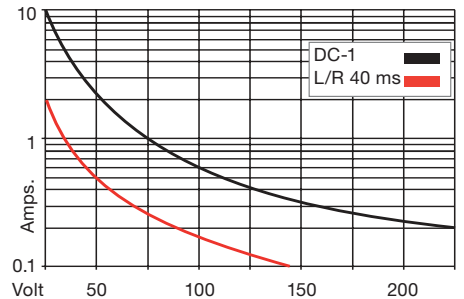
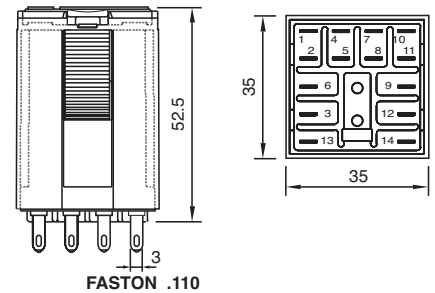


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C4-R3x

3 pole | changeover contact | remanance

Maximum contact load	10 A/250 V AC-1	0.5 A/110 V DC-1
	10 A/10 V DC-1	0.2 A/220 V DC-1
Recommended minimum contact load	10 mA/10 V Code 0	
	5 mA/5 V Code 8	

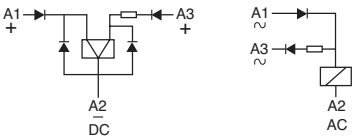
Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
Rated Load	10 A		
Max. inrush current (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	1 Winding for AC, 2 Windings for DC ≤ 0.8 × U _N

Internal Diagram:



Coil table

V AC	mA ON	mA OFF	V DC	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	1000 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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Minimum pulse length for ON OFF	50 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill. switching cycles
DC voltage endurance at rated load	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	95 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, 230

C4-R30/AC ... V C4-R38/AC ... V

V DC 12, 24, 48, 110

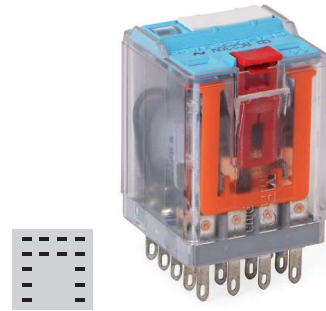
C4-R30/DC ... V C4-R38/DC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S4-J, S4-L, S4-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

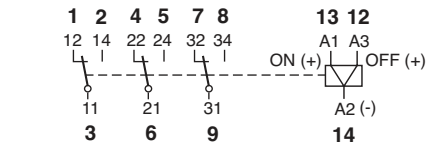


fig. 1 AC voltage endurance

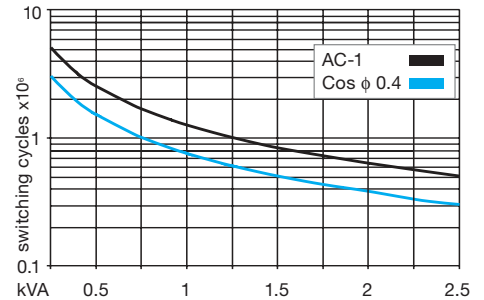
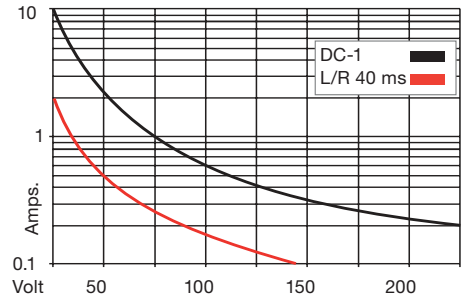
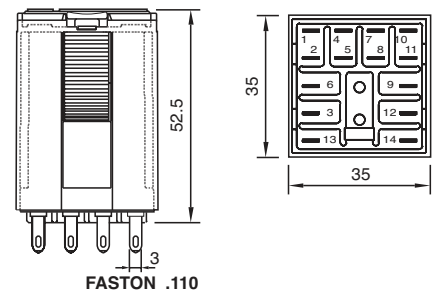


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C4-X2x

2 pole | normally open serial contact | Faston

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
Recommended minimum contact load	10 mA/10 V Code 0	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			10 A
Max. inrush current (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

V AC	Ω	mA	V DC	Ω	mA
24	65	100	24	443	54
48	286	50	48	1K8	27
115	1K7	21	110	9K2	12
230	6k8	10	220	30K3	6

Insulation

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

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

LED

RC Suppressor

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

C4-X20/AC ... V

C4-X20X/AC ... V

C4-X20R/AC ... V

C4-X20/DC ... V

C4-X20X/DC ... V

C4-X20DX/DC ... V

C4-X20FX/DC ... V

C4-X20BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S4-J, S4-L, S4-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

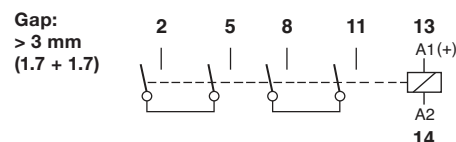


fig. 1 AC voltage endurance

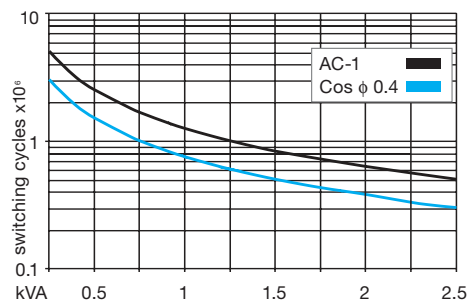
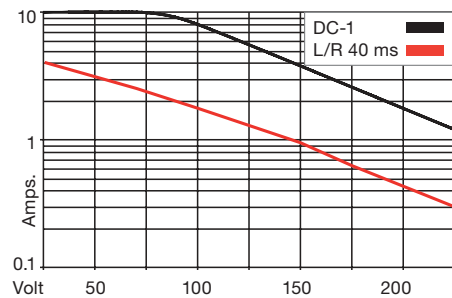
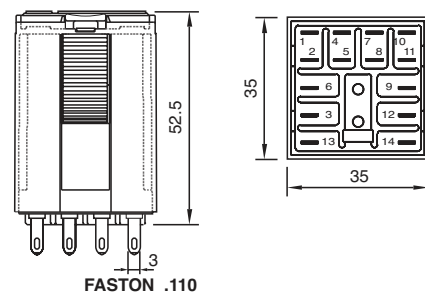


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-A2x

2 pole | changeover contact | Faston

Maximum contact load	16 A/400 V AC-1	0.5 A/110 V DC-1
	16 A/30 V DC-1	0.2 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			16 A
Max. inrush current (20 ms)			40 A
Switching voltage max.			400 V
AC load fig. 1			4 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)/1.4 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	65	100	24	414	58
48	286	50	48	1K6	30
115	1K7	21	110	8K1	13
230	6K8	10	220	30K3	6
400	18K8	6			

Insulation

Contact open	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥3 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

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

LED

RC Suppressor (max 250 V)

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

C5-A20/AC ... V
C5-A20X/AC ... V
C5-A20R/AC ... V

C5-A20/DC ... V
C5-A20X/DC ... V
C5-A20DX/DC ... V
C5-A20FX/DC ... V

C5-A20BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

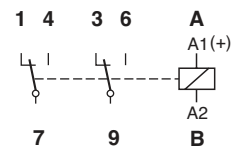


fig. 1 AC voltage endurance

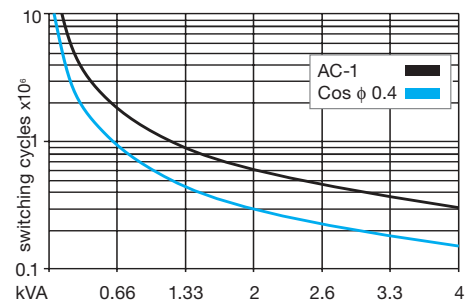
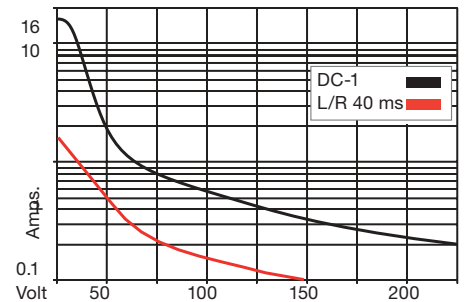
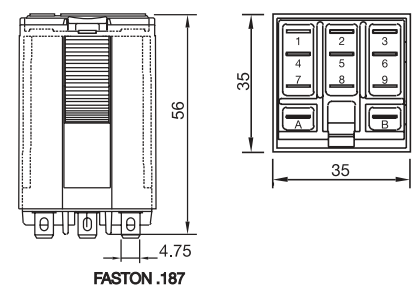


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-A3x

3 pole | changeover contact | Faston



Maximum contact load	16 A/400 V AC-1	0.5 A/110 V DC-1
	16 A/30 V DC-1	0.2 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	AgNi
	Optional	Code 5	AgSnO ₂
Rated Load	16 A		
Max. inrush current (20 ms)	40 A		
Switching voltage max.	400 V		
AC load fig. 1	4 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)/1.4 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	65	100	24	414	58
48	286	50	48	1K6	30
115	1K7	21	110	8K1	13
230	6K8	10	220	30K3	6.2
400	18K8	6			

Insulation

Contact open	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥3 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C /-40 ... 80 °C (no ice)
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	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	95 g

Product References

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

LED

RC Suppressor (max 250 V)

C5-A30/AC ... V

C5-A30X/AC ... V

C5-A30R/AC ... V

C5-A35/AC ... V

C5-A35X/AC ... V

C5-A35R/AC ... V

V DC 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

C5-A30/DC ... V

C5-A30X/DC ... V

C5-A30DX/DC ... V

C5-A30FX/DC ... V

C5-A35/DC ... V

C5-A35X/DC ... V

C5-A35DX/DC ... V

C5-A35FX/DC ... V

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

Other voltages on request

C5-A30BX/UC ... V

C5-A35BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

- Socket
- Wall Mounting Adapter
- Blanking Plug

- S5-M, S5-P**
- S5-R (BAG 5 PCS)**
- SO-NP (BAG 10 PCS)**



Connection diagram

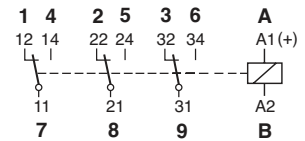


fig. 1 AC voltage endurance

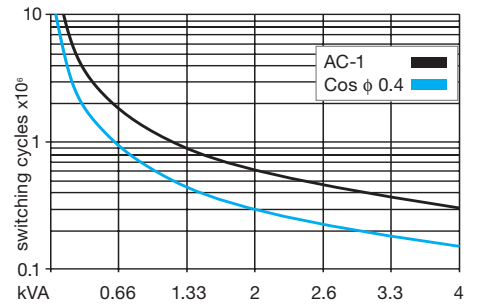
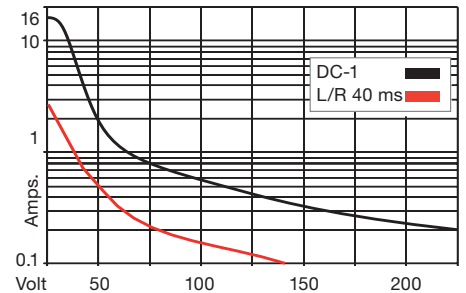
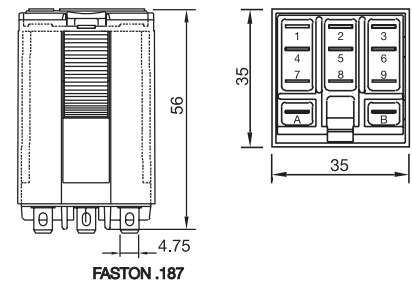


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-G3x

3 pole | normally open contact | Faston

Maximum contact load	16 A/400 V AC-1	1.2 A/110 V DC-1
	16 A/30 V DC-1	0.4 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 5	⚡ AgSnO ₂
Rated Load	16 A		
Max. inrush current (20 ms)	40 A		
Switching voltage max.	400 V		
AC load fig. 1	4 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

V AC	Ω	mA	V DC	Ω	mA
24	65	100	12	90	133
48	286	50	24	373	66
115	1K7	21	48	1K4	34
230	6K8	10	110	7K6	15
400	18K8	6	220	30K3	7.5

Insulation

Contact open	2000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥ 3 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	95 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, (120), 230, (240)	C5-G30/AC ... V	C5-G35/AC ... V
LED	C5-G30X/AC ... V	C5-G35X/AC ... V
RC Suppressor (max 250 V)	C5-G30R/AC ... V	C5-G35R/AC ... V
V DC 12, 24, 48, 110, 220	C5-G30/DC ... V	C5-G35/DC ... V
LED	C5-G30X/DC ... V	C5-G35X/DC ... V
Free wheeling diode	C5-G30DX/DC ... V	C5-G35DX/DC ... V
Polarity and free wheeling diode	C5-G30FX/DC ... V	C5-G35FX/DC ... V
AC/DC bridge rectifier 24 V, 48 V, 60 V	C5-G30BX/UC ... V	C5-G35BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

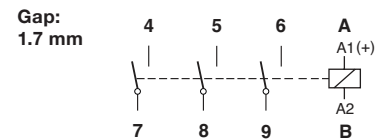


fig. 1 AC voltage endurance

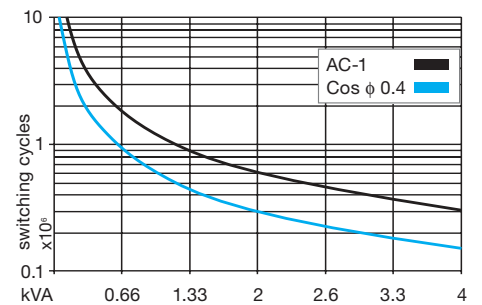
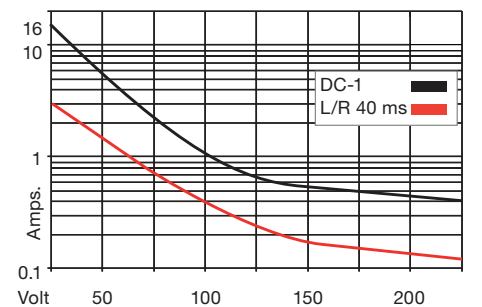
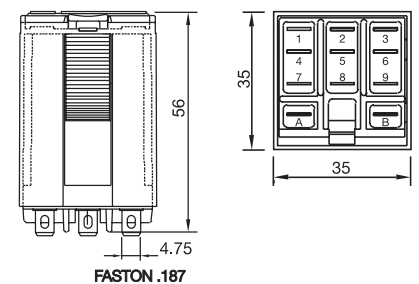


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-M1x

1 pole | normally open serial contact with blow magnet | Faston

Maximum contact load	16 A/400 V AC-1	10 A/220 V DC-1
	3.6 A/110 V DC-13	2 A/220 V DC-13
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			16 A
Max. inrush current (20 ms)			40 A
Switching voltage max.			400 V
AC load fig. 1			4 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

V AC	Ω	mA	V DC	Ω	mA
24	65	100	12	110	108
48	286	50	24	443	54
115	1K7	21	48	1K7	27
230	6K8	10	110	9K2	12
400	18K8	6	220	30K3	6.2

Insulation

Contact open	4000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥ 3 G.Ω
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	see fig. 2
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

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

LED

RC Suppressor (max 250 V)

V DC 12, 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

Other voltages on request

C5-M10/AC ... V

C5-M10X/AC ... V

C5-M10R/AC ... V

C5-M10/DC ... V

C5-M10X/DC ... V

C5-M10DX/DC ... V

C5-M10FX/DC ... V

C5-M10BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

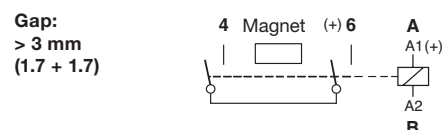


fig. 1 AC voltage endurance

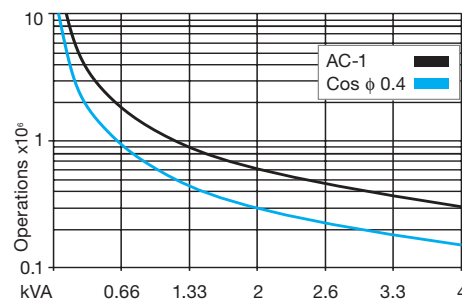
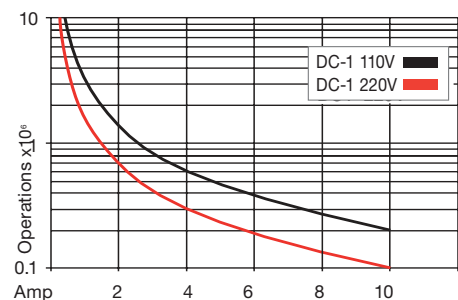
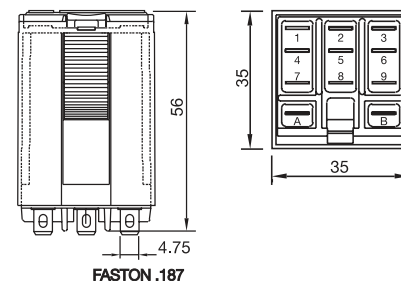


fig. 2 DC voltage endurance



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-M2x

2 pole | normally open contact with blow magnet | Faston



Maximum contact load	16 A / 250 V AC-1	7 A / 110 V DC-1
		3 A / 220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			16 A
Max. inrush current (20 ms)			40 A
Switching voltage max.			250 V
AC load fig. 1			4 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

V AC	Ω	mA	V DC	Ω	mA
24	65	100	12	90	133
48	286	50	24	373	66
115	1K7	21	48	1K4	33
230	6K8	10.4	110	7K6	15

Insulation

Contact open	2 kV
Contact/contact	4 kV
Contact/coil	3 kV
Insulation resistance at 500 V	≥ 3 GΩ
Insulation, EN 60947/IEC 61810-1:	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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. switching cycles
DC Rated load	≥ 75 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

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

LED

RC Suppressor

C5-M20/AC ... V

C5-M20X/AC ... V

C5-M20R/AC ... V

V DC 12, 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

C5-M20/DC ... V

C5-M20X/DC ... V

C5-M20DX/DC ... V

C5-M20FX/DC ... V

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

Other voltages on request

C5-M20BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

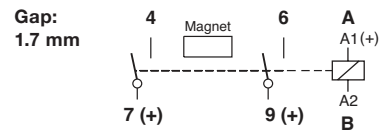


fig. 1 AC voltage endurance

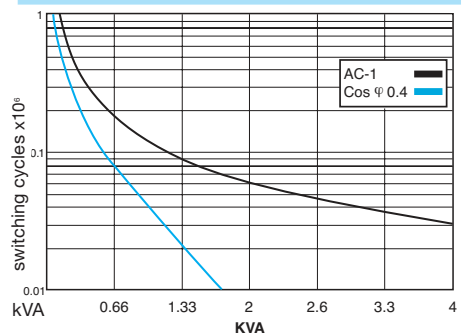
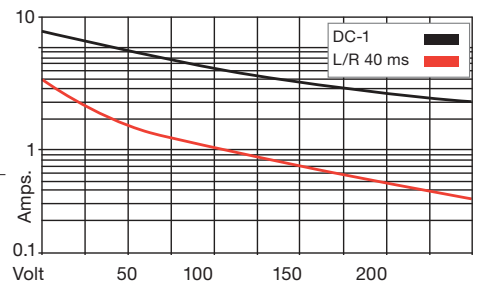
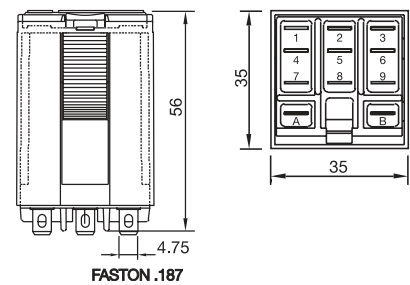


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-R2x

2 pole | changeover contact | remanance

Maximum contact load	10 A/400 V AC-1	10 A/30 V DC-1
	0.2 A/250 V DC-1	0.5 A/110 V DC-1
Recommended minimum contact load	10mA/10V	

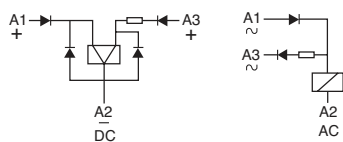
Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			10 A
Max. inrush current (20 ms)			30 A
Switching voltage max.			400 V
AC load fig. 1			4 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 1 winding for AC, 2 winding for DC
Pull-in ON OFF	< 0.8 x U _N

Internal Diagram:



Coil table

V AC	mA ON	mA OFF	V DC	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	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥3 GΩ
Insulation, EN 60947/IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Minimum pulse ON OFF	50 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	95 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, 230

C5-R20/AC ... V

V DC 12, 24, 48, 110,

C5-R20/DC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

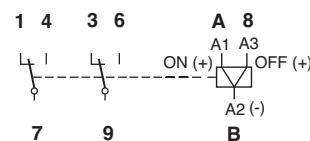


fig. 1 AC voltage endurance

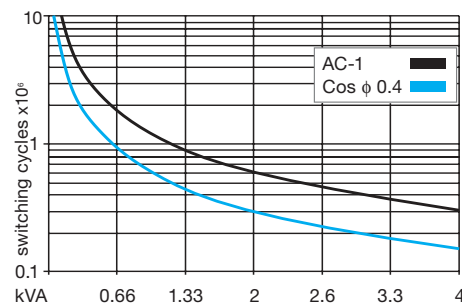
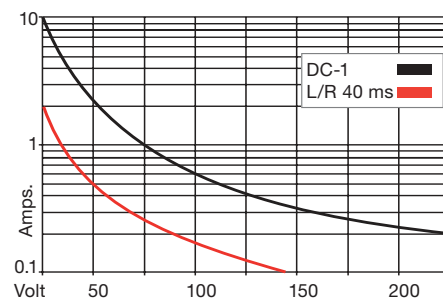
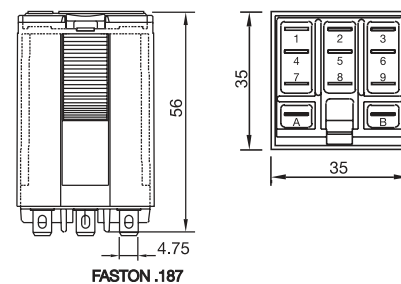


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C5-X1x

1 pole | normally open serial contact | Faston

Maximum contact load	16 A/400 V AC-1	7 A/110 V DC-1
	16 A/30 V DC-1	1.2 A/220V DC-13
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			16 A
Max. inrush current (20 ms)			40 A
Switching voltage max.			400 V
AC load fig. 1			4 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

V AC	Ω	mA	V DC	Ω	mA
24	65	100	12	110	108
48	286	50	24	443	54
115	1K7	21	48	1K7	27
230	6K8	10	110	9K2	12
400	18K8	6	220	30K3	6.2

Insulation

Contact open	4 kV
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	≥ 3 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	90 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)	C5-X10/AC ... V
LED	C5-X10X/AC ... V
RC Suppressor (max 250 V)	C5-X10R/AC ... V
V DC 12, 24, 48, 110, 220	C5-X10/DC ... V
LED	C5-X10X/DC ... V
Free wheeling diode	C5-X10DX/DC ... V
Polarity and free wheeling diode	C5-X10FX/DC ... V
AC/DC bridge rectifier 24 V, 48 V, 60 V	C5-X10BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S5-M, S5-P
Wall Mounting Adapter	S5-R (BAG 5 PCS)
Blanking Plug	SO-NP (BAG 10 PCS)



Connection diagram

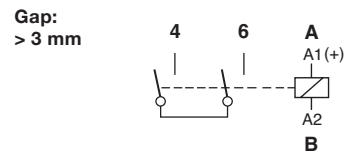


fig. 1 AC voltage endurance

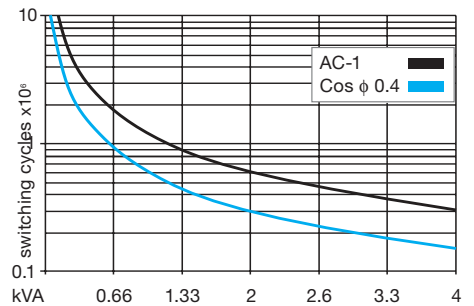
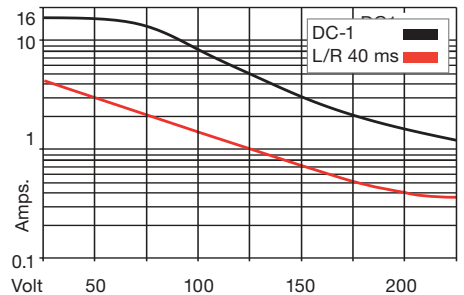
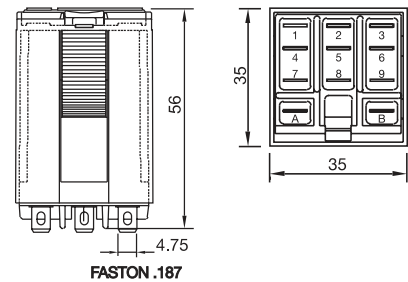


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-A1x

1 pole | changeover contact | Faston

Maximum contact load	16 A/250 V AC-1	0.5 A/110 V DC-1
	16 A/24 V DC-1	0.2 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			16 A
Max. inrush current (20 ms)			40 A (120 A for code 5)
Switching voltage max.			250 V
AC load fig. 1			4 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	1.2 VA (AC)/1.3 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	174	50	12	111	108
48	686	25	24	432	55
115	4K3	10.4	48	1K7	28
230	18K6	5.2	110	9K2	12

Insulation

Contact open	1000 V
Contact/coil	2.5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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.
AC/DC voltage endurance at rated load	$\geq 100\,000$ switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

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

LED

C7-A10X/AC ... V

V DC 12, 24, 48, 110

LED

C7-A10X/DC ... V

Free wheeling diode (only 24 DC)

C7-A10DX/DC 24 V

Polarity and free wheeling diode

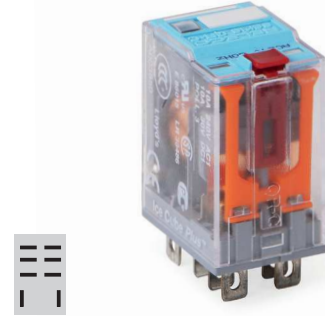
C7-A10FX/DC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

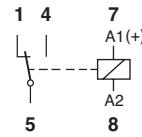


fig. 1 AC voltage endurance

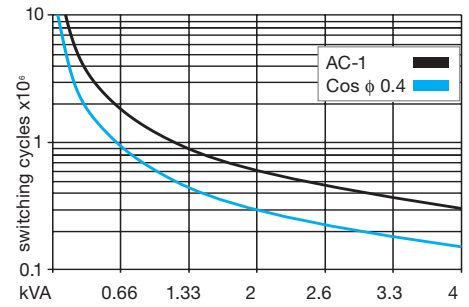
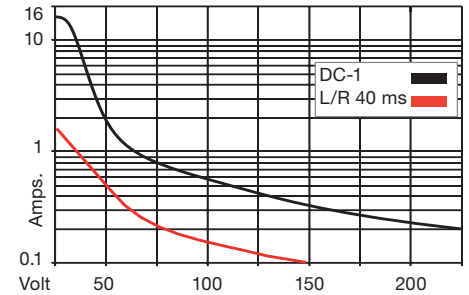
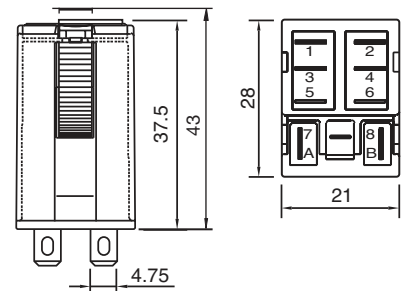


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-A2x

2 pole | changeover contact | Faston

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	
	5 mA/5 V Code 8	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
Rated Load	10 A		
Max. inrush current (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	1.2 VA (AC)/1 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	174	50	12	148	85
48	686	25	24	594	43
115	4K3	10.4	48	2K3	21
230	18K6	5.2	110	11K4	10

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

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

LED

C7-A20X/AC ... V C7-A28X/AC ... V

V DC 12, 24, 48, 110

LED

C7-A20X/DC ... V C7-A28X/DC ... V

Free wheeling diode (only 24 DC)

C7-A20DX/DC 24 V C7-A28DX/DC 24 V

Polarity and free wheeling diode

C7-A20FX/DC ... V C7-A28FX/DC ... V

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

C7-A20BX/UC ... V C7-A28BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P,
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

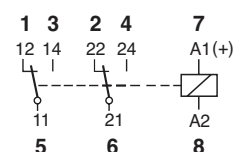


fig. 1 AC voltage endurance

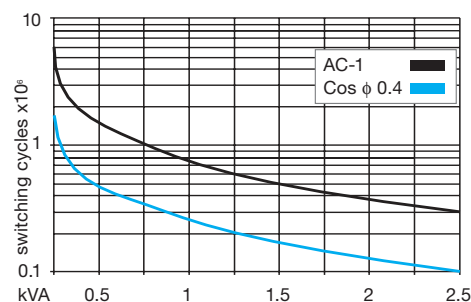
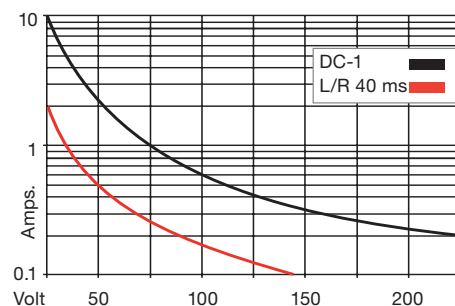
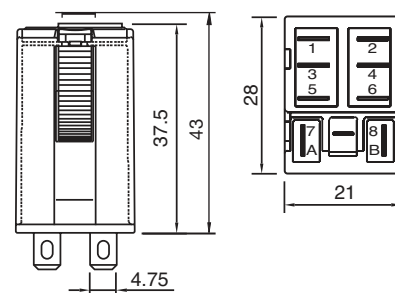


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-G2x

2 pole | normally open contact | Faston

Maximum contact load	10 A/250 V AC-1	0.8 A/110 V DC-1
	10 A/30 V DC-1	0.4 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			10 A
Max. inrush current (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	1.5 VA (AC)/1.5 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	153	62	12	99	121
48	611	31	24	388	61
115	3K6	13	48	1K5	32
230	14K6	6.5	110	8K	14

Insulation

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240) LED

C7-G20X/AC ... V

V DC 12, 24, 48, 110

LED

Polarity and free wheeling diode

C7-G20FX/DC ... V

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

Other voltages on request

C7-G20BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P,
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

Gap: 1.5 mm

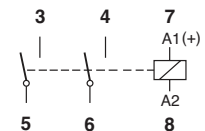


fig. 1 AC voltage endurance

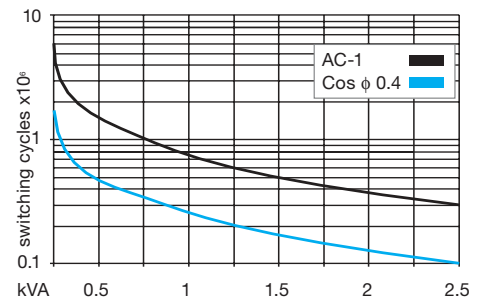
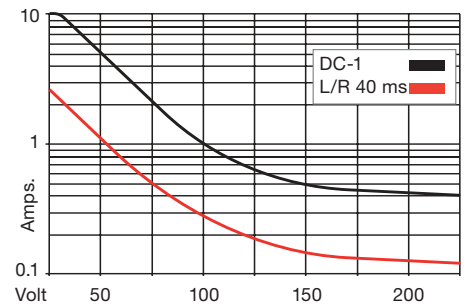
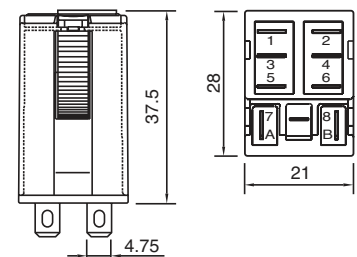


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-T2x

2 pole | changeover twin contact

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 + 5 μ Au
Rated Load			6 A
Max. inrush current (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	1.2 VA (AC)/1 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	174	50	12	148	85
48	686	25	24	594	43
115	4K3	10.4	48	2K3	21
230	18K6	5.2	110	11K4	10

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

V AC 50 Hz/60 Hz: 230 (240)

LED

C7-T21X/AC ... V

C7-T22X/AC230V

V DC 12, 24, 48, 110

LED

C7-T21X/DC ... V

C7-T21DX/DC24V

C7-T21FX/DC ... V

C7-T21BX/UC ... V

C7-T22FX/DC110V

C7-T22BX/UC24V

C7-T22BX/UC48V

AC/DC bridge rectifier 24 V, 48 V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P,
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

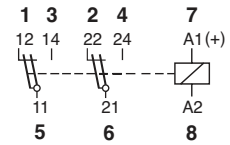


fig. 1 AC voltage endurance

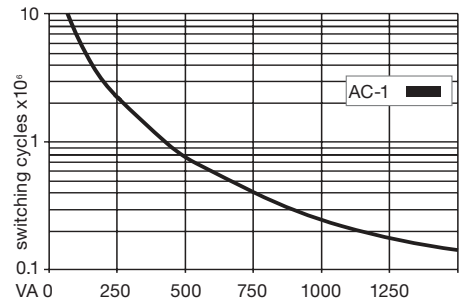
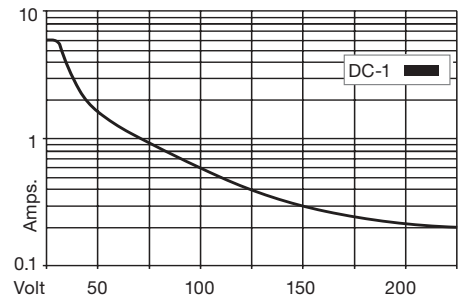
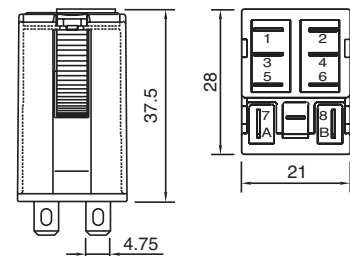


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-W1x

1 pole | normally open tungsten pre-contact | Faston

Maximum contact load:	10 A/250 V AC-1	6 A / 250 V AC-5a/b
Recommended minimum contact load:	10 mA/10 V	

Contacts

Material	Standard	Code 0	AgNi/W
Rated Load			10 A
Max. inrush current (2.5 ms)			500 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	1.5 VA (AC)/1.5 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	153	62	12	99	121
48	611	31	24	388	61
115	3K6	13	48	1K5	32
230	14K5	6.5	110	8K	14

Insulation

Contact open	1000 V
Contact/coil	2.5 kV
Insulation resistance at 500 V	$\geq 1 \text{ G}\Omega$
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	$\geq 100\,000$ switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)
LED

C7-W10X/AC ... V

V DC 12, 24, 48, 110
LED

Polarity and free wheeling diode

C7-W10FX/DC ... V

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

Other voltages on request

C7-W10BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P,
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

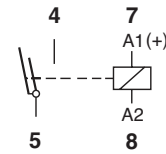


fig. 1 AC voltage endurance

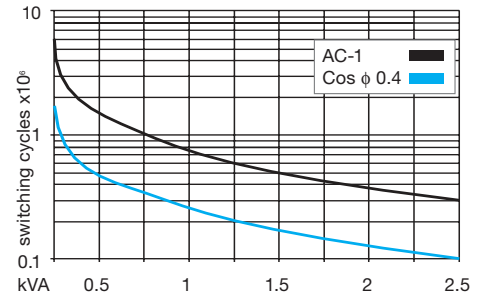
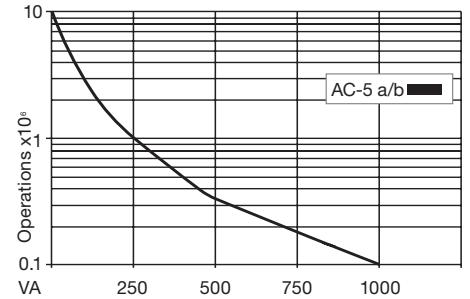
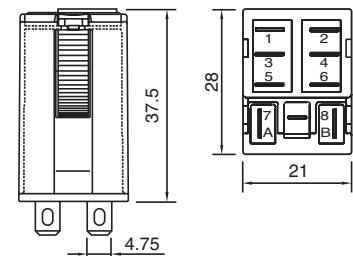


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C7-X1x

1 pole | normally open serial contact | Faston

Maximum contact load	10 A/250 V AC-1	6 A/110 V DC-1
	10 A/30 V DC-1	1 A/220 V DC-1
Recommended minimum contact load	10mA/10V	

Contacts

Material	Standard	Code 0	⚡ AgNi
Rated Load			10 A
Max. inrush current (20 ms)			30 A
Switching voltage max.			250 V
AC load			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	1.5 VA (AC)/1.3 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	153	62	12	111	108
48	611	31	24	432	55
115	3K6	13	48	1K7	27
230	14K6	6.5	110	9K2	12

Insulation

Contact open	2.5 kV
Contact/coil	2.5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

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

LED

C7-X10X/AC ... V

V DC 12, 24, 48, 110

LED

C7-X10X/DC ... V

Free wheeling diode (only 24 DC)

C7-X10DX/DC 24 V

Polarity and free wheeling diode

C7-X10FX/DC ... V

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

C7-X10BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S7-C, S7-IO, S7-P,
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

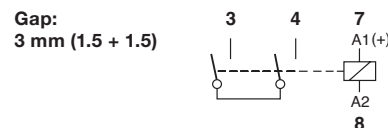


fig. 1 AC voltage endurance

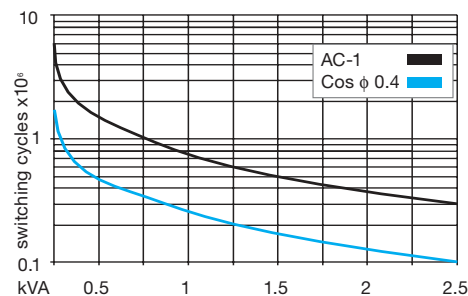
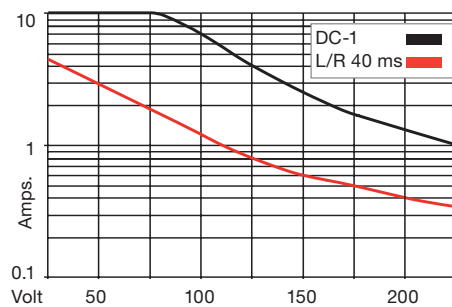
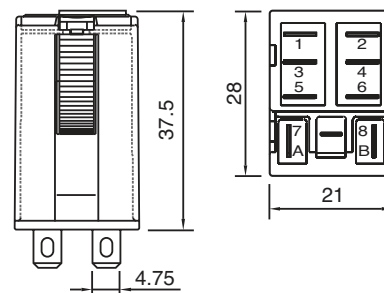


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C9-A4x

4 pole | changeover contact | Faston

Maximum contact load	5 A/250 V AC-1	5 A/30 V DC-1
Recommended minimum contact load	10 mA/10 V Code 1	1 mA/5 V Code 2

Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
	Optional	Code 2	AgNi + 5 μ Au
Rated Load	5 A		
Max. inrush current (20 ms)	15 A		
Switching voltage max (same polarity)	250 V		
AC load fig. 1	1250 VA		
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	1.2 VA (AC)/1 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	174	50	12	148	81
48	686	25	24	594	40
115	4K3	10.4	48	2K3	21
230	18K6	5.2	110	11K4	11

Insulation

Contact open	1000 V
Contact/contact	2 kV
Contact/coil	2.5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 3 ms
Release time/bounce time	6 ms / ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, 230 (240)

LED

C9-A41X/AC ... V

C9-A42X/AC ... V

V DC 12, 24, 48, 110

LED

C9-A41X/DC ... V

C9-A42X/DC ... V

Free wheeling diode (only 24 DC)

C9-A41DX/DC 24 V

C9-A42DX/DC 24 V

Polarity and free wheeling diode

C9-A41FX/DC ... V

C9-A42FX/DC ... V

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

C9-A41BX/UC ... V

C9-A42BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S9-M, S9-P
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Maximum voltage between two separate circuits on neighbouring contacts: 150 V
Not permitted: 24 V DC next to 230 V AC, 230 V AC next to neutral, 230 V AC next to 230 V AC of different phases
Permitted: 230 V AC next to 230 V AC same phase



Connection diagram

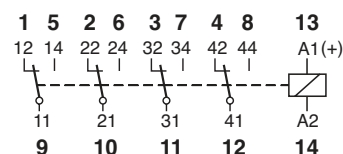


fig. 1 AC voltage endurance

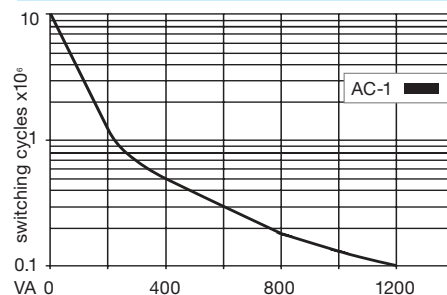
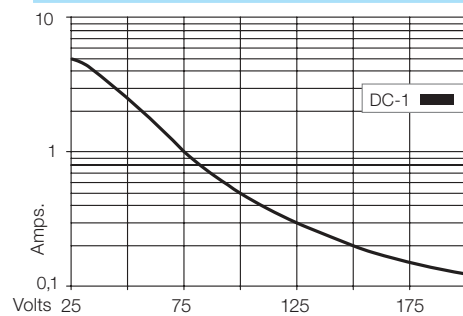
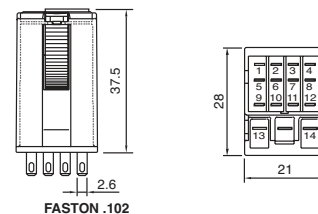


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C9-E2x

2 pole | changeover contact | sensitive coil | Faston

Maximum contact load	5 A/250 V AC-1	5 A/30 V DC-1
Recommended minimum contact load	10 mA/10 V Code 1	

Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
Rated Load			5 A
Max. inrush current (20 ms)			15 A
Switching voltage max.			250 V
AC load fig. 1			1200 VA
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	0.8 VA (AC)/0.5 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	238	33	12	288	42
48	1K	17	24	1K1	21
115	5K9	7	48	4K6	10
230	23K9	3.5	110	24K2	4.5

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

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 3 ms
Release time/bounce time	6 ms / ≤ 1 ms
Mechanical life	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	40 g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115, 230 (240)

LED

C9-E21X/AC ... V

V DC 12, 24, 48, 110, 220

LED

C9-E21X/DC ... V

Free wheeling diode (only 24 DC)

C9-E21DX/DC 24 V

Polarity and free wheeling diode

C9-E21FX/DC ... V

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

C9-E21BX/UC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S9-M, S9-P
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

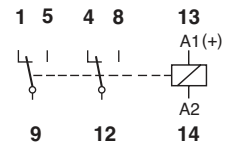


fig. 1 AC voltage endurance

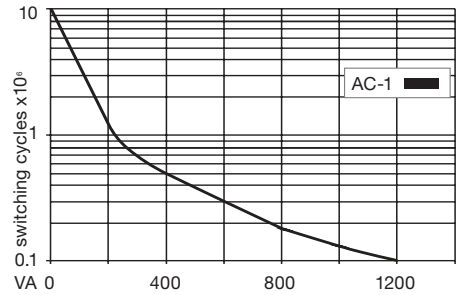
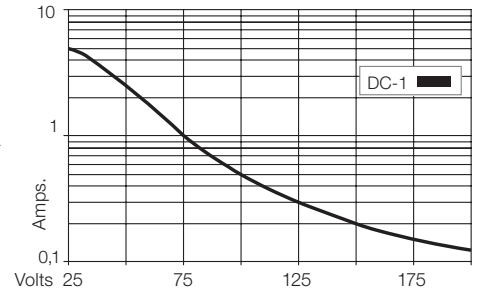
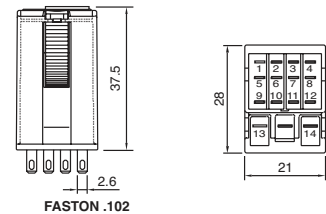


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C9-R2x

2 pole | changeover contact | remanance | Faston

Maximum contact load	5 A/120V AC-1	5 A/30 V DC-1
Recommended minimum contact load	10 mA/10 V	

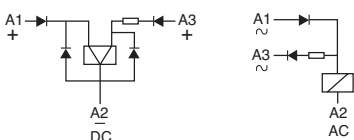
Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
Rated Load			5 A
Max. inrush current (20 ms)			15 A
Switching voltage max.			120V
AC load			600 VA
DC load			see fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
ON pulse power	1.2 VA/W
OFF pulse power	0.3 VA/W
1 winding for AC, 2 winding for DC	

Internal Diagram:



Coil table

V AC	mA ON	mA OFF	V DC	mA ON	mA OFF
24	50	8	12	100	25
48	25	4	24	50	12
115	10	2	48	25	6
230	5	1	60	20	5

Insulation

Contact open	1000 V
Contact/contact	2 kV
Contact/coil	2 kV
Insulation resistance at 500 V	≥1 GΩ
Insulation, IEC 61810-1	2.5 kV

Specifications

Ambient temperature operation/storage	-40...60 °C / -40 ... 80 °C (no ice)
Minimum pulse ON OFF	50 ms
Mechanical life	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	43 g

Product References

AC 50 Hz/60 Hz: 24, 48, 115, 230

C9-R21N/AC ... V

DC 12, 24, 48, 60

C9-R21N/DC ... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S9-M, S9-P
Push only	S9-OP (BAG 10 PCS)
Blanking Plug	S9-NP (BAG 10 PCS)



Connection diagram

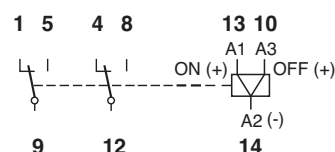


fig. 1 AC voltage endurance

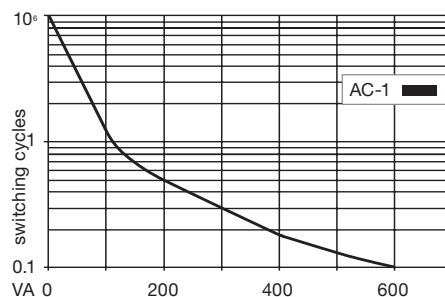
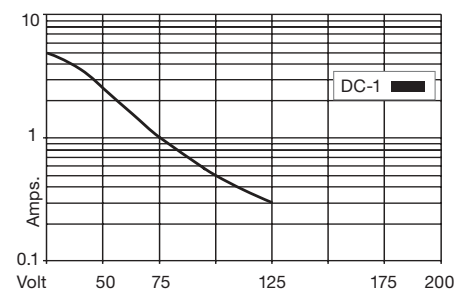
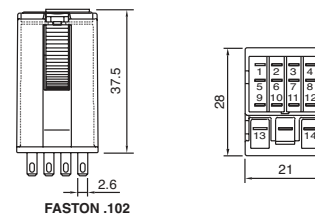


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

R7-A2x

2 pole | changeover contact | Faston

Maximum contact load:	10 A/250 V AC-1	10A/30V DC-1
Recommended minimum contact load	10 mA/10 V Code 0	
	5 mA/5 V Code 8	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
Rated Load			10 A
Max. inrush current (20 ms)			30 A
Switching voltage max.			250 V
AC load			see fig. 1
DC load			see fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Operating range	0,7 U _N ... 1,25 U _N
Pick-up voltage	≥ 0,1 x U _N
Nominal power	1,07 W

Coil table

Voltage	Ω ± 10%	mA
24	535	45
48	2004	24
72	4750	15
110	11337	10

Insulation

Contact open	1000V
Contact/Contact	4kV / 2200V
Contact/coil	4kV / 2200V
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	2,5 kV

Specifications

Ambient temperature operation/storage	-25...70 °C / -40 ... 80 °C (no ice)
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	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	35 g

Product References

V DC 12, 24, 48, 72, 110

LED + free wheeling diode

R7-A20DX/DC...V

R7-A28DX/DC...V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket **S7-C, S7-I/O, S7-P**



Connection diagram

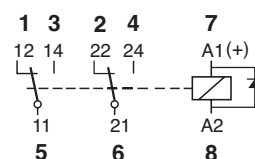


fig. 1 AC voltage endurance

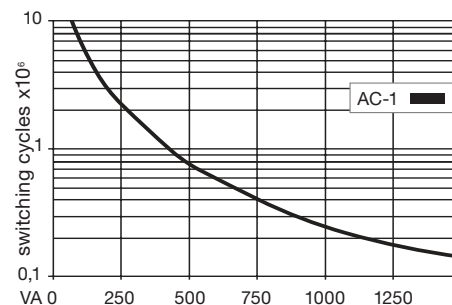
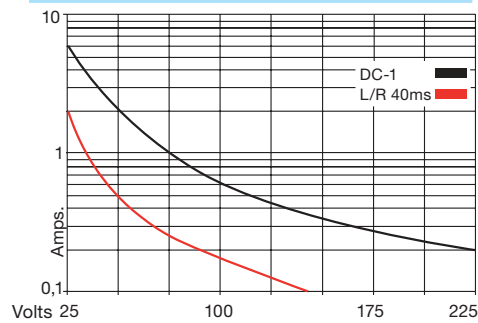
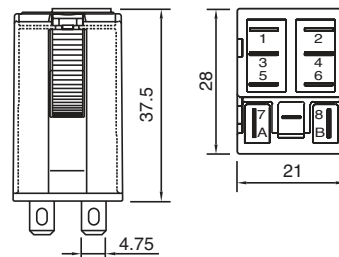


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC 60077; EN 60077-1-2/99; EN 61373/99

R7-T2x

2 pole | changeover twin contact



Maximum contact load:	10 A/250 V AC-1	10A/30V DC-1
Recommended minimum contact load	10 mA/10 V Code 2	

Contacts

Material	Standard	Code 2	AgNi + 5 μ Au
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Rated Load	6 A
Max. inrush current (20 ms)	30 A
Switching voltage max.	250 V
AC load	see fig. 1
DC load	see fig. 2

Coil

Coil resistance	see table; tolerance ± 10 %
Pick-up voltage	0,7 U _N ... 1,25 U _N
Release voltage	≥ 0,1 x U _N
Nominal power	1,07 W

Coil table

Voltage	Ω ± 10%	mA
24	535	45
48	2004	24
72	4750	15
110	11337	10

Insulation

Contact open	1000V
Contact/Contact	4kV / 2200V
Contact/coil	4kV / 2200V
Insulation resistance at 500 V	≥1 GΩ
Insulation, IEC 61810-1	2,5 kV

Specifications

Ambient temperature operation/storage	-25...70 °C / -40 ... 80 °C (no ice)
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	≥100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	35 g

Product References

V DC 12, 24, 72, 110

LED + free wheeling diode

R7-T22DX/DC... V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket **S7-C, S7-I/O, S7-P**



Connection diagram

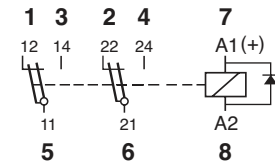


fig. 1 AC voltage endurance

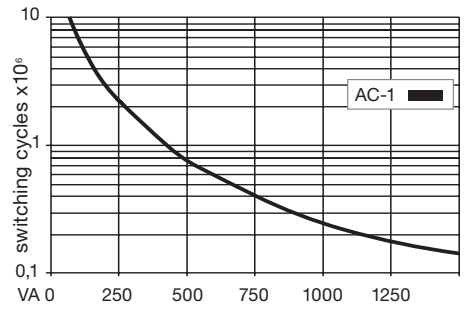
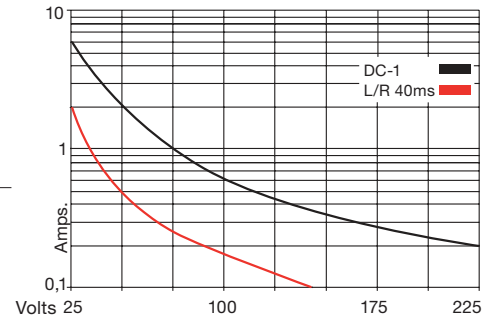
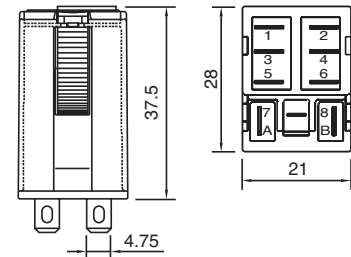


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC 60077; EN 60077-1-2/99; EN 61373/99

C10-A1x

1 pole | changeover contact | Faston



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, 5	
	5 mA/5 V Code 8	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 8	⚡ AgNi + 5 μ Au
	Optional	Code 5	⚡ AgSnO ₂
Rated Load	10 A		
Max. inrush current (20 ms)	30 A (120 A for code 5)		
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	1.1 VA (AC)/0.7 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	290	45	12	224	53
48	1200	23	24	742	32
115	7.300	9.5	48	3.500	13.7
230	28.800	4.7	110	19.900	5.5

Insulation

Contact open	1000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40 ... 70 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 1 ms
Release time/bounce time	5 ms / ≤ 3 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	21g

Product References

V AC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)	C10-A10/AC...V	C10-A18/AC...V	C10-A15/AC ... V
LED	C10-A10X/AC...V	C10-A18X/AC...V	C10-A15X/AC...V
RC Suppressor	C10-A10R/AC...V	C10-A18R/AC...V	C10-A15R/AC...V
V DC 12, 24, 48, 110	C10-A10/DC...V	C10-A18/DC...V	C10-A15/DC...V
LED	C10-A10X/DC...V	C10-A18X/DC...V	C10-A15X/DC...V
Polarity and free wheeling diode	C10-A10FX/DC...V	C10-A18FX/DC...V	C10-A15FX/DC...V
V AC/DC bridge rectifier 24 V, 48 V	C10-A10BX/UC...V	C10-A18BX/UC...V	C10-A15BX/UC...V

Other voltages on request

"..." List Coil Voltage to complete Product References

Accessories

Socket	S10, S10-P
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Connection diagram

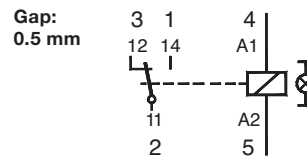


fig. 1 AC voltage endurance

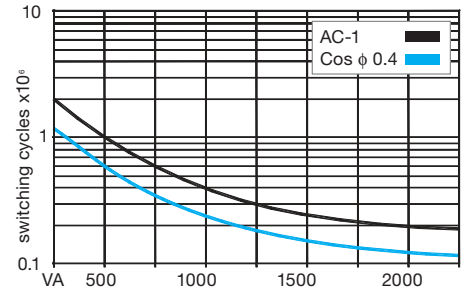
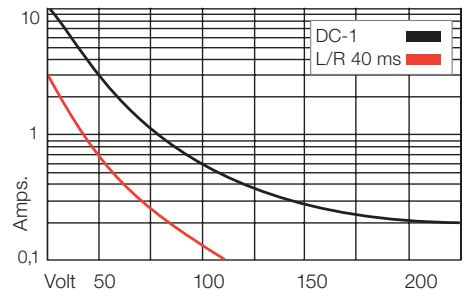
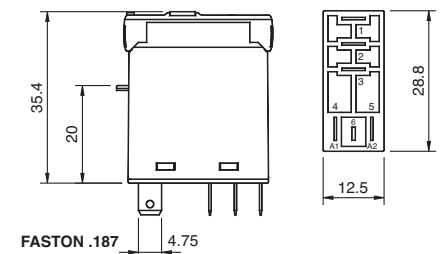


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C10-G1x

1 pole | normally open contact | Faston

Maximum contact load	10 A/250 V AC-1	0.8 A/110 V DC-1
	10 A/30 V DC-1	0.4 A/220 V DC-1
Recommended minimum contact load	10 mA/10 V Code 0, 5	
	5 mA/5 V Code 8	

Contacts

Material	Standard	Code 0	⚡ AgNi
	Optional	Code 5	⚡ AgSnO ₂
Rated Load	10 A		
Max. inrush current (20 ms)	30 A (120 A for code 5)		
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	1.1 VA (AC)/0.7 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	290	45	12	224	53
48	1200	23	24	742	32
115	7.300	9.5	48	3.500	13.7
230	28.800	4.7	110	19.900	5.5

Insulation

Contact open	2000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40 ... 70 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 1 ms
Release time/bounce time	8 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	21g

Product References

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

LED

RC Suppressor

V DC 12, 24, 48, 110

LED

Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V

Other voltages on request

C10-G10/AC ... V
C10-G10X/AC ... V
C10-G10R/AC...V

C10-G10/DC ... V
C10-G10X/DC ... V
C10-G10FX/DC ... V

C10-G10BX/DC ... V

C10-G15/AC ... V
C10-G15X/AC ... V
C10-G15R/AC...V

C10-G15/DC ... V
C10-G15X/DC ... V
C10-G15FX/DC... V

C10-G15BX/UC... V

"..." List Coil Voltage to complete Product References

Accessories

Socket **S10, S10-P**



Connection diagram

Gap: 1 mm

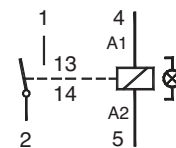


fig. 1 AC voltage endurance

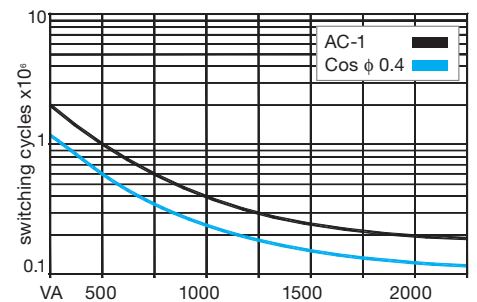
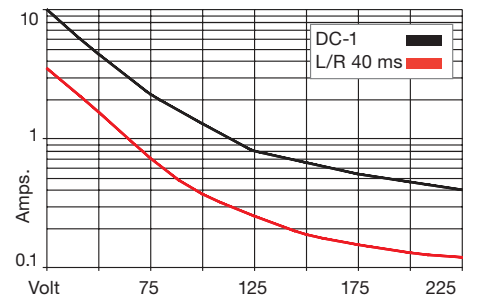
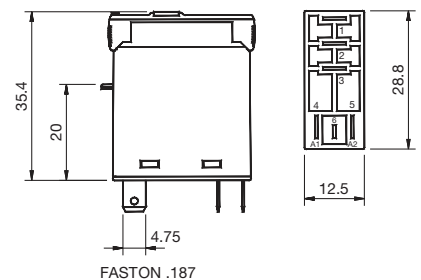


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C10-T1x

1 pole | changeover twin contact | Faston

Maximum contact load	6 A/250 V	AC-1	0.5 A/110 V	DC-1
	6 A/30 V	DC-1	0.2 A/220 V	DC-1
Recommended minimum contact load	5 mA/5 V	Code 1		
	1 mA/5 V	Code 3		

Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
	Optional	Code 3	AgNi + 5 μ Au
Rated Load			6 A
Max. inrush current (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 × U _N
Release voltage	≥ 0.1 × U _N
Nominal power	1.1 VA (AC)/0.7 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	290	45	12	224	53
48	1200	23	24	742	32
115	7.300	9.5	48	3.500	13.7
230	28.800	4.7	110	19.900	5.5

Insulation

Contact open	1000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40 ... 70 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 1 ms
Release time/bounce time	5 ms / ≤ 3 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	21 g

Product References

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

LED

RC Suppressor

V DC12, 24, 48, 110

LED

Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V

Other voltages on request

C10-T11/AC ... V
C10-T11X/AC ... V
C10-T11R/AC...V

C10-T13/AC ... V
C10-T13X/AC ... V
C10-T13R/AC...V

C10-T11/DC ... V
C10-T11X/DC ... V
C10-T11FX/DC ... V

C10-T13/DC ... V
C10-T13X/DC ... V
C10-T13FX/DC ... V

C10-T11BX/UC ... V

C10-T13BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket **S10, S10-P**



Connection diagram

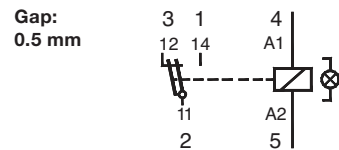


fig. 1 AC voltage endurance

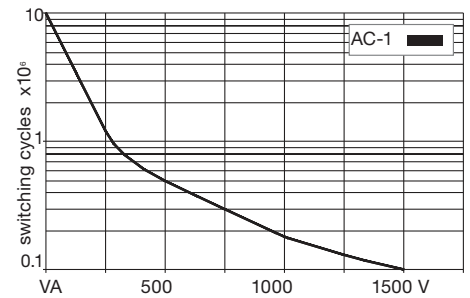
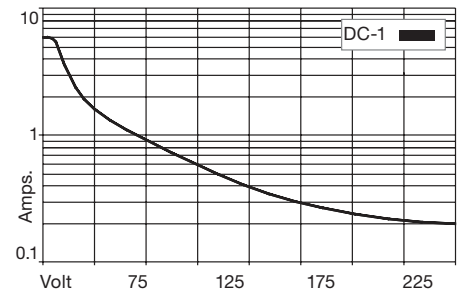
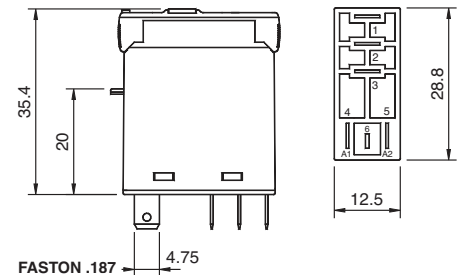


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



C12-A2x

2 pole | changeover contact | Faston

Maximum contact load	5 A/250 V AC-1	0.5 A/110 V DC-1
	5 A/30 V DC-1	0.2 A/220 V DC-1
Recommended minimum contact load	10 mA/10 V Code 1	
	5 mA/5 V Code 2	

Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
	Optional	Code 2	AgNi + 5 μ Au
Rated Load	5 A		
Max. inrush current (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 x U _n
Release voltage	≥ 0.1 x U _n
Nominal power	1.1 VA (AC)/0.7 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	290	45	12	224	53
48	1200	23	24	742	32
115	7.300	9.5	48	3.500	13.7
230	28.800	4.7	110	19.900	5.5

Insulation

Contact open	1000 V
Contact/contact	3000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40 ... 60 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 1 ms
Release time/bounce time	5 ms / ≤ 3 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	21 g

Product References

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

LED

RC Suppressor

V DC 12, 24, 48, 110

LED

Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V

Other voltages on request

C12-A21/AC ... V

C12-A21X/AC ... V

C12-A21R/AC ... V

C12-A21/DC ... V

C12-A21X/DC ... V

C12-A21FX/DC ... V

C12-A21BX/UC ... V

C12-A22/AC ... V

C12-A22X/AC ... V

C12-A22R/AC ... V

C12-A22/DC ... V

C12-A22X/DC ... V

C12-A22FX/DC ... V

C12-A22BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket **S12, S12-P**



Connection diagram

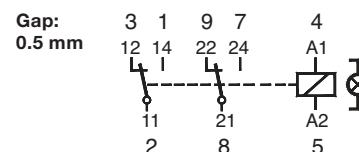


fig. 1 AC voltage endurance

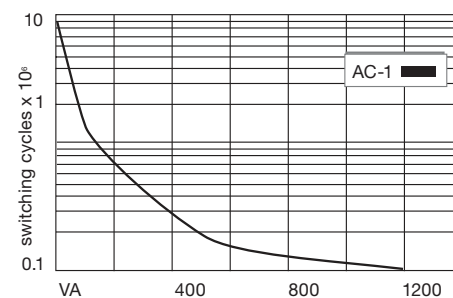
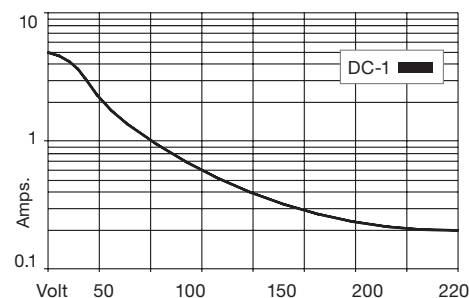
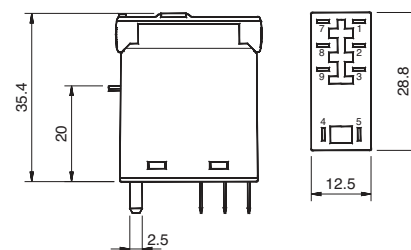


fig. 2 DC load limit curve



Dimensions (mm)



FASTON .098

Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947

C12-G2x

2 pole | normally open contact | Faston



Maximum contact load	5 A/250 V AC-1	0.8 A/110 V DC-1
	5 A/30 V DC-1	0.4 A/220 V DC-1
Recommended minimum contact load	10 mA/10 V Code 1	
	5 mA/5 V Code 2	

Contacts

Material	Standard	Code 1	AgNi + 0.2 μ Au
	Optional	Code 2	AgNi + 5 μ Au
Rated Load	5 A		
Max. inrush current (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	1.1 VA (AC)/0.7 W (DC)

Coil table

V AC	Ω	mA	V DC	Ω	mA
24	290	45	12	224	53
48	1200	23	24	742	32
115	7.300	9.5	48	3.500	13.7
230	28.800	4.7	110	19.900	5.5

Insulation

Contact open	2000 V
Contact/contact	3000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV

Specifications

Ambient temperature operation/storage	-40 ... 60 °C / -40 ... 80 °C (no ice)
Pick-up time/bounce time	10 ms / ≤ 1 ms
Release time/bounce time	5 ms / ≤ 3 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100 000 switching cycles
Max. switching frequency at rated load	1200/h
Weight	21 g

Product References

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

LED

RC Suppressor

V DC 12, 24, 48, 110

LED

Polarity and free wheeling diode

AC/DC bridge rectifier 24 V, 48 V

Other voltages on request

C12-G21/AC ... V
C12-G21X/AC ... V
C12-G21R/AC ... V

C12-G22/AC ... V
C12-G22X/AC ... V
C12-G22R/AC ... V

C12-G21/DC ... V
C12G21X/DC ... V
C12-G21FX/DC ... V

C12-G22/DC ... V
C12-G22X/DC ... V
C12-G22FX/DC ... V

C12-G21BX/UC ... V

C12-G22BX/UC ... V

"..." List Coil Voltage to complete Product References

Accessories

Socket **S12, S12-P**



Connection diagram

Gap: 1 mm

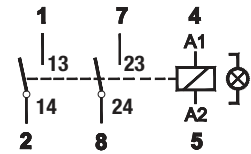


fig. 1 AC voltage endurance

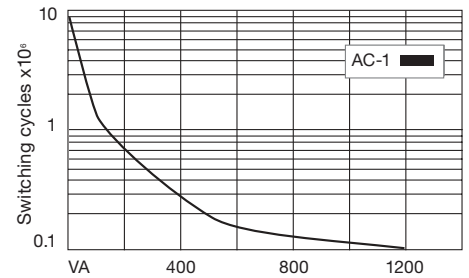
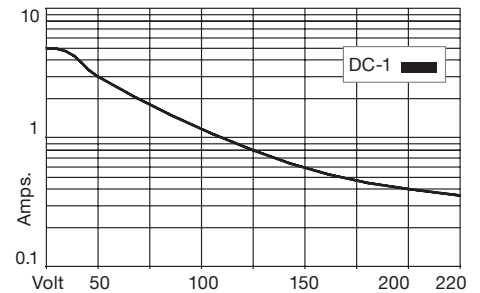
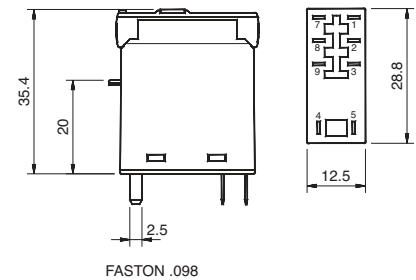


fig. 2 DC load limit curve



Dimensions (mm)



Technical approvals, conformities



IEC/EN 61810; IEC/EN 60947