

Type	C5-A2x/ ... V Power relays, 2 change-over contacts
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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

Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,4 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	24	414	58
48	286	50	48	1K6	30
115	1K7	21	110	8K1	13
230	6K8	10	220	35K6	6
400	18K8	6			

Insulation

	Volt rms, 1 min
Contact open	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, IEC 61810-1	4 kV/3

Specifications

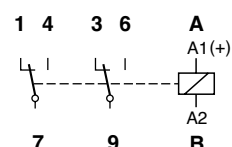
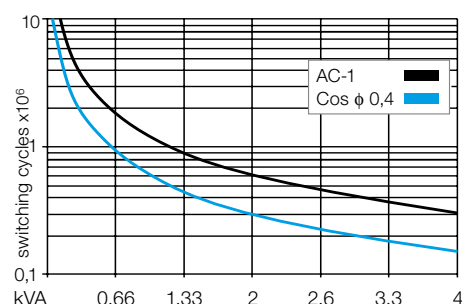
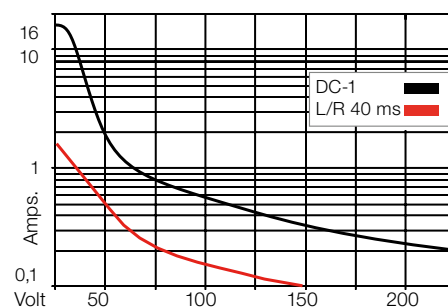
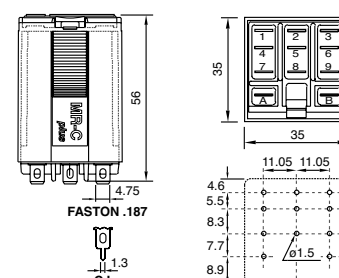
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200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

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC suppresor (max 250 V)****VDC 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V**
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

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

IEC 61810; EN 60947

Type	C5-A3x/ ... V Power relays, 3 change-over contacts			
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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

Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,4 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	24	414	58
48	286	50	48	1K6	30
115	1K7	21	110	8K1	13
230	6K8	10	220	35K6	6,2
400	18K8	6			

Insulation

	Volt rms, 1 min
Contact open	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, IEC 61810-1	4 kV/3

Specifications

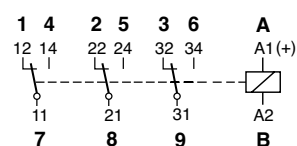
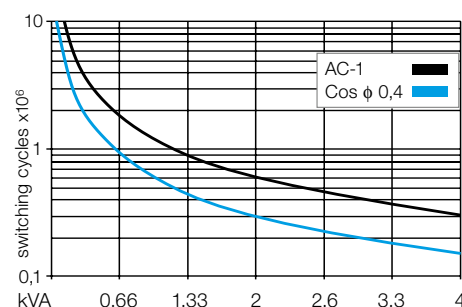
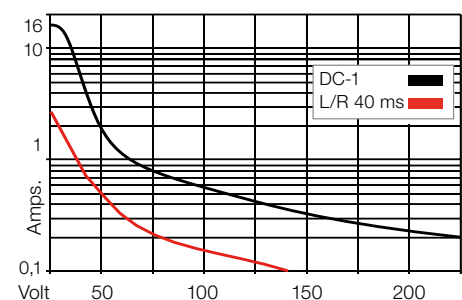
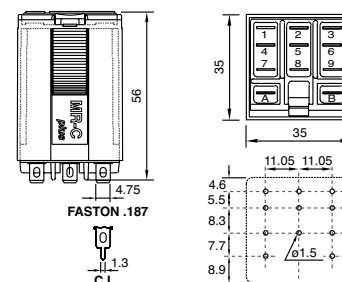
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	$\leq 1200/\text{h}$
Protection class	IP40
Weight	95 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115, (120), 230, (240)****LED****RC suppresor (max 250 V)****VDC 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V****C5-A30/AC ... V****C5-A30X/AC ... V****C5-A30R/AC ... V****C5-A30/DC ... V****C5-A30X/DC ... V****C5-A30DX/DC ... V****C5-A30FX/DC ... V****C5-A30BX/UC ... V**

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

EN 60947; IEC 61810

Type	C5-G3x/ ... V Power relays, DC application. 3 open contacts
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Maximum contact load	16 A/400 V AC-1 16 A/30 V DC-1	1,2 A/110 V DC-1 0,4 A/220 V DC-1
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Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,6 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	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	Volt rms, 1 min
Contact/contact	2000 V
Contact/coil	4 kV
Insulation resistance at 500 V	4 kV
Insulation, IEC 61810-1	$\geq 3 \text{ G}\Omega$
	4 kV/3

Specifications

Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	$\leq 1200/\text{h}$
Protection class	IP40
Weight	95 g

Standard types

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

LED

RC suppresor (max 250 V)

VDC 12, 24, 48, 110, 220

LED

Free wheeling diode

Polarity and free wheeling diode

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

C5-G30/AC ... V

C5-G30X/AC ... V

C5-G30R/AC ... V

C5-G30/DC ... V

C5-G30X/DC ... V

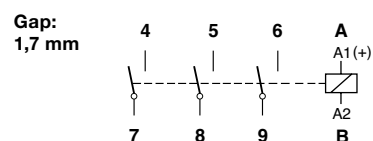
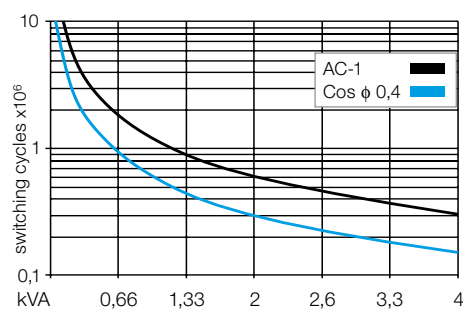
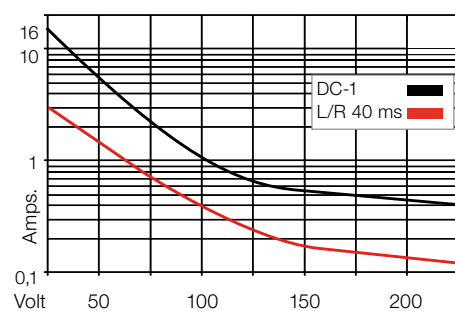
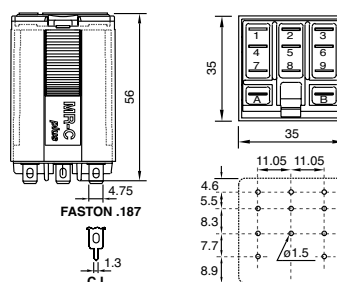
C5-G30DX/DC ... V

C5-G30FX/DC ... V

C5-G30BX/UC ... V

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

Accessories
 Socket:
 Optional accessories (blanking plug):

S5-S, S5-L, S5-P, S5-P0, S5-M
SO-NP, SO-OP
**Connection diagram****Fig. 1 AC voltage endurance****Fig. 2 DC load limit curve****Dimensions [mm]****Technical approvals, conformities**

EN 60947; IEC 61810

Type	C5-X1x/ ... V Power relays, DC application 1 pole, NO, double make			
Maximum contact load	16 A/400 V AC-1 16 A/30 V DC-1	7 A/110 V DC-1 1,2 A/220V DC-13		

Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	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	34K5	6,2

Insulation

	Volt rms, 1 min
Contact open	4 kV
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, IEC 61810-1	4 kV/3

Specifications

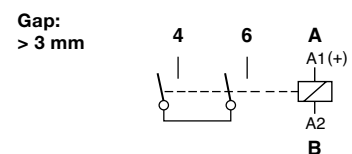
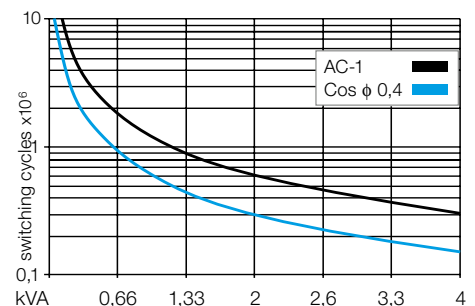
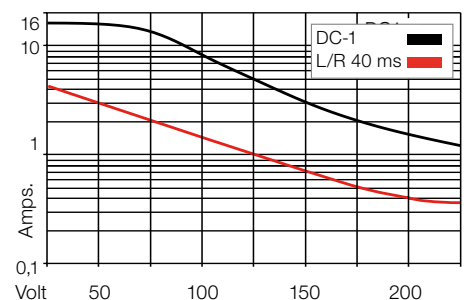
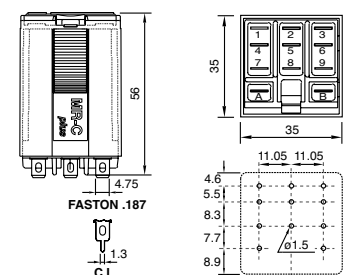
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	$\leq 1200/\text{h}$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

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

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

IEC 61810; EN 60947

Type	C5-M1x/ ... V Power relays, DC application 1 pole, NO, magnetic blow out
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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
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Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\leq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC)/1,3 W (DC)

Coil table

VAC	Ω	mA	VDC	Ω	mA
24	65	100	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	34K5	6,2

Insulation

	Volt rms, 1 min
Contact open	4000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, IEC 61810-1	4 kV/3

Specifications

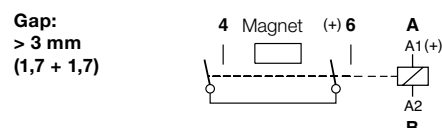
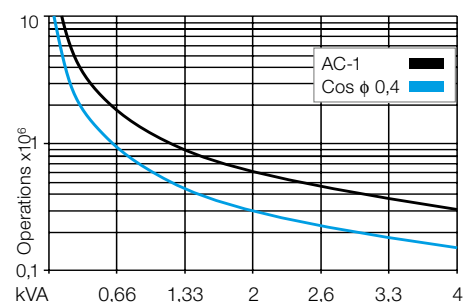
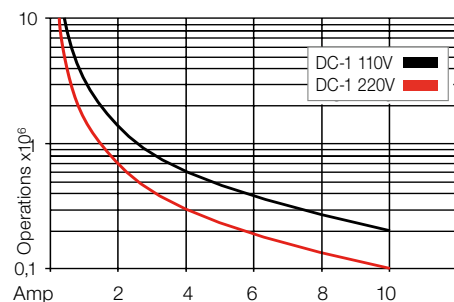
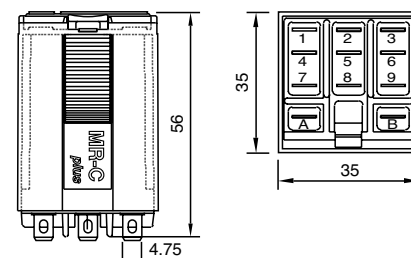
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance	see fig. 2
Switching frequency at rated load	$\leq 1200/\text{h}$
Protection class	IP40
Weight	90 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC suppresor (max 250 V)****VDC 12, 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V**
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

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

IEC 61810; EN 60947

Type	C5-M2x/ ... V Power relays, DC application double pole, NO, magnetic blow out	
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Maximum contact load	16 A / 250 V AC-1	7 A / 110 V DC-1 3 A / 220 V DC-1
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Contacts

Material	Standard	Code 0	AgNi
Rated current			16 A
Switch-on current max. (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 $\pm 10\%$
Pick-up voltage	$\geq 0,8 \times U_N$
Release voltage	$\geq 0,1 \times U_N$
Nominal power	2,4 VA (AC) / 1,6 W (DC)

Coil table

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

Insulation

	Volt rms, 1 min
Contact open	2 kV
Contact/contact	4 kV
Contact/coil	3 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, EN 60947/IEC 61810-1:	4 kV/3

Specifications

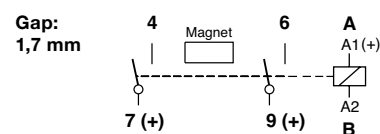
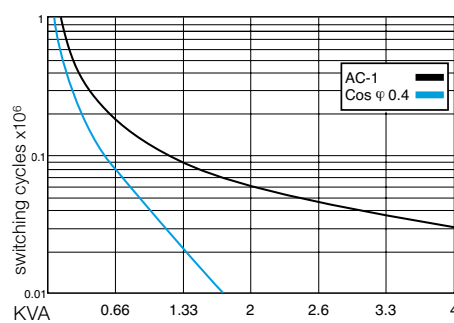
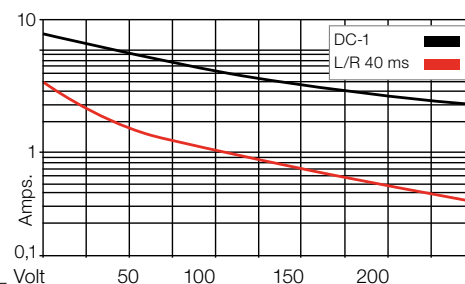
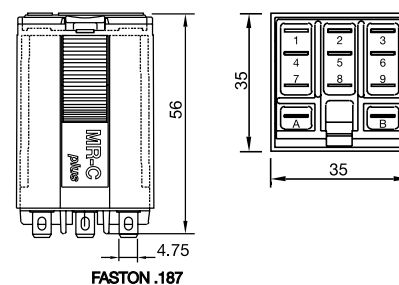
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Pick-up time/bounce time	20 ms/ ≤ 3 ms
Release time/bounce time	10 ms/ ≤ 1 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill. switching cycles
DC Rated load	≥ 75.000 switching cycles
Switching frequency at rated load	$\leq 1200/\text{h}$
Protection class	IP40
Weight	90 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****LED****RC suppresor (max 250 V)****VDC 12, 24, 48, 110, 220****LED****Free wheeling diode****Polarity and free wheeling diode****AC/DC bridge rectifier 24 V, 48 V, 60 V****C5-M20/AC ... V****C5-M20X/AC ... V****C5-M20R/AC ... V****C5-M20/DC ... V****C5-M20X/DC ... V****C5-M20DX/DC ... V****C5-M20FX/DC ... V****C5-M20BX/UC ... V**

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

IEC 61810; EN 60947

Type	C5-R2x/ ... V Magnetic latching – Remanence relays 2 change-over contact, 10A
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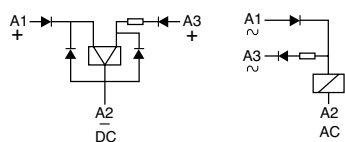
Maximum contact load	10 A/400 V AC-1 0,2 A/250 V DC-1	10 A/30 V DC-1 0,5 A/110 V DC-1
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Contacts

Material	Standard	Code 0	AgNi
Rated current			10 A
Switch-on current max. (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 $\pm 10\%$
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	$< 0,8 \times U_N$

Internal Diagram:**Coil table**

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

Insulation

Contact open	Volt rms, 1 min
Contact/contact	1000 V
Contact/contact	4 kV
Contact/coil	4 kV
Insulation resistance at 500 V	$\geq 3 \text{ G}\Omega$
Insulation, EN 60947/IEC 61810-1	4 kV/3

Specifications

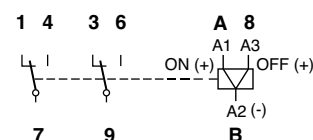
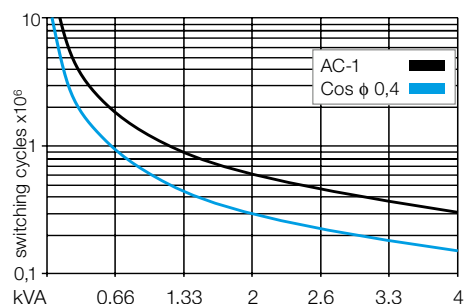
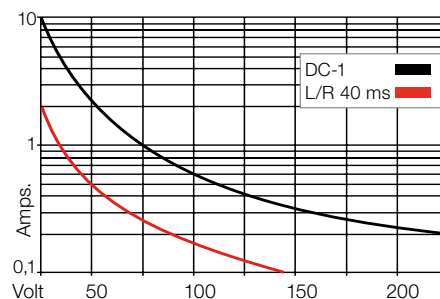
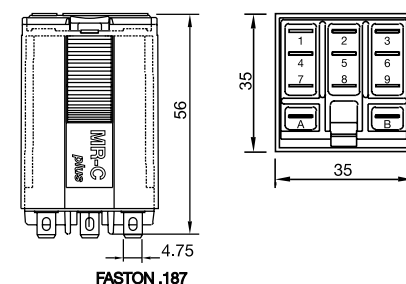
Ambient temperature operation/storage	-40 (no ice)...60 °C / -40 ... 80 °C
Minimum pulse ON/OFF	50 ms
Mechanical life ops	AC: 10 Mill./DC: 20 Mill.
DC voltage endurance at rated load	≥ 100000 switching cycles
Switching frequency at rated load	$\leq 1200/\text{h}$
Protection class	IP40
Weight	95 g

Standard types**VAC 50 Hz/60 Hz: 24, 48, 115 (120), 230 (240)****C5-R20/AC ... V****VDC : 12, 24, 48, 110,****C5-R20/DC ... V**

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

Accessories

Socket:	S5-S, S5-L, S5-P, S5-P0, S5-M
Optional accessories (blanking plug):	SO-NP, SO-OP

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

IEC 61810, EN 60947