

1.1.3 Interface Relays

IRC Series



Application	Types	Pins	Contacts	AC ratings	DC ratings	Socket
C10 Series						
Interface standard relay	C10-A1x			10 A / 250 V	10 A / 30 V	S10
DC load switching	C10-G1x			10 A / 250 V	10 A / 30 V	S10
Low switching load	C10-T1xx			6 A / 250 V	6 A / 30 V	S10
Low switching load	C10-GTxx			6 A / 250 V	6 A / 30 V	S10
C12 Series						
Interface relay	C12-A2x			5 A / 250 V	5 A / 30 V	S12
Interface DC relay	C12-G2x			5 A / 250 V	5 A / 30 V	S12

Type	C10-A1x/ ... V Standard relay, 1 change-over contact Contact Ag Sn O2 to high inrush		
Maximum contact load	10 A/250 V AC1	0,5 A/110 V DC1	
	10 A/30 V DC1	0,2 A/220 V DC1	
	13 A/250 V AC1	5 A/110 V DC1	UL US
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+ 10 μ Au
	Optional	Code 5	Ag Sn O2
Rated current			10 A
Switch-on current max. (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 x U _N
Release voltage	≥ 0,1 x U _N
Nominal power	1,1 VA (AC)/0,7 W (DC)

Coil table					
VAC	Ω	mA	VDC	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	Volt rms, 1 min
Contact open	1000 V
Contact/coil	5 kV
Insulation resistance at 500 V	≥ 1 GΩ
Insulation, IEC 61810-1	4 kV/3

Specifications	
Ambient temperature operation/storage	-40 (no ice)...70 °C / -40 ... 80 °C
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	≥ 100000 switching cycles
Switching frequency at rated load	≤ 1200/h
Protection class	IP40
Weight	21 g

Standard types			
VAC 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
VDC 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
VAC/DC bridge rectifier 24 V, 48 V	C10-A10BX/UC...V	C10-A18BX/UC...V	C10-A15BX/UC...V

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

Accessories	
Socket:	S10, S10-M, S10-P



Connection diagram

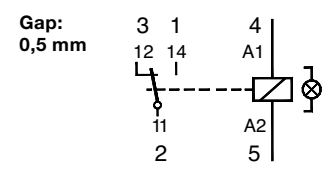


Fig. 1 AC voltage endurance

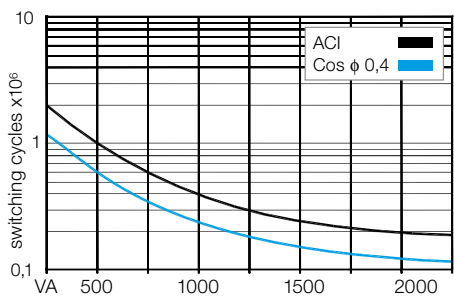
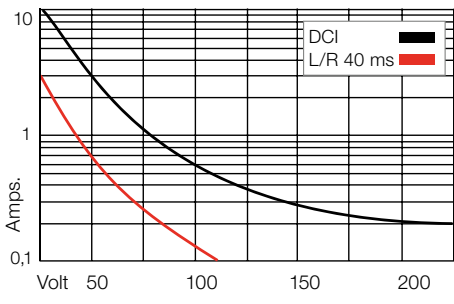
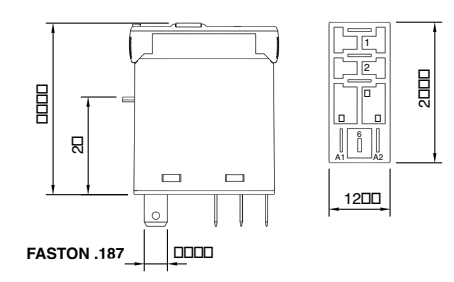


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities



IEC 61810; EN 60947