

Plug-in auxiliary relays

- AC or DC coils
- Lockable test button with mechanical flag indicator.
- Sockets with rear 35 mm rail (EN 50022) mounting.
- With LED indicator incorporated.

Miniature relays

Types	Poles	AC ratings	Sockets
PRC4M2...	2 CO	12A/250V	PRCG-ES15/2N
PRC4M3...	3 CO	10A/250V	PRCG-ES15/3N
PRC4M4...	4 CO	6A/250V	PRCG-ES15/4N

Standard 8-11 pin relays

Types	Poles	AC ratings	Sockets
PRC2P2...	2 CO	10A/250V	PRZ8
PRC3P3...	3 CO	10A/250V	PRZ11

Interface relay module

Types	Poles	AC ratings	Sockets
PRC1S1...	1 CO	6A/250V	-
For use with PLC systems			
PRC1T1...	1 CO	16A/250V	PRCGZT80
PRC1T2...	2 CO	8A/250V	PRCGZT80

Approvals

According to types:

Plug-in relays	Sockets
CE	CE
CSA	CSA
cUL	cUL
VDE	

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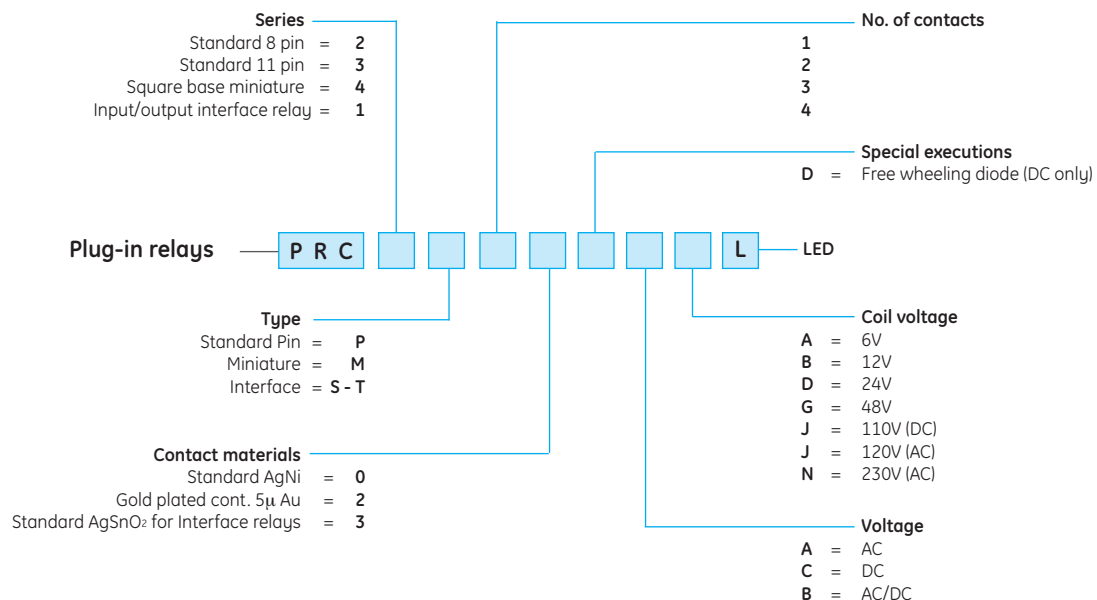
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Catalogue number structure



- Order codes ● pg. A.3
- Modules for sockets ● pg. A.6
- Technical characteristics ● pg. A.7
- Dimensions ● pg. A.14



Miniature plug-in relays



2 changeover contacts

Ratings	Contacts Standard material	Voltage		With LED			
				Cat. no. ⁽²⁾	Ref. no.	Pack	
AC 12A/250V	0 AgNi		AC 50/60 Hz	12V	PRC4M20ABL	220710	10
				24V	PRC4M20ADL	220711	10
				48V	PRC4M20AGL	220712	10
				120V	PRC4M20AJL	220715	10
				230V	PRC4M20ANL	220717	10
			DC	12V	PRC4M20CBL	220713	10
				24V	PRC4M20CDL	220714	10
				48V	PRC4M20CGL	220716	10
				110V	PRC4M20CJL	220718	10
				DC Diode	12V	PRC4M20DCBL	220754
			24V		PRC4M20DCDL	220755	10
			48V		PRC4M20DCGL	220756	10
			110V		PRC4M20DCJL	220757	10

3 changeover contacts

AC 10A/250V	0 AgNi		AC 50/60 Hz	12V	PRC4M30ABL	221051	10
				24V	PRC4M30ADL	221052	10
				48V	PRC4M30AGL	221053	10
				120V	PRC4M30AJL	221056	10
				230V	PRC4M30ANL	221058	10
			DC	12V	PRC4M30CBL	221054	10
				24V	PRC4M30CDL	221055	10
				48V	PRC4M30CGL	221057	10
				110V	PRC4M30CJL	221059	10
				DC Diode	12V	PRC4M30DCBL	221074
			24V		PRC4M30DCDL	221075	10
			48V		PRC4M30DCGL	221076	10
			110V		PRC4M30DCJL	221077	10

4 changeover contacts

AC 6A/250V	0 AgNi		AC 50/60 Hz	12V	PRC4M40ABL	221809	10
				24V	PRC4M40ADL	221810	10
				48V	PRC4M40AGL	221811	10
				120V	PRC4M40AJL	221814	10
				230V	PRC4M40ANL	221816	10
			DC	12V	PRC4M40CBL	221812	10
				24V	PRC4M40CDL	221813	10
				48V	PRC4M40CGL	221815	10
				110V	PRC4M40CJL	221817	10
				DC Diode	12V	PRC4M40DCBL	221851
			24V		PRC4M40DCDL	221852	10
			48V		PRC4M40DCGL	221853	10
			110V		PRC4M40DCJL	221854	10

Sockets

For PRC4M2...
2 changeover contacts



				Cat. no.	Ref. no.	Pack
Screw terminals Two levels	Socket			PRCG-ES15/2N	220912	10
	Fixing clip	Metal		PRCG1052	220914	10
	Retainer/Extractor	White plastic		PRCMS35	220915	10
	Identification plate			PRCTR1	220916	10

For PRC4M3...
3 changeover contacts

Screw terminals Two levels	Socket			PRCG-ES15/3N	221442	10
	Fixing clip	Metal		PRCG1052	220914	10
	Retainer/Extractor	White plastic		PRCMS35	220915	10
	Identification plate			PRCTR1	220916	10

For PRC4M4...
4 changeover contacts

Screw terminals Two levels	Socket			PRCG-ES15/4N	221934	10
	Fixing clip	Metal		PRCG1052	220914	10
	Retainer/Extractor	White plastic		PRCMS35	220915	10
	Identification plate			PRCTR1	220916	10

Order codes

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Standard 8-11 pin plug-in relays

Plug-in relays

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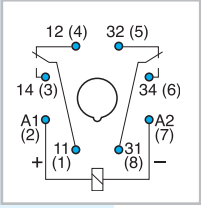

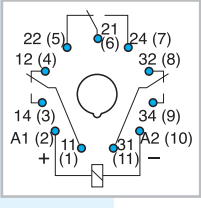
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	Ratings	Contacts Standard material	Voltage	With LED			
				Cat. no. ⁽²⁾	Ref. no.	Pack	
 <p>Standard 8 pin</p>	10A/250V 	2 changeover contacts 0 AgNi	AC 50/60 Hz DC diode	12V	PRC2P20ABL	220019	10
				24V	PRC2P20ADL	220020	10
				48V	PRC2P20AGL	220021	10
				120V	PRC2P20AJL	220024	10
				230V	PRC2P20ANL	220026	10
				12V	PRC2P20CBL	220022	10
				24V	PRC2P20CDL	220023	10
				48V	PRC2P20CGL	220025	10
				110V	PRC2P20CJL	220027	10
				12V	PRC2P20DCBL	220041	10
				24V	PRC2P20DCDL	220042	10
				48V	PRC2P20DCGL	220043	10
				110V	PRC2P20DCJL	220044	10
				 <p>Standard 11 pin</p>	10A/250V 	3 changeover contacts 0 AgNi	AC 50/60 Hz DC diode
24V	PRC3P30ADL	220311	10				
48V	PRC3P30AGL	220312	10				
120V	PRC3P30AJL	220315	10				
230V	PRC3P30ANL	220317	10				
12V	PRC3P30CBL	220313	10				
24V	PRC3P30CDL	220314	10				
48V	PRC3P30CGL	220316	10				
110V	PRC3P30CJL	220318	10				
12V	PRC3P30DCBL	220335	10				
24V	PRC3P30DCDL	220336	10				
48V	PRC3P30DCGL	220337	10				
110V	PRC3P30DCJL	220338	10				

Sockets




For PRC2P20...
Standard 8 pin

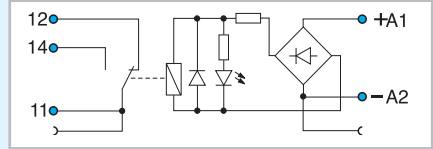
For PRC3P30...
Standard 11 pin

				Cat. no.	Ref. no.	Pack
	Screw terminals One level	Socket		PRC28	220216	10
		Fixing clip		PRCP211	220218	10
	Solder terminal	Socket		PRCG8	220217	10
		Fixing clip		PRCR159	220219	10
	Screw terminals One level	Socket		PRC211	220647	10
		Fixing clip		PRCP211	220218	10
	Solder terminal	Socket		PRCG11	220648	10
		Fixing clip		PRCR159	220219	10




Interface relay

	Ratings AC1	Ratings DC1	Contacts material	Voltage		With LED		Pack		
						Cat. no.	Ref. no.			
 <p>1 single pole 1 changeover contact</p>	6A/250V	-	3 AgSnO ₂	AC/DC	230V	6,2mm wide		10		
						PRC1S13BNL	222013			
						AC	230V		PRC1S13ANL	222012
						DC	12V		PRC1S13CBL	222007
							24V		PRC1S13CDL	222008
						AC/DC	24V		PRC1S13BDL	222004
						Identification label			PRCTR1S	222043
						20-way jumper link			PRCW20	222039






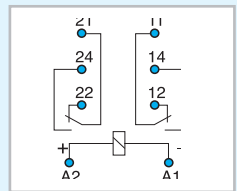
Interface relay for PLC systems

	Ratings AC1	Ratings DC1	Contacts material	Voltage		With LED		Pack						
						Cat. no.	Ref. no.							
 <p>1 changeover contact 2 changeover contacts</p>	16A/250V	16A/24V	0 AgNi	AC	24V	16mm width		10						
						PRC1T10ADL	221868							
							120V		PRC1T10AJL	221869				
							230V		PRC1T10ANL	221870				
						DC	12V		PRC1T10CBL	221860				
							24V		PRC1T10CDL	221861				
							110V		PRC1T10CJL	221862				
						8A/250V	8A/24V		0 AgNi	AC	24V	8A/250V		10
												PRC1T20ADL	221883	
													120V	
	230V	PRC1T20ANL	221885											
DC	12V	PRC1T20CBL	221875											
	24V	PRC1T20CDL	221876											
	110V	PRC1T20CJL	221877											

Complete set of relay, socket, module (diode+Led for DC-Varistor + Led for AC) and retaining clip + marking plate.

Spare parts

				Voltage		Cat. no.	Ref. no.	Pack	
 <p>Miniature P.C.B. relays. 16A 1 changeover contact</p>	50/60 Hz	AC	24V	230V	PRCT1AD	221896	20		
					PRCT1AJ	221897	20		
					PRCT1AN	221898	20		
					DC	12V	PRCT1CB	221890	20
						24V	PRCT1CD	221891	20
						110V	PRCT1CJ	221892	20
 <p>Miniature P.C.B. relays. 8A 2 changeover contacts</p>	50/60 Hz	AC	24V	230V	PRCT2AD	221913	20		
					PRCT2AJ	221914	20		
					PRCT2AN	221915	20		
					DC	12V	PRCT2CB	221905	20
						24V	PRCT2CD	221906	20
						110V	PRCT2CJ	221907	20
 <p>Socket for miniature P.C.B. relays</p>	Three level screws			PRCGZT80	221918	10			
		Retainer/Retractor Plate		PRCMS16	221920	10			
				PRCTR	221921	10			



NOTE: If more than 12A are applied to the relay contact, twin wiring is required. See the connection diagram of the relay

Order codes

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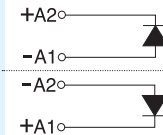
Modules for sockets



Diode

Protection against polarity inversion

For use with sockets:
PRCG-ES15/2N
PRCG-ES15/3N
PRCG-ES15/4N



6 / 230V DC
6 / 230V DC

Color
Led

Cat. no.

Ref. no.

Pack

PRCM21P

222100

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PRCM21N

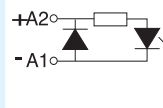
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Diode
and Led

Protection against polarity inversion
Coil energizing indication

For use with sockets:
PRCG-ES15/2N
PRCG-ES15/3N
PRCG-ES15/4N
PRCGZT80



6 / 24V DC
24 / 60V DC
110 / 230V DC
6 / 24V DC
24 / 60V DC
110 / 230V DC

Red
Green
Red
Green
Red
Green
Red
Green
Red
Green

PRCM31R
PRCM31G
PRCM32R
PRCM32G
PRCM33R
PRCM33G
PRCM41R
PRCM41G
PRCM42R
PRCM42G
PRCM43R
PRCM43G

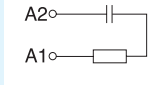
222102
222104
222103
222105
222109
222106
222110
222107
222111
222124
222112
222125

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RC group

Arc suppression circuit

For use with sockets:
PRCG-ES15/2N
PRCG-ES15/3N
PRCG-ES15/4N



6 / 24V AC
24 / 60V AC
110 / 240V AC

PRCM51
PRCM52
PRCM53

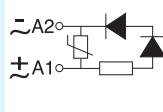
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Led
and varistor

No protection against polarity inversion
Coil energizing indication
AC/DC voltage allowed

For use with sockets:
PRCG-ES15/2N
PRCG-ES15/3N
PRCG-ES15/4N
PRCGZT80



6 / 24V AC
110 / 230V AC

Red
Green
Green

PRCM91R
PRCM91G
PRCM93G

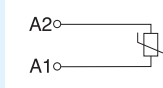
222116
222126
222120

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Varistor group

No indication
Protection against overvoltage

For use with sockets:
PRCG-ES15/2N
PRCG-ES15/3N
PRCG-ES15/4N



24V AC
230V AC

PRCM71
PRCM73

222121
222122

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Plug-in relays

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Technical data

Sockets for miniature plug-in relays

		PRCG-ES15/2N	PRCG-ES15/3N	PRCG-ES15/4N
		Screw terminals two levels	Screw terminals two levels	Screw terminals two levels
<i>Specifications</i>				
Nominal load	(A)	12 (300V)	10 (300V)	10 (300V)
<i>Dielectric strength</i>				
Adjacent screws	(kV)	3	3	3
Screws - rail	(kV)	3	3	3
<i>Terminals</i>				
Type		Screw M4, Pozidriv	Screw M4, Pozidriv	Screw M3, Pozidriv
Max. torque	(Nm)	0,7	0,7	0,7
Protection category		IP20	IP20	IP20
Capacity	Solid wire (mm ²)	2x2,5	2x2,5	2x2,5
	Flexible wire	22-14 AWG	22-14 AWG	22-14 AWG
Ambient temperature	(°C)	-40 ... +70	-40 ... +70	-40 ... +70

Sockets for 8-11 pin standard plug-in relays

		PRCZ8	PRCG08	PRCZ11	PRCG11
		Screw terminals One level	8 pin Solder terminal socket	Screw terminals One level	11 pin Solder terminal socket
<i>Specifications</i>					
Nominal load	(A)	10 (250V)	10 (250V)	10 (250V)	10 (250V)
<i>Dielectric strength</i>					
Adjacent screws	(kV)	2,5	2,5	2,5	2,5
Screws - rail	(kV)	3		3	
<i>Terminals</i>					
Type		Screw M3, Pozidriv	Hard brass tin-plated terminals	Screw M3, Pozidriv	Hard brass tin-plated terminals
Max. torque	(Nm)	0,7		0,7	
Protection category		IP20		IP20	
Capacity	Solid wire (mm ²)	2x2,5		2x2,5	
	Flexible wire	22-14 AWG		22-14 AWG	
Ambient temperature	(°C)	-40 ... +70		-40 ... +70	

Sockets for miniature P.C.B. relays

		PRCGZ80
		Screw terminals Two levels
<i>Specifications</i>		
Nominal load	(A)	12 (300V)
<i>Dielectric strength</i>		
Adjacent screws	(kV)	3
Screws - rail	(kV)	3
<i>Terminals</i>		
Type		Screw M4, Pozidriv
Max. torque	(Nm)	0,7
Protection category		IP20
Capacity	Solid wire (mm ²)	2x2,5
	Flexible wire	22-14 AWG
Ambient temperature	(°C)	-40 ... +70

Miniature plug-in relays

Plug-in relays

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		PRC4M20...	PRC4M30...	PRC4M40...
		2 pole	3 pole	4 pole
Contacts				
Number of contacts		2 changeover	3 changeover	4 changeover
Standard material		AgNi	AgNi	AgNi
Optional material		AgNi/Au 5μ	AgNi/Au 5μ	AgNi/Au 5μ
Voltage				
Max. switching AC/DC (poll. 3) voltage		250V	250V	250V
AC (poll. 2)		400V	400V	400V
Min. switching voltage AC/DC		5V	5V	5V
Current				
Rated load		12 (250V AC)	10 (250V AC)	6 (250V AC)
AC1 (A)		4 (250V AC)	4 (250V AC)	2,5 (250V AC)
DC1 (A)		12 (24V DC)	10 (24V DC)	6 (24V DC)
Min. switching current (mA)		5	5	5
Max. inrush current (A)		24	20	12
Rated current (A)		12	10	6
Max. breaking capacity (VA)		3000	2500	1500
Resistance (mΩ)		≤100 (100mA, 24V)	≤100 (100mA, 24V)	≤100 (100mA, 24V)
Max. operating frequency				
At rated load cycles/hour		1200	1200	1200
No load cycles/hour		18000	18000	18000
Coil				
Rated voltage AC 50/60Hz (V)		6 ... 240	6 ... 240	6 ... 240
DC (V)		5 ... 220	5 ... 220	5 ... 220
Must release AC		≥0.2 Un	≥0.2 Un	≥0.2 Un
time voltage DC		≥0.1 Un	≥0.1 Un	≥0.1 Un
Operating range of supply voltage		Table 1, 2	Table 1, 2	Table 1, 2
Rated power AC 50Hz (VA)		1.5	1.6	1.6
consumption 60Hz (VA)		1.3	1.3	1.3
DC (W)		0.9	0.9	0.9
AC/DC (W)		-	-	-
Insulation				
Insulation category		C250	C250	B250
Insulation rated voltage (VAC)		250	250	250
Dielectric strength Coil-Contact (VAC)		2500	2500	2500
Contact-Contact (VAC)		1500	1500	1500
Pole-Pole (VAC)		2500	2500	2000
Contact coil distance Clearance (mm)		≥ 2.5	≥ 2.5	≥ 1.6
Creepage (mm)		≥ 4	≥ 4	≥ 3.2
General data				
Operating time AC (ms)		10	10	10
(typical value) DC (ms)		13	13	13
Release time AC (ms)		8	8	8
(typical value) DC (ms)		3	3	3
Electrical life Resistive		≥ 10 ⁵	≥ 10 ⁵	≥ 10 ⁵
Cos φ		(12A, 250V AC)	(10A, 250V AC)	(6A, 250V AC)
Mechanical life (cycles)		See curves	See curves	See curves
Ambient temperature Storage (°C)		-40 ... +85	-40 ... +85	-40 ... +85
Operating AC (°C)		-40 ... +55	-40 ... +55	-40 ... +55
DC (°C)		-40 ... +70	-40 ... +70	-40 ... +70
Cover protection category		IP40	IP40	IP40
Shock resistance (g)		10	10	10
Vibration resistance (g)		5 (for 10..150Hz)	5 (for 10..150Hz)	5 (for 10..150Hz)

Table 1. Coil data DC version

Rated voltage V DC	Coil resistance Ω	Coil operating range V DC	
		Min. (at 20°C)	Max. (at 55°C)
12	160	9.6	13.2
24	640	19.2	26.4
48	2600	38.4	52.8
110	13600	88	121
220	54000	176	242

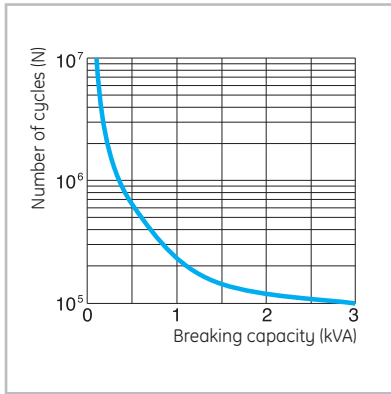
Table 2. Coil data AC 50/60Hz version

Rated voltage V AC	Coil resistance Ω	Coil operating range V AC	
		Min. (at 20°C)	Max. (at 55°C)
12	39	9.6	13.2
24	158	19.2	26.4
48	640	38.4	52.8
120	3770	88	121
230	16100	184	253

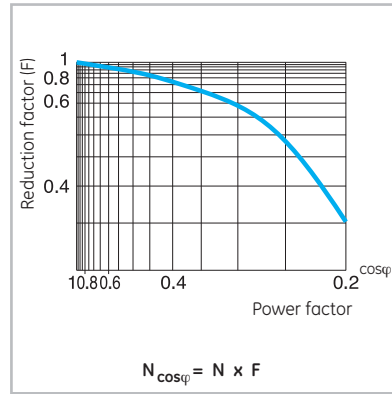


Miniature 2 pole plug-in relays

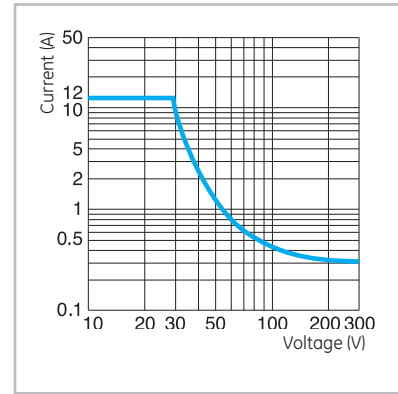
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

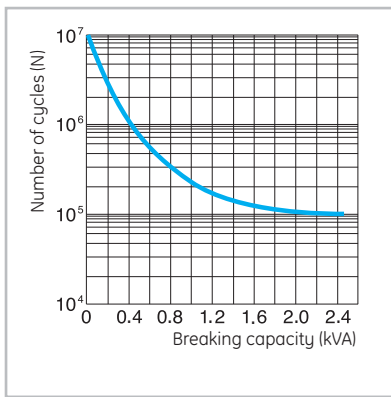


Max. DC resistive load breaking capacity

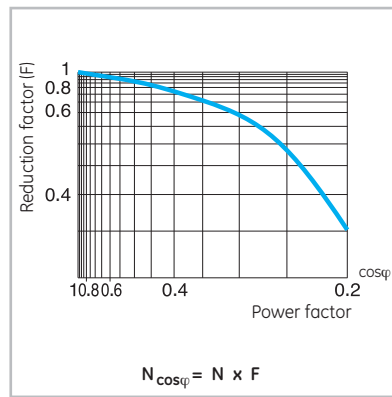


Miniature 3 pole plug-in relays

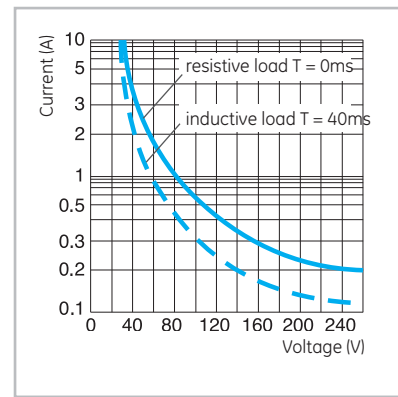
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

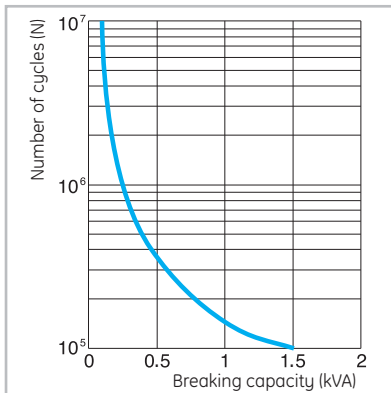


Max. DC load breaking capacity

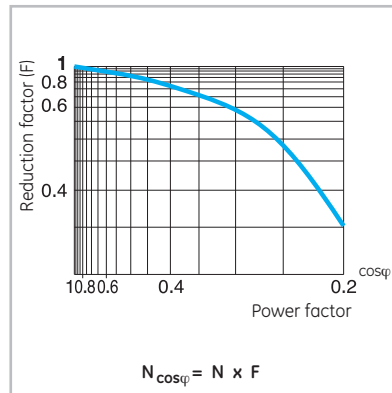


Miniature 4 pole plug-in relays

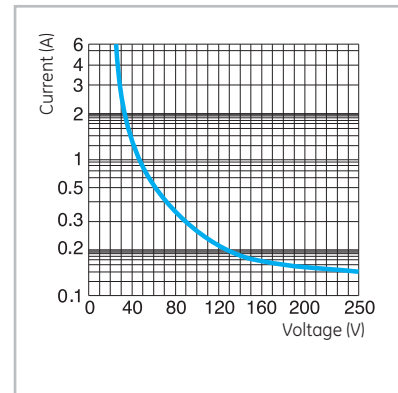
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load



Max. DC resistive load breaking capacity



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Standard 8-11 pin plug-in relays

Plug-in relays

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		PRC2P20...		PRC3P30...		
		Standard 8-pin		Standard 11-pin		
Contacts						
Number of contacts		2 changeover		3 changeover		
Standard material		AgNi		AgNi		
Optional material		AgNi/Au 5μ		AgNi/Au 5μ		
Voltage						
Max switching voltage	AC/DC (poll. 3)	250V		250V		
	AC (poll. 2)	400V		400V		
Min switching voltage AC/DC		10V (AgNi) 5V (AgNi/Au 5μ)		10V (AgNi) 5V (AgNi/Au 5μ)		
Current						
Rated load	AC1 (A)	10 (250V AC)		10 (250V AC)		
	AC15 (A)	4 (250V AC)		4 (250V AC)		
	DC1 (A)	10 (24V DC)		10 (24V DC)		
Min. switching current (mA)		5		5		
Max. inrush current (A)		30		30		
Rated current (A)		10		10		
Max. breaking capacity (VA)		2500		2500		
Resistance (mΩ)		H100 (100mA, 24V)		H100 (100mA, 24V)		
Max. operating frequency						
At rated load cycles/hour		1200		1200		
No load cycles/hour		12000		12000		
Coil						
Rated voltage	AC 50/60Hz (V)	6 ... 240		6 ... 240		
	DC (V)	6 ... 220		6 ... 220		
Must release time voltage	AC	≥0.15 Un		≥0.15 Un		
	DC	≥0.1 Un		≥0.1 Un		
Operating range of supply voltage		Table 1, 2		Table 1, 2		
Rated power consumption	AC 50Hz (VA)	2,7		2,7		
	60Hz (VA)	2,5		2,5		
	DC (W)	1,5		1,5		
	AC/DC (W)	-		-		
Insulation						
Insulation category		C250		C250		
Insulation rated voltage (VAC)		250		250		
Dielectric strength	Coil-Contact (VAC)	2500		2500		
	Contact-Contact (VAC)	1500		1500		
	Pole-Pole (VAC)	2000		2000		
Distance	Clearance (mm)	≥ 3		≥ 3		
	Creepage (mm)	≥ 4.2		≥ 4.2		
General						
Operating time (typical value)	AC (ms)	12		12		
	DC (ms)	12		12		
Release time (typical value)	AC (ms)	10		10		
	DC (ms)	7		7		
Electrical life	Resistive	≥ 2x10 ⁵ (10A, 250V AC)		≥ 2x10 ⁵ (10A, 250V AC)		
	Cos φ	See curves		See curves		
Mechanical life (cycles)		≥ 2x10 ⁷		≥ 2x10 ⁷		
Ambient temperature	Storage (°C)	-40 ... +85		-40 ... +85		
	Operating	AC (°C)	-40 ... +55		-40 ... +55	
		DC (°C)	-40 ... +70		-40 ... +70	
Cover protection category		IP40		IP40		
Shock resistance (G)		10		10		
Vibration resistance (G)		5		5		

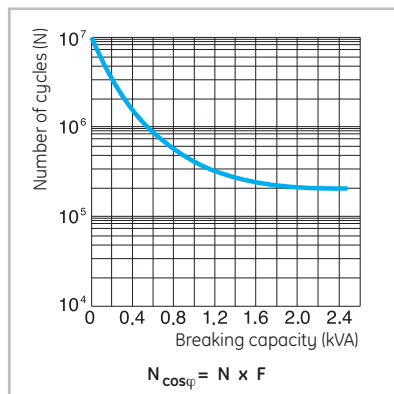
Table 1. Coil data DC version

Rated voltage V DC	Coil resistance Ω	Coil operating range V DC	
		Min. (at 20°C)	Max. (at 55°C)
12	110	9.6	13.2
24	430	19.2	26.4
48	1750	38.4	52.8
110	9200	88	121
220	37000	176	242

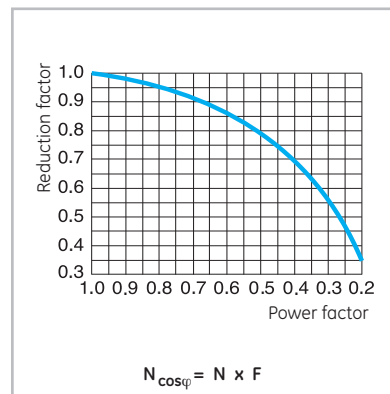
Table 2. Coil data AC 50/60Hz version

Rated voltage V AC	Coil resistance Ω	Coil operating range V AC	
		Min. (at 20°C)	Max. (at 55°C)
12	18.5	9.6	13.2
24	75	19.2	26.4
48	305	38.4	52.8
120	1910	96	132
230	7080	184	253

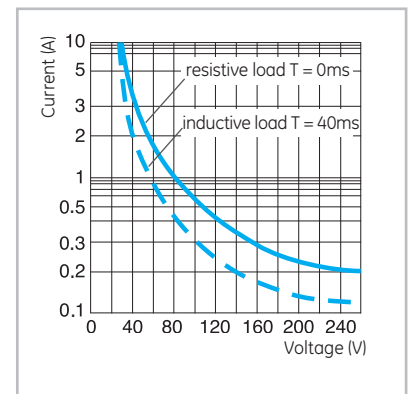
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load



Max. DC load breaking capacity



Interface plug-in relays

PRC1S13...			
Contacts			
Number of contacts		1 changeover	
Standard material		AgSnO ₂	
Optional material			
Voltage			
Max switching voltage	AC/DC (poll. 3)	AC 250V / DC 150V	
	AC (poll. 2)	AC 400V / DC 300V	
Min switching voltage	AC/DC	12V	
Current			
Rated load	AC1	(A) 6 (250V AC)	
	AC15	(A) 6	
	DC1	(A) 6 (24V DC)	
Min. switching current	(mA)	10	
Max. inrush current (A)		15	
Rated current	(A)	6	
Max. breaking capacity	(VA)	1500V	
Resistance	(mΩ)	≤100 (100mA, 24V)	
Max. operating frequency			
At rated load		360 cycles/hour	
No load		72000 cycles/hour	
Coil			
Rated voltage	AC/DC	(V) 24, 230	
	AC 50/60Hz	(V) 230	
	DC	(V) 12, 24	
Must release time	AC	≥0,2 Un	
	DC	≥0,1 Un	
Operating range of supply voltage		See Table 1	
Rated power consumption	AC 50Hz	(VA) 0.6...1.9	
	60Hz	(VA) -	
	DC	(W) 0.33	
	AC/DC	(W) 0.48 (at 24V), 1.8 (at 230V)	
Insulation			
Insulation category		C250	
Insulation rated voltage	(VAC)	400	
Dielectric strength	Coil-Contact	(VAC) 4000	
	Contact-Contact	(VAC) 1000	
	Pole-Pole	(VAC) -	
Distance	Clearance	mm ≥ 8	
	Creepage	mm ≥ 8	
General			
Operating time (typical value)	AC	(ms) 8	
	DC	(ms) 6	
Release time (typical value)	AC	(ms) 15	
	DC	(ms) 8	
Electrical life	Resistive		
	Cos φ		
Mechanical life (cycles)		20x10 ⁶	
Ambient temperature	Storage	(°C) -40 ... +70	
	Operating	AC	(°C) -20 ... +55
		DC	(°C) -20 ... +55
Cover protection category		IP20	
Shock resistance	(G)	10	
Vibration resistance	(G)	0.062" DA (10 ... 55Hz)	

Table 1. Interface relay

Rated voltage V		Coil operating range V DC	
		Min.	Max.
12	DC	9	17
24	DC	17	30
24	AC/DC	18	30
230	AC	80	250
230	AC/DC	185	250

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Interface relay for PLC systems

Plug-in relays

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		PRC1T10...	
Contacts			
Number of contacts		1 changeover	
Standard material		AgNi	
Optional material			
Voltage			
Max. switching voltage	AC/DC	AC 400V / DC 300V	
Min. switching voltage	AC/DC	5V	
Current			
Rated load	AC1	(A)	16 (250V AC)
	DC1	(A)	16 (24V DC)
Min. switching current	(mA)	5	
Max. inrush current	(A)	30	
Rated current	(A)	16	
Max. breaking capacity	(VA)	4000	
Min. breaking capacity	(W)	0,3	
Resistance	(mΩ)	≤100 (at 1A, 24V)	
Max. operating frequency			
At rated load		600 cycles/hour	
No load		72000 cycles/hour	
Coil			
Rated voltage	AC 50/60Hz	(V)	24,120, 230
	DC	(V)	12, 24, 110
Must release time voltage	AC	≥0.15 Un	
	DC	≥0.1 Un	
Operating range of supply voltage		See Table 1, 2	
Rated power consumption	AC	(VA)	0.75
	DC	(W)	0.4
Insulation			
Insulation category		C250	
Insulation rated voltage	(VAC)	400	
Dielectric strength	Coil-Contact	(VAC)	5000
	Contact-Contact	(VAC)	1000
	Pole-Pole	(VAC)	-
Distance	Clearance	mm	≥ 10
	Creepage	mm	≥ 10
General			
Operating time (typical value)	AC	(ms)	7
	DC	(ms)	7
Release time (typical value)	AC	(ms)	5
	DC	(ms)	3
Electrical life	Resistive	(s)	≥ 0.7 × 10 ⁵ (at 16A, 250VAC)
	Cos φ		See curves
	L/R = 40ms		≥ 10 ⁵ (at 0.12A, 220VDC)
Mechanical life (cycles)			3×10 ⁷
Ambient temperature	Storage	(°C)	-40 ... +70
	Operating	(°C)	-40 ... +70
Cover protection category		IP40	
Shock resistance	(G)	30	
Vibration resistance	(G)	10 (for 10 ... 150Hz)	

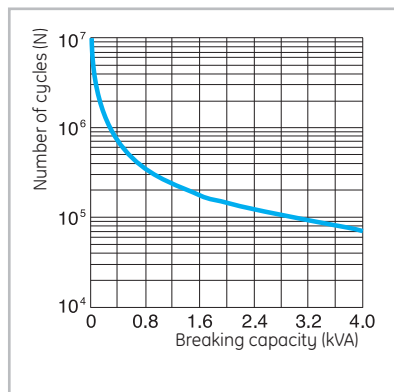
Table 1. Coil data DC version

Rated voltage V DC	Coil resistance (±10%) at 20°C Ω	Coil operating range V DC	
		U Min.	U Max.
12	360	8.4	30.6
24	1440	16.8	61.2
110	25200	77	280

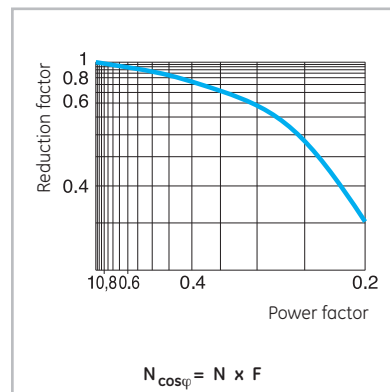
Table 2. Coil data AC 50/60Hz version

Rated voltage V AC	Coil resistance (±10%) at 20°C Ω	Coil operating range V AC	
		U Min.	U Max.
24	400	19.2	28.8
120	10200	96	144
230	38500	184	276

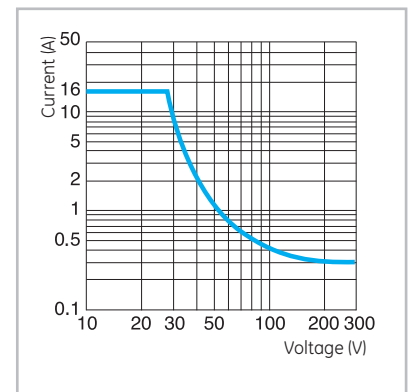
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load



Max. DC load breaking capacity



Interface relay for PLC systems

PRC1T20...			
Contacts			
Number of contacts			2 changeover
Standard material			AgNi
Optional material			
Voltage			
Max. switching voltage	AC/DC		AC 400V / DC 300V
Min. switching voltage	AC/DC		5V
Current			
Rated load	AC1	(A)	8 (250V AC)
	DC1	(A)	8 (24V DC)
Min. switching current		(mA)	5
Max. inrush current		(A)	15
Rated current		(A)	8
Max. breaking capacity		(VA)	2000
Min. breaking capacity		(W)	0,3
Resistance		(mΩ)	≤100 (at 1A, 24V)
Max. operating frequency			
At rated load			600 cycles/hour
No load			72000 cycles/hour
Coil			
Rated voltage	AC 50/60Hz	(V)	24, 230
	DC	(V)	12, 24
Must release time voltage	AC		≥0.15 Un
	DC		≥0.1 Un
Operating range of supply voltage			See Table 1, 2
Rated power consumption	AC	(VA)	0.75
	DC	(W)	0.4
Insulation			
Insulation category			C250
Insulation rated voltage		(VAC)	400
Dielectric strength	Coil-Contact	(VAC)	5000
	Contact-Contact	(VAC)	1000
	Pole-Pole	(VAC)	-
Distance contact coil	Clearance	mm	≥ 10
	Creepage	mm	≥ 10
General			
Operating time (typical value)	AC	(ms)	7
	DC	(ms)	7
Release time (typical value)	AC	(ms)	5
	DC	(ms)	3
Electrical life	Resistive	(s)	≥ 0.7 × 10 ⁵ (at 8A, 250VAC)
	Cos φ		See curves
	L/R = 40ms		≥ 10 ⁵ (at 0.12A, 220VDC)
Mechanical life (cycles)			3×10 ⁷
Ambient temperature	Storage	(°C)	-40 ... +70
	Operating	(°C)	-40 ... +70
Cover protection category			IP40
Shock resistance		(G)	20
Vibration resistance		(G)	10 (for 10 ... 150Hz)

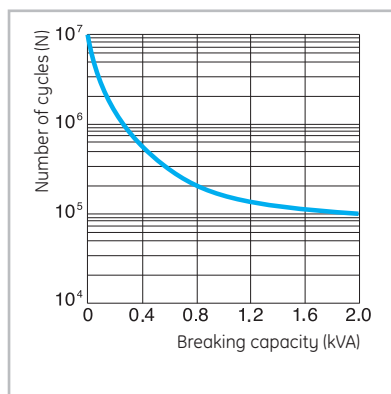
Table 1. Coil data DC version

Rated voltage V DC	Coil resistance (±10%) at 20°C Ω	Coil operating range V DC	
		U Min.	U Max.
12	360	8.4	30.6
24	1440	16.8	61.2
110	25200	77	280

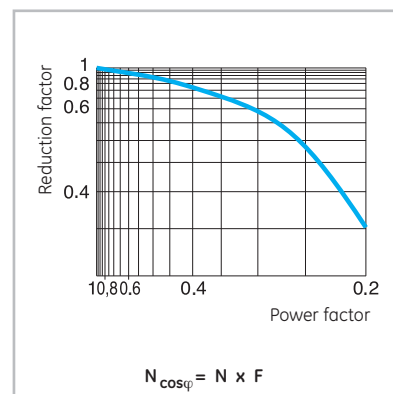
Table 2. Coil data AC 50/60 Hz version

Rated voltage V AC	Coil resistance (±10%) at 20°C Ω	Coil operating range V AC	
		U Min.	U Max.
24	400	19.2	28.8
120	10200	96	144
230	38500	184	276

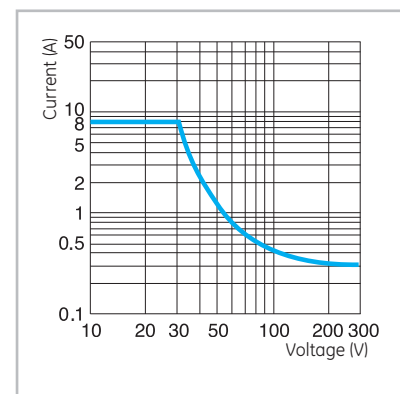
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

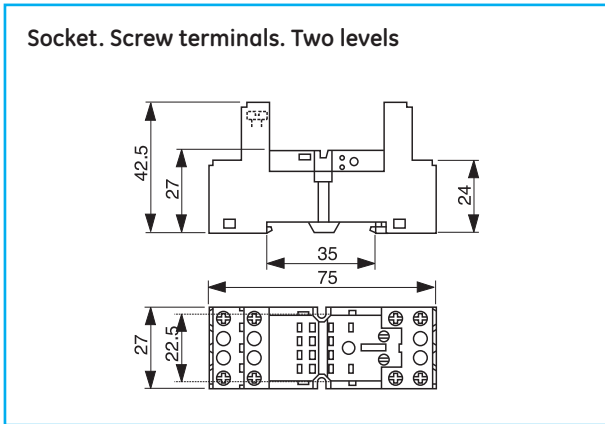
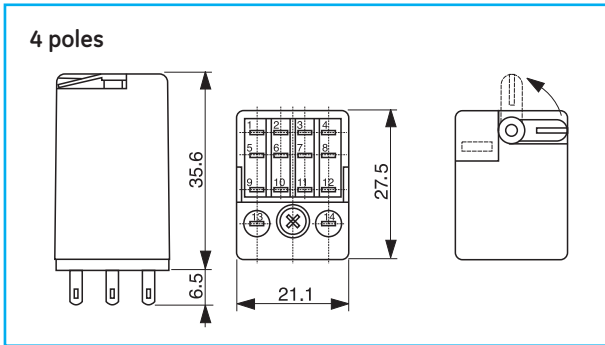
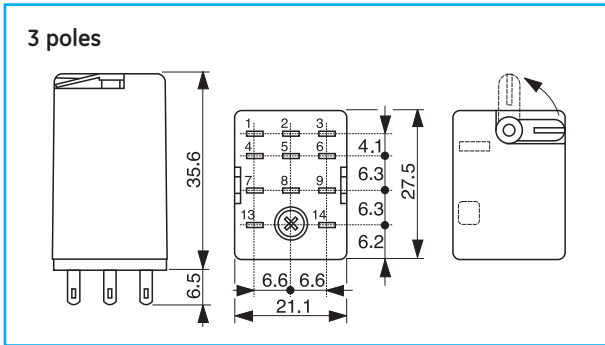
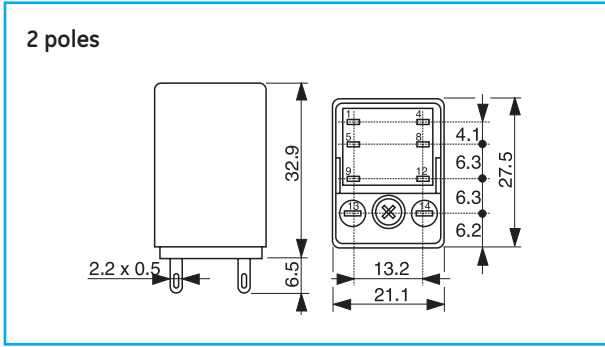


Max. DC load breaking capacity

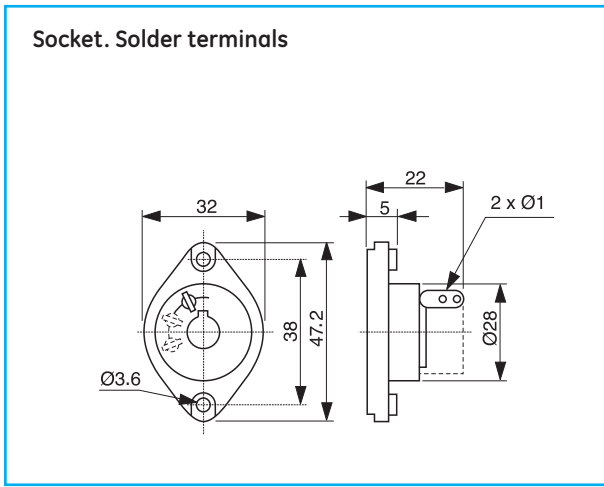
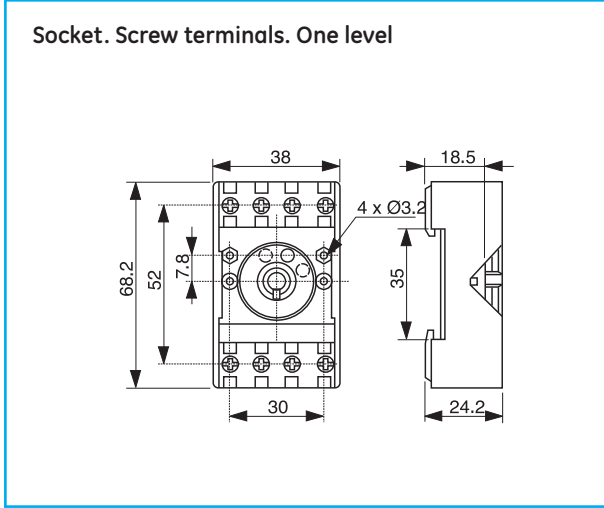
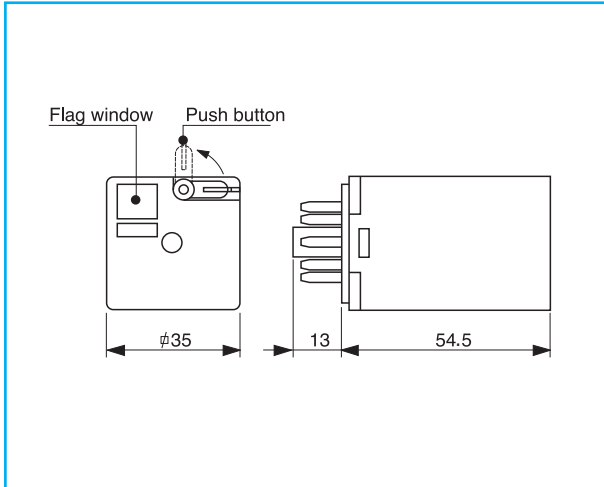


Dimensional drawings

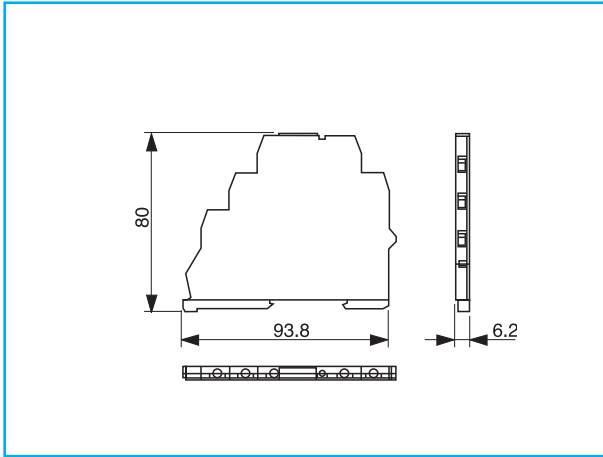
Miniature



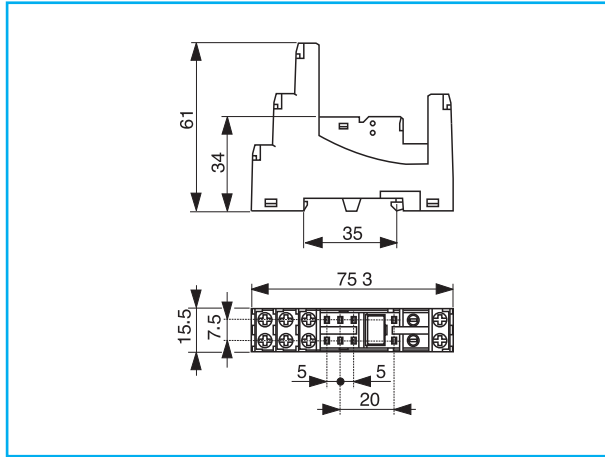
Standard 8-11 pin



Interface relay



Socket for miniature P.C.B. relays



Dimensions

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