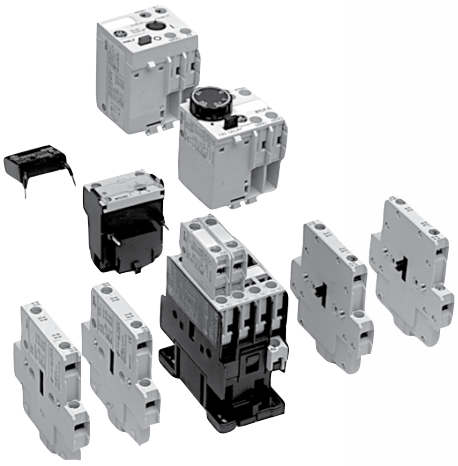
GE Energy
Industrial Solutions

WORLDWIDE PARTNER

Control and Automation

For industrial applications ED.03

Plug-in relays & Auxiliary contactors



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Innovation has always been the foundation of our past and the key to our future contributions. GE plays a vital role in our modern world by making extraordinary ideas, a natural part of everybody's life. We are committed to anticipate and meet changing needs and represent imagination in a manner that reflects our principles. We take pride in delivering quality and value to our customers day after day.

GE Energy – Industrial Solutions, India

GE Energy – Industrial Solutions, India offers innovative solutions to meet customer needs in Power & Protection. The company has a pan India presence, with 4 regional offices, 13 sales offices and manufacturing plant at Bangalore.

GE Energy – Industrial Solutions, offers solutions and products to customers in several segments that include power sector, core infrastructure like marine establishments, airports, highways, heavy and light Industries, IT & ITES infrastructure, healthcare, commercial and residential segments.

The India Innovation Center

The India Innovation Center (IIC) is a dedicated engineering research & design IT development center for the global GE Energy – Industrial Solutions business. Established in 1999, IIC today is amongst the largest design and development centers for GE Energy – Industrial Solutions business. IIC employs more than 1000 engineers and IT professionals working with teams across the globe.

About the Technology Team

The Technology teams at IIC develop new products and solutions for the global market in the areas of Circuit Breakers, Motors, Power Quality and Protection, Electrical Machines, Industrial Automation, Sensing Systems.

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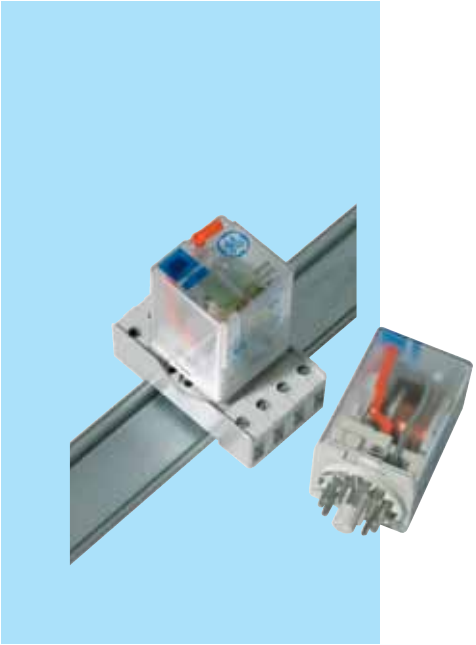


Plug-in auxiliary relays

- 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 Types
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 Types
PRC2P2...	2 CO	10A/250V	**PRZ8**
PRC3P3...	3 CO	10A/250V	**PRZ11**

Interface relay module

Types	Poles	AC ratings	Sockets Types
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	

Catalogue number structure

Series
Standard 8 pin = **2**
Standard 11 pin = **3**
Square base miniature = **4**
Input/output interface relay = **1**

No. of contacts
1
2
3
4

Special executions
D = Free wheeling diode (DC only)

Plug-in relays — **P R C** [ ] [ ] [ ] [ ] [ ] [ ] [ ] **L** — **LED**

Type
Standard Pin = **P**
Miniature = **M**
Interface = **S - T**

Contact materials
Standard AgNi = **0**
Gold plated cont. 5µ Au = **2**
Standard $AgSnO_2$ for Interface relays = **3**

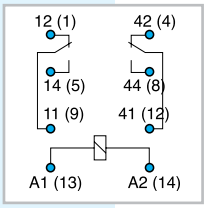
Coil voltage
A = 6V
B = 12V
D = 24V
G = 48V
J = 110V (DC)
J = 120V (AC)
N = 230V (AC)

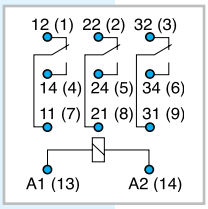
Voltage
A = AC
C = DC
B = AC/DC

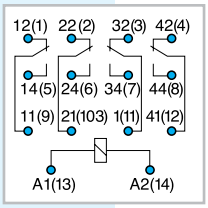
Order codes | pg. A.3
Modules for sockets | pg. A.6
Technical characteristics | pg. A.7
Dimensions | pg. A.14

Miniature plug-in relays

	Ratings AC	Contacts standard material	Voltage		With LED Cat. no.	Ref. no.	Pack
2 changeover contacts	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	10
				24V	**PRC4M20DCDL**	220755	10
				48V	**PRC4M20DCGL**	220756	10
				110V	**PRC4M20DCJL**	220757	10
3 changeover contacts	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	10
				24V	**PRC4M30DCDL**	221075	10
				48V	**PRC4M30DCGL**	221076	10
				110V	**PRC4M30DCJL**	221077	10
4 changeover contacts	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	10
				24V	**PRC4M40DCDL**	221852	10
				48V	**PRC4M40DCGL**	221853	10
				110V	**PRC4M40DCJL**	221854	10







Sockets

					Cat. no.	Ref. no.	Pack
For PRC4M2... 2 changeover contacts	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

Standard 8-11 pin plug-in relays

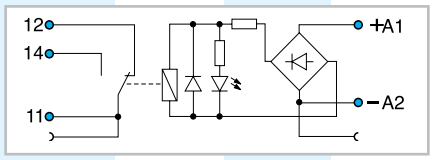
	Ratings AC	Contacts standard material	Voltage		With LED Cat. no.	Ref. no.	Pack
Standard 8 pin	**2 changeover contacts**						
	10A/250V	0 AgNi	AC 50/60 Hz	12V	**PRC2P20ABL**	220019	10
				24V	**PRC2P20ADL**	220020	10
				48V	**PRC2P20AGL**	220021	10
				120V	**PRC2P20AJL**	220024	10
				230V	**PRC2P20ANL**	220026	10
			DC	12V	**PRC2P20CBL**	220022	10
				24V	**PRC2P20CDL**	220023	10
				48V	**PRC2P20CGL**	220025	10
				110V	**PRC2P20CJL**	220027	10
			DC diode	12V	**PRC2P20DCBL**	220041	10
				24V	**PRC2P20DCDL**	220042	10
				48V	**PRC2P20DCGL**	220043	10
				110V	**PRC2P20DCJL**	220044	10
Standard 11 pin	**3 changeover contacts**						
	10A/250V	0 AgNi	AC 50/60 Hz	12V	**PRC3P30ABL**	220310	10
				24V	**PRC3P30ADL**	220311	10
				48V	**PRC3P30AGL**	220312	10
				120V	**PRC3P30AJL**	220315	10
				230V	**PRC3P30ANL**	220317	10
			DC	12V	**PRC3P30CBL**	220313	10
				24V	**PRC3P30CDL**	220314	10
				48V	**PRC3P30CGL**	220316	10
				110V	**PRC3P30CJL**	220318	10
			DC diode	12V	**PRC3P30DCBL**	220335	10
				24V	**PRC3P30DCDL**	220336	10
				48V	**PRC3P30DCGL**	220337	10
				110V	**PRC3P30DCJL**	220338	10

Sockets

			Cat. no.	Ref. no.	Pack
 **For PRC2P20...** Standard 8 pin	Screw terminals One level	Socket	**PRCZ8**	220216	10
		Fixing clip	**PRCPZ11**	220218	10
	Solder terminal	Socket	**PRCG8**	220217	10
		Fixing clip	**PRCR159**	220219	10
For PRC3P30... Standard 11 pin	Screw terminals One level	Socket	**PRCZ11**	220647	10
		Fixing clip	**PRCPZ11**	220218	10
	Solder terminal	Socket	**PRCG11**	220648	10
		Fixing clip	**PRCR159**	220219	10

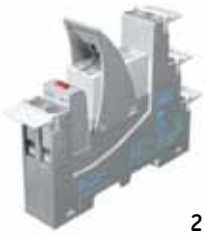
Interface relay

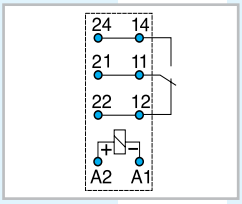
	Ratings AC1	Ratings DC1	Contacts material	Voltage		With LED Cat. no.	Ref. no.	Pack
6,2mm wide								
1 single pole	6A/250V	-	3 $AgSnO_2$	AC/DC	230V	**PRC1S13BNL**	222013	10
1 changeover contact	6A/250V	-	3 AgSnO2	AC	230V	**PRC1S13ANL**	222012	10
				DC	12V	**PRC1S13CBL**	222007	10
					24V	**PRC1S13CDL**	222008	10
				AC/DC	24V	**PRC1S13BDL**	222004	10
				Identification label		**PRCTR1S**	222043	10
				20-way jumper link		**PRCW20**	222039	10

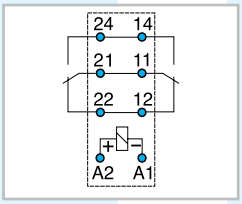


Interface relay for PLC systems

	Ratings AC1	Ratings DC1	Contacts material	Voltage		With LED Cat. no.	Ref. no.	Pack
1 changeover contact	16A/250V	16A/24V	0 AgNi	AC	24V	**PRC1T10ADL**	221868	10
					120V	**PRC1T10AJL**	221869	10
					230V	**PRC1T10ANL**	221870	10
				DC	12V	**PRC1T10CBL**	221860	10
					24V	**PRC1T10CDL**	221861	10
					110V	**PRC1T10CJL**	221862	10
2 changeover contacts	8A/250V	8A/24V	0 AgNi	AC	24V	**PRC1T20ADL**	221883	10
					120V	**PRC1T20AJL**	221884	10
					230V	**PRC1T20ANL**	221885	10
				DC	12V	**PRC1T20CBL**	221875	10
					24V	**PRC1T20CDL**	221876	10
					110V	**PRC1T20CJL**	221877	10



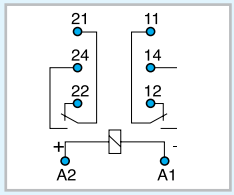




Complete set of relay, socket, module (diode+Led for DC-Varistor + Led for AC) and retaining clip + marking plate.
16mm width

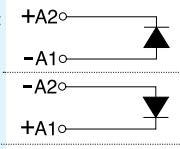
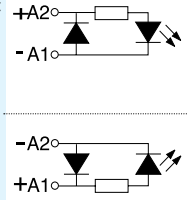
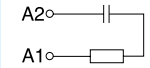
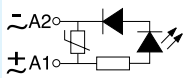
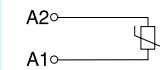
Spare parts

				Voltage		Cat. no.	Ref. no.	Pack
Miniature P.C.B. relays. 16A 1 changeover contact				AC 50/60 Hz	24V	**PRCT1AD**	221896	20
					120V	**PRCT1AJ**	221897	20
					230V	**PRCT1AN**	221898	20
				DC	12V	**PRCT1CB**	221890	20
					24V	**PRCT1CD**	221891	20
					110V	**PRCT1CJ**	221892	20
Miniature P.C.B. relays. 8A 2 changeover contacts				AC 50/60 Hz	24V	**PRCT2AD**	221913	20
					120V	**PRCT2AJ**	221914	20
					230V	**PRCT2AN**	221915	20
				DC	12V	**PRCT2CB**	221905	20
					24V	**PRCT2CD**	221906	20
					110V	**PRCT2CJ**	221907	20
Socket for miniature P.C.B. relays	Three level screws					**PRCGZT80**	221918	10
				Retainer/Retractor		**PRCMS16**	221920	10
				Plate		**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

Modules for sockets

			Color Led	Cat. no.	Ref. no.	Pack
Diode	Protection against polarity inversion					
	For use with sockets: **PRCG-ES15/2N PRCG-ES15/3N PRCG-ES15/4N** 	6 / 230V DC		**PRCM21P**	222100	10
		6 / 230V DC		**PRCM21N**	222101	10
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	Red	**PRCM31R**	222102	10
			Green	**PRCM31G**	222104	10
		24 / 60V DC	Red	**PRCM32R**	222103	10
			Green	**PRCM32G**	222105	10
		110 / 230V DC	Red	**PRCM33R**	222109	10
			Green	**PRCM33G**	222106	10
		6 / 24V DC	Red	**PRCM41R**	222110	10
			Green	**PRCM41G**	222107	10
		24 / 60V DC	Red	**PRCM42R**	222111	10
			Green	**PRCM42G**	222124	10
		110 / 230V DC	Red	**PRCM43R**	222112	10
			Green	**PRCM43G**	222125	10
RC group	Arc suppression circuit					
	For use with sockets: **PRCG-ES15/2N PRCG-ES15/3N PRCG-ES15/4N** 	6 / 24V AC		**PRCM51**	222113	10
		24 / 60V AC		**PRCM52**	222114	10
		110 / 240V AC		**PRCM53**	222115	10
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	Red	**PRCM91R**	222116	10
			Green	**PRCM91G**	222126	10
		110 / 230V AC	Green	**PRCM93G**	222120	10
Varistor group	No indication Protection against overvoltage					
	For use with sockets: **PRCG-ES15/2N PRCG-ES15/3N PRCG-ES15/4N** 	24V AC		**PRCM71**	222121	10
		230V AC		**PRCM73**	222122	10

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
Specifications					
Nominal load		(A)	12 (300V)	10 (300V)	10 (300V)
Dielectric strength					
	Adjacent screws	(kV)	3	3	3
	Screws - rail	(kV)	3	3	3
Terminals	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
Specifications						
Nominal load		(A)	10 (250V)	10 (250V)	10 (250V)	10 (250V)
Dielectric strength		(kV)		2.5		2.5
	Adjacent screws	(kV)	2.5		2.5	
	Screws - rail	(kV)	3		3	
Terminals	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
Specifications			
Nominal load		(A)	12 (300V)
Dielectric strength			
	Adjacent screws	(kV)	3
	Screws - rail	(kV)	3
Terminals	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

				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 voltage	AC/DC (poll. 3)			250V	250V	250V
	AC (poll. 2)			400V	400V	400V
Min. switching voltage AC/DC				5V	5V	5V
Current						
Rated load	AC1		(A)	12 (250V AC)	10 (250V AC)	6 (250V AC)
	AC15		(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)	H100 (100mA, 24V)	H100 (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 time voltage	AC			G0.2 Un	G0.2 Un	G0.2 Un
	DC			G0.1 Un	G0.1 Un	G0.1 Un
Operating range of supply voltage				Table 1, 2	Table 1, 2	Table 1, 2
Rated power consumption	AC	50Hz	(VA)	1.5	1.6	1.6
		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	G 2.5	G 2.5	G 1.6
	Creepage		mm	G 4	G 4	G 3.2
General data						
Operating time (typical value)	AC		(ms)	10	10	10
	DC		(ms)	13	13	13
Release time (typical value)	AC		(ms)	8	8	8
	DC		(ms)	3	3	3
Electrical life	Resistive			G 10^5 (12A, 250V AC)	G 10^5 (10A, 250V AC)	G 10^5 (6A, 250V AC)
	Cos φ			See curves	See curves	See curves
Mechanical life (cycles)				G 10^7	G 10^7	G x10^7
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

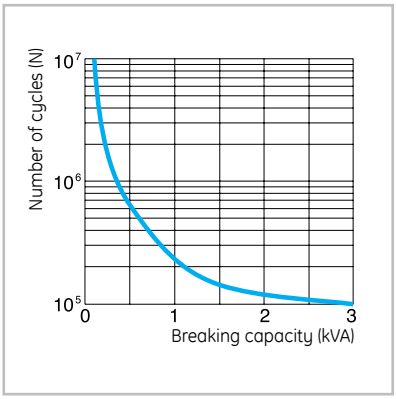
Rated voltage	Coil resistance	Coil operating range V DC	
		Min.	Max.
V DC	Ω	(at 20°C)	(at 55°C)
12	160	9.6	13.2
24	640	19.2	26.4
48	2600	38.4	52.8
110	13600	88	121
220	54000	176	242

Table 2. Coil data AC 50/60Hz version

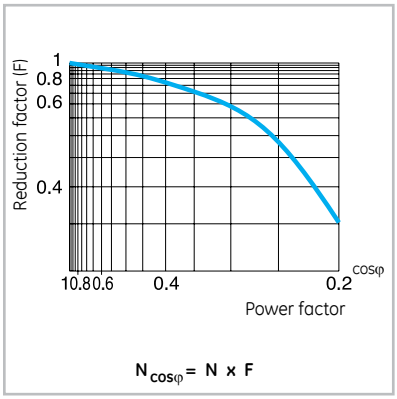
Rated voltage	Coil resistance	Coil operating range V AC	
		Min.	Max.
V AC	Ω	(at 20°C)	(at 55°C)
12	39	9.6	13.2
24	158	19.2	26.4
48	640	38.4	52.8
120	3770	88	121
230	16100	184	253

Miniature 2 pole plug-in relays

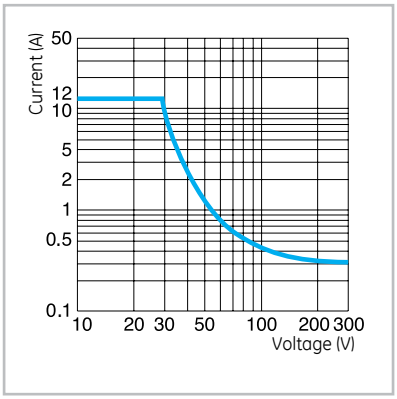
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

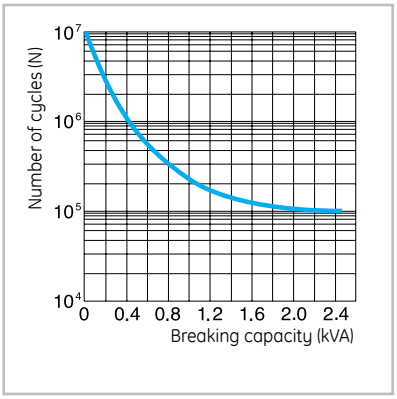


Max. DC resistive load breaking capacity

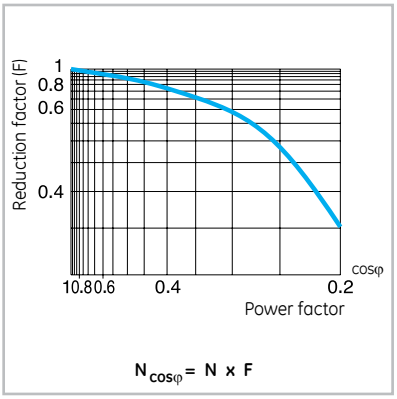


Miniature 3 pole plug-in relays

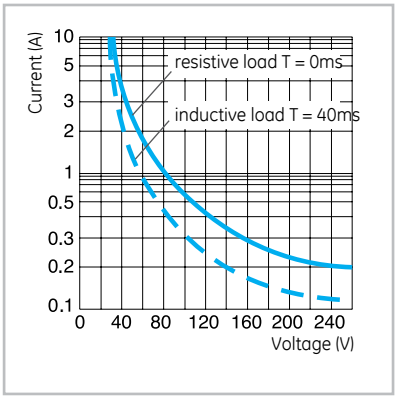
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load

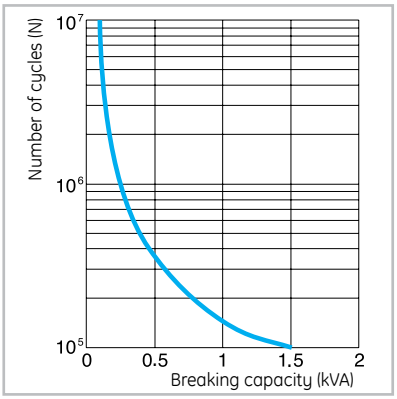


Max. DC load breaking capacity

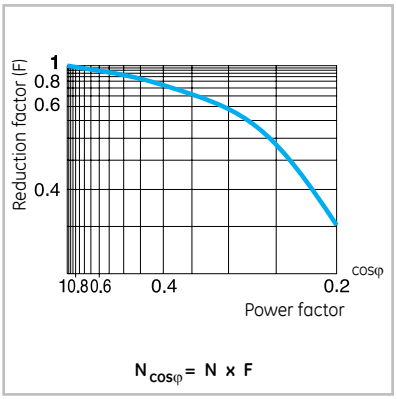


Miniature 4 pole plug-in relays

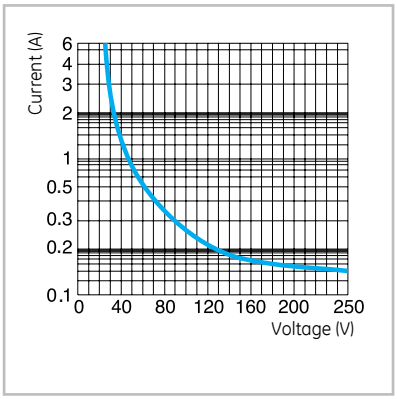
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load



Max. DC resistive load breaking capacity



Standard 8-11 pin plug-in relays

				PRC2P20... Standard 8-pin	PRC3P30... 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			G0.15 Un	G0.15 Un
	DC			G0.1 Un	G0.1 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	G 3	G 3
contact coil	Creepage		mm	G 4.2	G 4.2
General					
Operating time	AC		(ms)	12	12
(typical value)	DC		(ms)	12	12
Release time	AC		(ms)	10	10
(typical value)	DC		(ms)	7	7
Electrical life	Resistive			G 2x10^5 (10A, 250V AC)	G 2x10^5 (10A, 250V AC)
	Cos φ			See curves	See curves
Mechanical life (cycles)				G 2x10^7	G 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

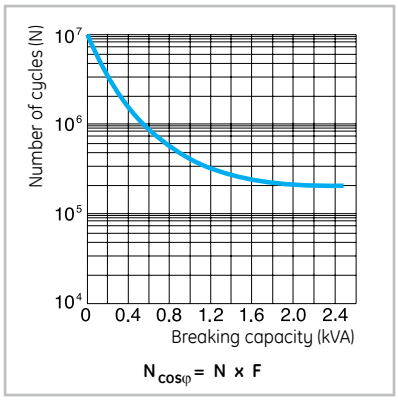
Table 1. Coil data DC version

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

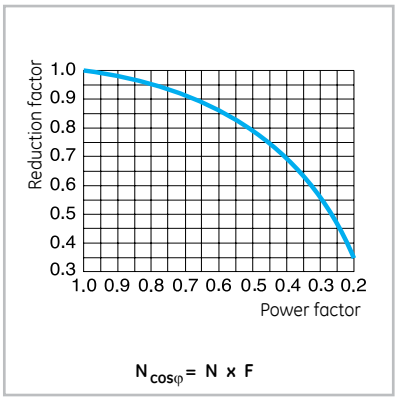
Table 2. Coil data AC 50/60Hz version

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

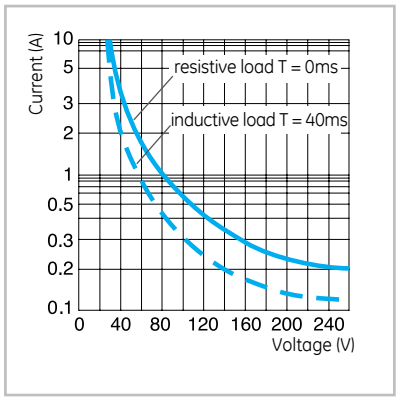
Electrical life at AC resistive load



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)	
	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)	H100 (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 voltage	AC		G0,2 Un
	DC		G0,1 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 contact coil	Clearance	mm	G 8
	Creepage	mm	G 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

Interface relay for PLC systems

			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)	H100 (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	AC		G0.15 Un
voltage	DC		G0.1 Un
Operating range of supply voltage			See Table 1, 2
Rated power	AC	(VA)	0.75
consumption	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	G 10
contact coil	Creepage	mm	G 10
General			
Operating time	AC	(ms)	7
(typical value)	DC	(ms)	7
Release time	AC	(ms)	5
(typical value)	DC	(ms)	3
Electrical life	Resistive	(s)	G 0.7×10^5 (at 16A, 250VAC)
	Cos φ		See curves
	L/R = 40ms		G 10^5 (at 0.12A, 220VDC)
Mechanical life (cycles)			3×10^7
Ambient	Storage	(°C)	-40 ... +70
temperature	Operating	(°C)	-40 ... +70
Cover protection category			IP40
Shock resistance		(G)	30
Vibration resistance		(G)	10 (for 10 ... 150Hz)

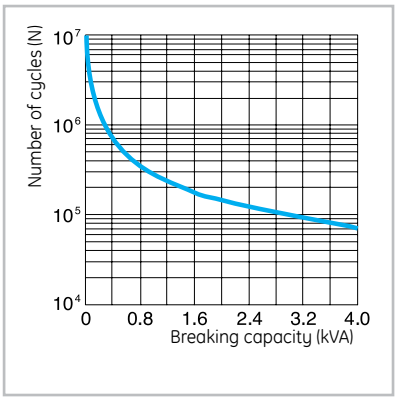
Table 1. Coil data DC version

Rated voltage	Coil resistance (±10%) at20°C	Coil operating range V DC	
		U Min.	U Max.
V DC	Ω		
12	360	8.4	30.6
24	1440	16.8	61.2
110	25200	77	280

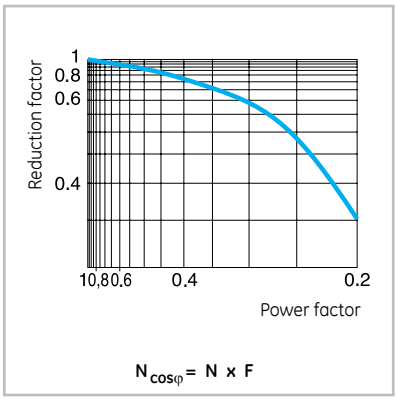
Table 2. Coil data AC 50/60Hz version

Rated voltage	Coil resistance (±10%) at20°C	Coil operating range V AC	
		U Min.	U Max.
V AC	Ω		
24	400	19.2	28.8
120	10200	96	144
230	38500	184	276

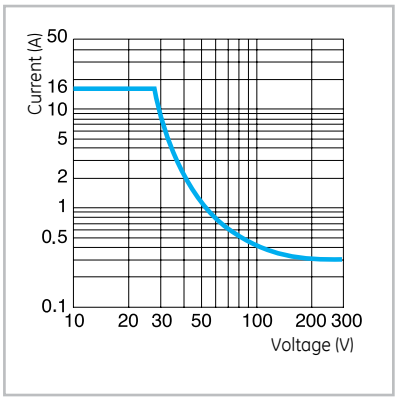
Electrical life at AC resistive load



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)	H100 (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	AC		G0.15 Un
voltage	DC		G0.1 Un
Operating range of	supply voltage		See Table 1, 2
Rated power	AC	(VA)	0.75
consumption	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	G 10
contact coil	Creepage	mm	G 10
General			
Operating time	AC	(ms)	7
(typical value)	DC	(ms)	7
Release time	AC	(ms)	5
(typical value)	DC	(ms)	3
Electrical life	Resistive	(s)	G 0.7 x 10^5 (at 8A, 250VAC)
	Cos φ		See curves
	L/R = 40ms		G 10^5 (at 0,12A, 220VDC)
Mechanical life (cycles)			$3x10^7$
Ambient	Storage	(°C)	-40 ... +70
temperature	Operating	(°C)	-40 ... +70
Cover protection category			IP40
Shock resistance		(G)	20
Vibration resistance		(G)	10 (for 10 ... 150Hz)

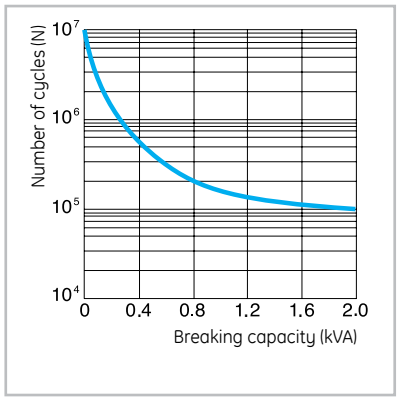
Table 1. Coil data DC version

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

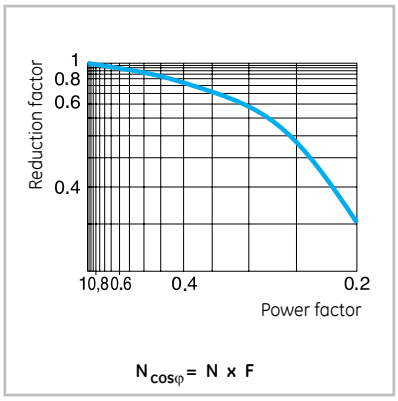
Table 2. Coil data AC 50/60 Hz version

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

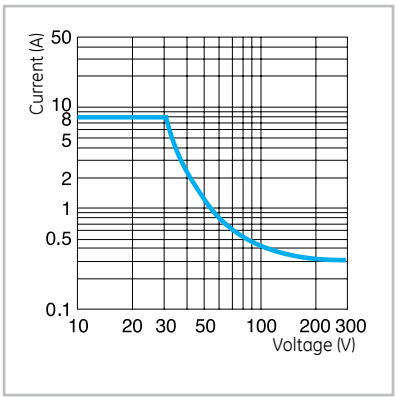
Electrical life at AC resistive load



Electrical life reduction factor at AC inductive load



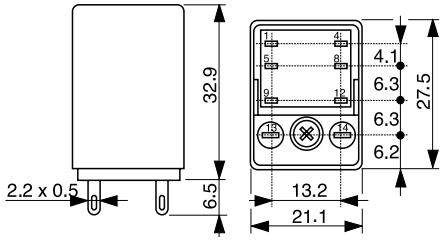
Max. DC load breaking capacity



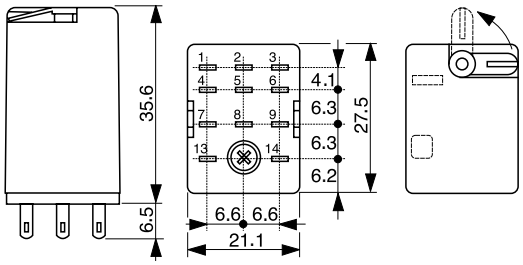
Dimensional drawings

Miniature

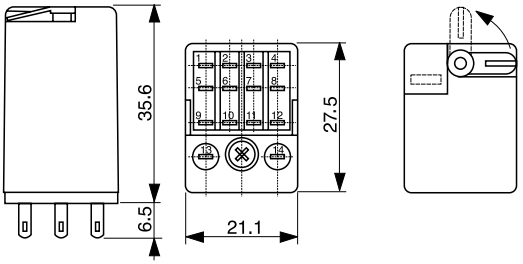
2 poles



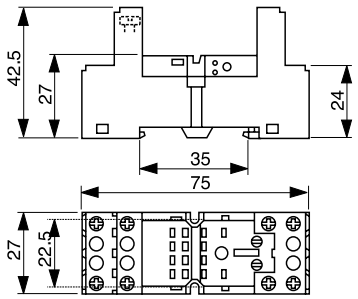
3 poles



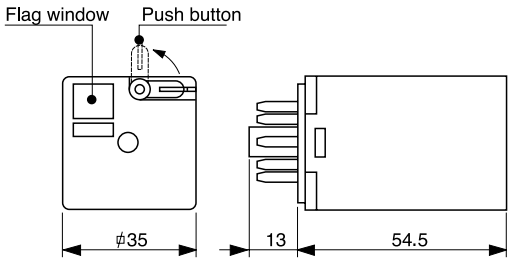
4 poles



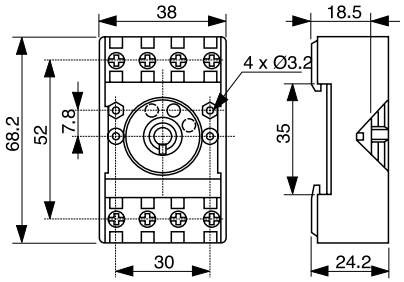
Socket. Screw terminals. Two levels



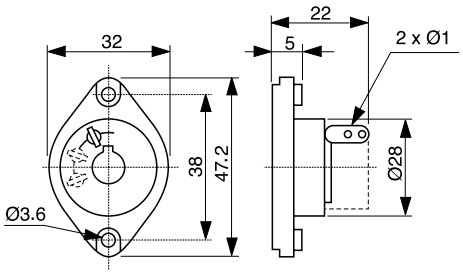
Standard 8-11 pin



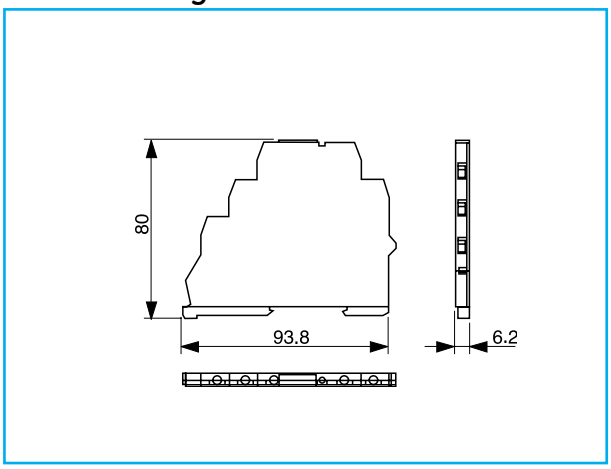
Socket. Screw terminals. One level



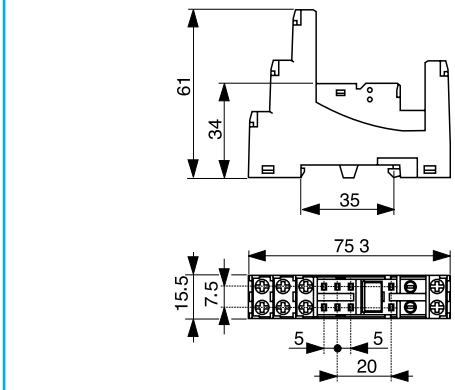
Socket. Solder terminals

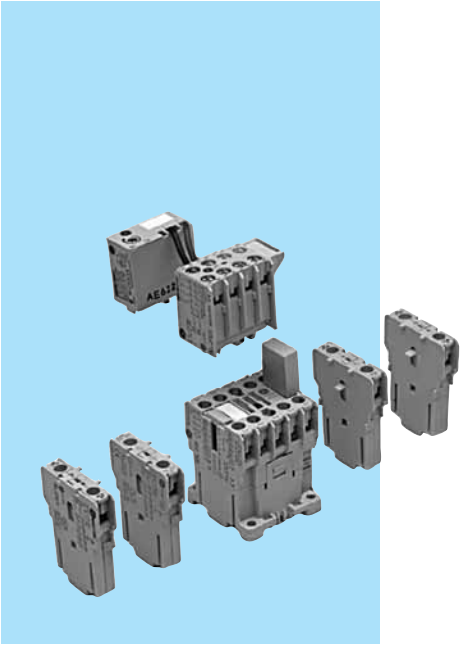


Interface relay



Socket for miniature P.C.B. relays





Auxiliary minicontactors Ith = 16A

- Control circuit: Alternating current up to 600V
  Direct current up to 250V
- Terminal numbering in accordance with EN 50011
- Fixing system for rapid and simple mounting by clamping onto standard 35 mm DIN rail (EN 50022)
- Screw and push-on terminals protected against accidental contacts in accordance with VDE 0106 T.100 and VBG4
- Printed circuit version
- Ring terminal version
- Facility to mount instant or timed auxiliary contact blocks and voltage supressor blocks
- Maximum number of auxiliary contacts to add: 6
- Degree of protection IP20 (EN 60529)
- According to IEC/EN 60947-1

Standards

IEC/EN 60947-5-1	BS 4794
IEC/EN 60947-1	CENELEC HD 420
EN 50002	NFC 63-110
EN 50005	NFC 63-140
EN 50011	CSA C22.2/14
UL 508	VDE 0660

Approvals

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General data

Maximum number of contacts (MCR...)					4			
Rated thermal current (Ith) θ H 60°					(A) 16			
Rated operational voltage (Ue) acc. IEC 60947-1					(V) 690			
Insulation voltage (Ui) acc. IEC 60947-1					(V) 750			
Utilisation category:								
AC-15	**V**	110	220/240	380/400	415	440	500	660/690
	A	6	6	4	4	3	2.5	1.5

DC-13	**V**	24	48	110	220
	A	5	3.5	1.2	0.6

Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit.

Alternating current (V). Bifrequency coil

♦	10	1	2	9	3	4	5	6	7	8	12	13
AC 50/60Hz	12	24	42	48	110 115	120	220	230	240	440	380	400

Voltage operating limits of dual-frequency coil:
at 60Hz = 0.85 a 1.1 x Us
at 50Hz = 0.8 a 1.1 x Us for uninterrupted duty (ED=100%), temperature = 40°C

Alternating current (V)

♦	A	E	G	K	M	N	S	U	W	Y
AC 50Hz			48	115 127		220 240	260	380 400	415 440	500
AC 60Hz	6	32	60		208 220	240 277		440	480	600

Direct current (V)

♦	A	B	C	D	E	F	G	H	I	J	K	L	N	17	R	S	16
DC	6	12	32	24	36	42	48	60	72	110	120	125	220	230	240	250	440

Direct current (V) - Wide voltage range

♦	WD	WE	WG	WI	WJ	WN
DC	24	33	48	72	110	220

Order codes | pg. A.17
Auxiliary contacts blocks | pg. A.18
Accessories | pg. A.20
Dimensions | pg. A.21

Auxiliary minicontactors

	Contacts acc.			Control circuit: alternating current			Control circuit: direct current		
				Cat. no. [1]	Ref. no. see bottom	Pack	Cat. no. [1]	Ref. no. see bottom	Pack
									
Screw terminal									
	40E	4	0	**MCRA040AT ♦**		5	**MCRC040AT ♦**		10
	31E	3	1	**MCRA031AT ♦**		5	**MCRC031AT ♦**		10
	22E	2	2	**MCRA022AT ♦**		5	**MCRC022AT ♦**		10
	13E	1	3	**MCRA013AT ♦**		5			
	04E	0	4	**MCRA004AT ♦**		5			
									
Ring terminal									
	40E	4	0	**MCRA040AR ♦**		5	**MCRC040AR ♦**		10
	31E	3	1	**MCRA031AR ♦**		5	**MCRC031AR ♦**		10
	22E	2	2	**MCRA022AR ♦**		5	**MCRC022AR ♦**		10
	13E	1	3	**MCRA013AR ♦**		5			
	04E	0	4	**MCRA004AR ♦**		5			
									
Terminal: faston 2x2,8 insulated (2)									
	40E	4	0	**MCRA040AF ♦**		5	**MCRC040AF ♦**		10
	31E	3	1	**MCRA031AF ♦**		5	**MCRC031AF ♦**		10
	22E	2	2	**MCRA022AF ♦**		5	**MCRC022AF ♦**		10
	13E	1	3	**MCRA013AF ♦**		5			
	04E	0	4	**MCRA004AF ♦**		5			
									
Terminal: printed circuit									
	40E	4	0	**MCRA040AI ♦**		5	**MCRC040AI ♦**		10
	31E	3	1	**MCRA031AI ♦**		5	**MCRC031AI ♦**		10
	22E	2	2	**MCRA022AI ♦**		5	**MCRC022AI ♦**		10
	13E	1	3	**MCRA013AI ♦**		5			
	04E	0	4	**MCRA004AI ♦**		5			
									
Spare coil				**MB0A ♦**		10	**MB0C ♦**		10

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit. (see pg.A.16).
(2) Terminal: - with wire 1.5 mm²: Ie = 16A - with wire 1 mm²: Ie = 10A
Insulated terminal type B2.8x0.8 with wire 1 mm²: Ie = 8A to DIN 46247
Faston terminal 1 x 6.3 on request, replace the letter **F** by **H** in the catalogue number

Auxiliary minicontactors interface

	Contacts acc. to EN 50011			Control circuit: direct current 24V / 1.2W [3]			Control circuit: direct current 24V / 2W [4]		
				Operating limits from 19 to 30V (0.8-1.25xUs)			Operating limits from 17 to 30V (0.7-1.25xUs)		
				Cat. no.	Ref. no.	Pack	Cat. no.	Ref. no.	Pack
									
Screw terminal									
	40E	4	0	**MCRI040ATD**	100530	10	**MCRK040ATD**	100533	10
	31E	3	1	**MCRI031ATD**	100531	10	**MCRK031ATD**	100534	10
	22E	2	2	**MCRI022ATD**	100532	10	**MCRK022ATD**	100535	10
									
Spare coil				**MB0ID**	100470	10	**MB0KD**	100471	10

(3) No possibility of adding instantaneous auxiliary blocks.
(4) Facility to mount instantaneous auxiliary contact block of two contacts (MARN2...) or two instantaneous auxiliary contact blocks of one contact (MARL1...).

Instantaneous auxiliary contacts blocks

Front mounting

Number of contacts	Combination with MCRA040AT♦ (40E) according to EN 50011	Contacts acc. to EN 50005 Designation (block marking)	•3 •4	•1 •2	Cat. no.	Ref. no.	Pack
Screw terminal							
2	60E	20	2	0	**MARN220AT**	100994	10
2	51E	11	1	1	**MARN211AT**	100993	10
2	42E	02	0	2	**MARN202AT**	100992	10
Ring terminal							
2	60E	20	2	0	**MARN220AR**	103349	10
2	51E	11	1	1	**MARN211AR**	103350	10
2	42E	02	0	2	**MARN202AR**	103351	10
Screw terminal							
4	80E	40	4	0	**MARN440AT**	100991	10
4	71E	31	3	1	**MARN431AT**	100990	10
4	62E	22	2	2	**MARN422AT**	100989	10
4	53E	13	1	3	**MARN413AT**	100988	10
4	44E	04	0	4	**MARN404AT**	100987	10
Terminal : Ring terminal							
4	80E	40	4	0	**MARN440AR**	103352	10
4	71E	31	3	1	**MARN431AR**	103353	10
4	62E	22	2	2	**MARN422AR**	103354	10
4	53E	13	1	3	**MARN413AR**	103355	10
4	44E	04	0	4	**MARN404AR**	103300	10

Instantaneous auxiliary contacts blocks

Lateral mounting








Number of contacts	Combination with MCRA040AT♦ (40E) according to EN 50011	Contacts acc. to EN 50005 Designation (Block marking)	•3 •4	•1 •2	Cat. no.	Ref. no.	Pack
• One or two blocks to cover combinations of 5 or 6 contacts without increasing the height of the basic unit							
Screw terminal							
1	50E	10	1	0	**MARL110AT**	100513	10
1	–	01	0	1	**MARL101AT**	100514	10
Ring terminal							
1	50E	10	1	0	**MARL110AR**	103556	10
1	–	01	0	1	**MARL101AR**	103557	10
Terminal : Faston 2x2,8 insulated (1)							
1	50E	10	1	0	**MARL110AF**	100515	10
1	–	01	0	1	**MARL101AF**	100516	10
Terminal : Printed circuit							
1	50E	10	1	0	**MARL110AI**	100517	10
1	–	01	0	1	**MARL101AI**	100518	10
• One or two additional blocks, when 9 or 10 contacts are required (combination possible with the front mounting block) • One or two additional blocks on both sides, to cover up to 8 contacts (combination only possible with lateral blocks)							
Screw terminal							
1	50E	10	1	0	**MARL110ATS**	100519	10
1	–	01	0	1	**MARL101ATS**	100520	10
Ring terminal							
1	50E	10	1	0	**MARL110ARS**	103299	10
1	–	01	0	1	**MARL101ARS**	103298	10
Terminal : Faston 2x2,8 insulated (1)							
1	50E	10	1	0	**MARL110AFS**	100521	10
1	–	01	0	1	**MARL101AFS**	100522	10
Terminal : Printed circuit							
1	50E	10	1	0	**MARL110AIS**	100523	10
1	–	01	0	1	**MARL101AIS**	100524	10

(1) Terminal with wire 1 mm^2: Ie = 10A
Insulated terminal type B2.8x0.8 with wire 1 mm^2: Ie = 8A

Accessories

Electronic timer block

For use with:	Time	Function	Ue	Cat. no.	Ref. no.	Pack
Lateral or front fixing on the contactor						
MCR..MC_ ...	0.5 - 60 sec.	Delay ON	24 to 250V AC/DC	**MREBC10AC2**	100541	10
MCR..MC_ ...	0.2 - 24 sec.	Delay ON	24 to 250V AC/DC	**MREBC20AC2**	100542	10

Timer fitment

For use with:						
For fixing onto 35mm DIN-rail (EN 5022)						
MREBC...				**MVB0R**	100543	10

Voltage suppresor block

For use with:	Type	Control	Ue	Cat. no.	Ref. no.	Pack
Connection and (plug-in) fixing onto front of the contactor						
MCRA,MC_ ...	RC	AC	12 to 60V 50/60Hz	**MP0AAE1**	100544	10
MCRA,MC_ ...	RC	AC	72 to 250V 50/60Hz	**MP0AAE2**	100545	10
MCRC,MC_ ...	Diode	DC	6 to 250V DC	**MP0CAE3**	100546	10
MCRC, MC_...	Varistor	AC/DC	24-48V	**MP0DAE4**	100536	10

Mechanical interlock

For use with:		Cat. no.	Ref. no.	Pack
Kit comprising mechanical interlock and contactor jointing parts				
MCR, MC_ ...		**MMH0**	100547	10

Identification

For use with:		Cat. no.	Ref. no.	Pack
MCR, MC_ ...	Sheets of labels (10 sheets of 260 labels each)	**EAT 260**	100548	1
MCR, MC_ ...	Labelling plate base. Plug-in labelling plate bases (50 pieces in one pack)	**SPR**	100549	1

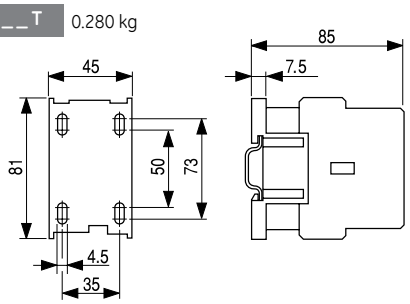
Dimensional drawings

Auxiliary contactors

Screw terminal

AC

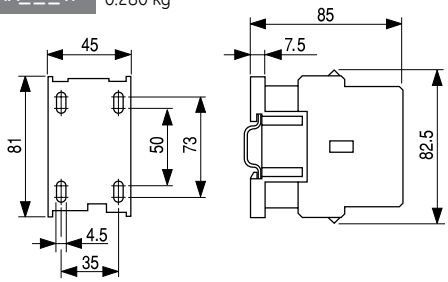
RL4RA___T 0.280 kg



Ring terminal

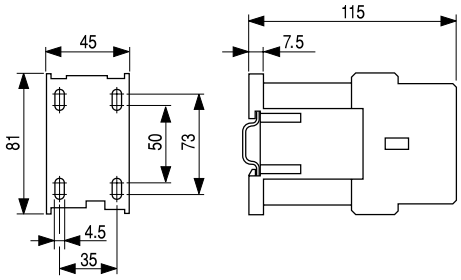
AC

RL4RA___R 0.280 kg



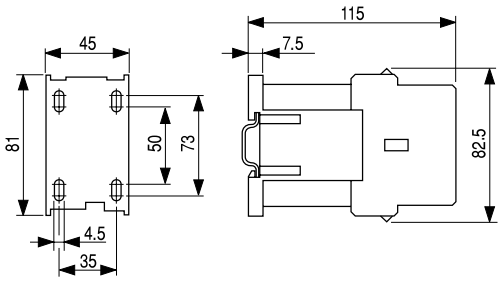
DC

RL4RD___T 0.490 kg



DC

RL4RD___R 0.490 kg

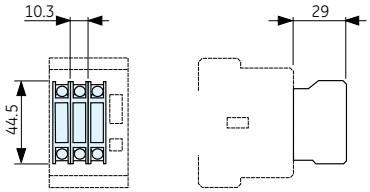


Instantaneous auxiliary contact blocks

Screw terminal

Instantaneous, frontal mounting

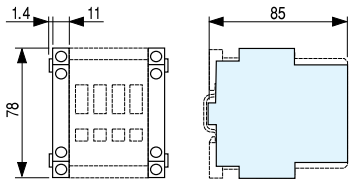
BCLF___ 0.015 kg



Screw terminal

Instantaneous, lateral mounting

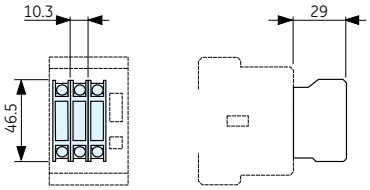
BRLL___ 0.048 kg



Ring terminal

Frontal mounting

BCRF___ 0.015 kg

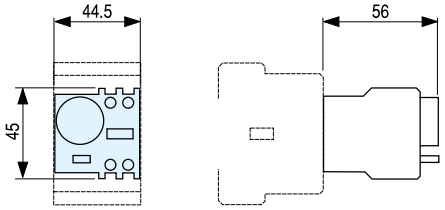


Timed auxiliary contact blocks

Screw terminal

Front mounting

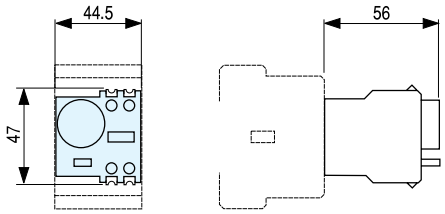
BTLF_ _ _ 0.085 kg



Ring terminal

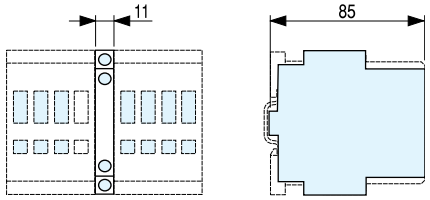
Front mounting

BTRF_ _ _ 0.085 kg



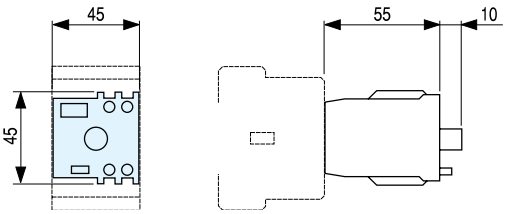
Mechanical (-/electrical) interlock

BELA 0.025 kg
BELA02 0.025 kg



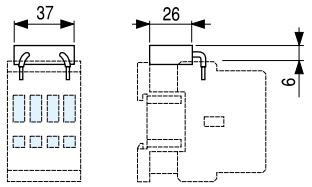
Mechanical latch block

RMLF_ _ 0.082 kg



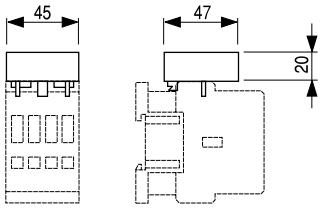
Voltage suppressor blocks

BSLR2_ 0.020 kg
BSLDZ_ 0.020 kg
BSLV3_ 0.020 kg



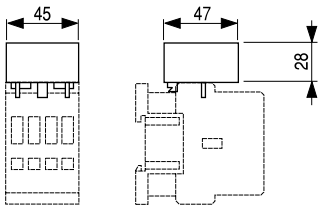
Electronic timer block

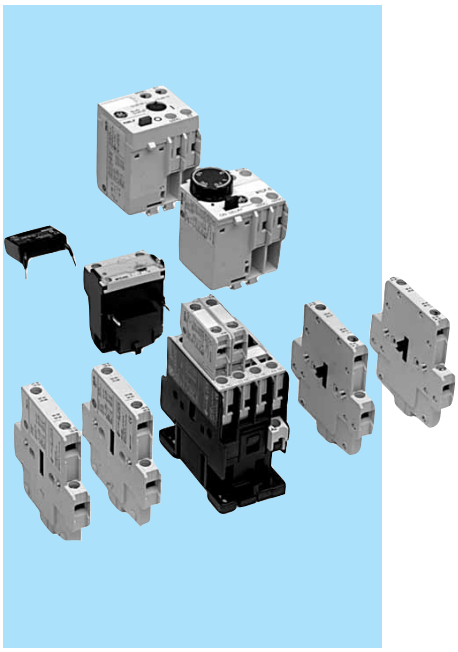
BETL_ _ C 0.040 kg
BETL_ _ D 0.040 kg



Interface

IMR_ 0.060 kg
IMRF_ 0.050 kg
IMSSD 0.045 kg
IMAMS 0.045 kg





Auxiliary contactors
Ith = 20A

- Control circuit: Alternating current up to 690V
  Direct current up to 440V
- Terminal numbering in accordance with EN 50005 and EN 50011
- Fixing system for rapid and simple mounting onto standard 35mm DIN-rail (EN 50022-35)
- Terminals protected against accidental contact in accordance with VDE 0106 T.100, VBG4
- Ring terminal versions
- Three coil terminals
- Facility to mount side and/or front instantaneous contact blocks, timed auxilary contacts, mechanical latch, voltage supressor blocks and interface modules
- Degree of protection IP20 (EN 60529)

Standards

IEC/EN 60947-5-1	BS 4794
IEC/EN 60947-1	CENELEC HD410
EN 90947	CENELEC HD420
EN 60947	NFC 63-110
EN 50005	NFC 63-140
EN 50011	CSA C22.2/14
UL 508	VDE 0660/102
NEMA ICS 1	

Approvals

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SEMKO SETI CE

Lloyd's Register Bureau Veritas

General data

Maximum number of contacts (RL...)						4	
Rated thermal current (Ith) θ ≤ 55°						(A)	20
Rated operational voltage (Ue)						(V)	690
Insulation voltage (Ui)						(V)	1000
Utilisation category:							
AC-15	**V**	120	230/220	400/380	440/415	500	690/660
	A	10	10	6	5	4	2
DC-13	**V**	24	48	110	220	440	
	A	6	4	2	0.7	0.35	

Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit.

Alternating current (V). Dual-frequency coil

♦	1	2	9	3	4	5	6	7	13	8	15
AC 50/60Hz	24	42	48	110 115	120	220	230	240	400	440	480

Alternating current (V)

♦	A	B	E	K	L	N	T	U	W	Y	Z
AC 50Hz			32	127		220 230		380 400	415	500	660 690
AC 60Hz	6	12			208	277	380	480	460	600	

Direct current (V)

♦	B	D	E	F	G	H	I	J	K	N	P	R	T
DC	12	24	36	42	48	60	72	110	120	220	230	240	250

Direct current (V) - Wide voltage range

♦	WB	WD	WE	WF	WG	WH	WI	WJ	WK	WN	WP	WR	WT
DC	12	24	33	42	48	60	72	110	125	220	230	240	250

Order codes | pg. A.24
Auxiliary contacts blocks | pg. A.24
Accessories | pg. A.25
Dimensions | pg. A.26

Auxiliary contactors

Contacts				Control circuit: Alternating current up to 690V			Control circuit: Direct current up to 440V		
				Cat. no. [1]	Ref. no. see bottom	Pack	Cat. no. [1]	Ref. no. see bottom	Pack
Screw terminal									
4	0	0	0	**RL4RA040T ♦**		5	**RL4RD040T ♦**		10
3	1	0	0	**RL4RA031T ♦**		5	**RL4RD031T ♦**		10
2	2	0	0	**RL4RA022T ♦**		5	**RL4RD022T ♦**		10
0	4	0	0	**RL4RA004T ♦**		5	**RL4RD004T ♦**		10
1	1	1	1	**RL4RA022G ♦**		5	**RL4RD022G ♦**		10
Ring terminal									
4	0	0	0	**RL4RA040R ♦**		5	**RL4RD040R ♦**		10
3	1	0	0	**RL4RA031R ♦**		5	**RL4RD031R ♦**		10
2	2	0	0	**RL4RA022R ♦**		5	**RL4RD022R ♦**		10
0	4	0	0	**RL4RA004R ♦**		5	**RL4RD004R ♦**		10

Spare coil

Screw terminal									
				LB1A ♦		5	**LB1D ♦**		5
Ring terminal									
				LR1A ♦		5	**LR1D ♦**		5

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit. (see pg. A.22).

Auxiliary contacts

Instantaneous	Number of contacts	Contacts				Function	Time	Cat. no.	Ref. no.	Pack
Screw terminal										
Frontal mounting	1	1	0	0	0			**BCLF10**	104700	10
	1	0	1	0	0			**BCLF01**	104701	10
	1	0	0	1	0			**BCLF10G**	104702	10
	1	0	0	0	1			**BCLF01G**	104703	10
Ring terminal										
	1	1	0	0	0			**BCRF10**	108901	10
	1	0	1	0	0			**BCRF01**	108902	10
Screw terminal										
Side mounting	2	2	0	0	0			**BRLL20**	104704	10
	2	1	1	0	0			**BRLL11**	104705	10
	2	0	2	0	0			**BRLL02**	106622	10
Pneumatic timer blocks										
Screw terminal										
Frontal mounting	2	0	0	1	1	Delayed ON	0.1 - 30 sec.	**BTLF30C**	104709	10
	2	0	0	1	1	Delayed ON	1 - 60 sec.	**BTLF60C**	104710	10
	2	0	0	1	1	Delayed OFF	0.1 - 30 sec.	**BTLF30D**	104711	10
	2	0	0	1	1	Delayed OFF	1 - 60 sec.	**BTLF60D**	104712	10
Ring terminal										
	2	0	0	1	1	Delayed ON	0.1 - 30 sec.	**BTRF30C**	108903	10
	2	0	0	1	1	Delayed ON	1 - 60 sec.	**BTRF60C**	108904	10
	2	0	0	1	1	Delayed OFF	0.1 - 30 sec.	**BTRF30D**	108905	10
	2	0	0	1	1	Delayed OFF	1 - 60 sec.	**BTRF60D**	108906	10
Sealing cover protection for pneumatic timer								**BTLFX**	113001	5

Accessories

Mechanical interlock

Number of contacts	Contacts					Cat. no.	Ref. no.	Pack
	•3 •4	•1 •2	•7 •8	•5 •6				
Mechanical								
-	-	-	-	-		**BELA**	104723	5
Mechanical / electrical								
2	0	2	-	-		**BELA02**	104724	5

Mechanical latch blocks

Frontal mounted to the contactor						
RL4RA..., RL4RD...	**RMLF ♦** (1)	see bottom	20			

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit.

	D	G	HC	J	N	U	Y
50Hz	24, 32	42, 48		110, 115, 120, 127	220, 230, 240	380, 400, 415, 440, 480	500, 660/690
60HZ	24, 32	48, 60		110, 115, 120, 127	208, 220, 240, 277	380, 400, 415, 440, 480	600
DC	24, 32, 36	42, 48	60, 72	110, 120, 125	220, 230, 240, 250	440	

Transient voltage supressor block

For use with:	Type	Control circ.	Ue	Cat. no.	Ref. no.	Pack
Directly connected parallel to the coil terminals, allows simultaneous use with auxiliary contact blocks.						
RL4RA...	R/C	AC	12V ... 48V	**BSLR2G**	104713	10
RL4RA...	R/C	AC	50V ... 127V	**BSLR2K**	104714	10
RL4RA...	R/C	AC	130V ... 250V	**BSLR2R**	104715	10
RL4RD...	Diode	DC	12V ... 600V	**BSLDZ**	104719	10
RL4RA..., RL4RD...	Varistor	AC / DC	24V ... 48V	**BSLV3G**	104720	10
RL4RA..., RL4RD...	Varistor	AC / DC	50V ... 127V	**BSLV3K**	104721	10
RL4RA..., RL4RD...	Varistor	AC / DC	130V ... 250V	**BSLV3R**	104722	10
RL4RA..., RL4RD...	Varistor	AC / DC	277V ... 500V	**BSLV3U**	110836	10

Identification

For use with:		Cat. no.	Ref. no.	Pack
RL4RA..., RL4RD...	Sheets of labels (10 sheets of 260 labels each)	**EAT 260**	100548	1
RL4RA..., RL4RD...	Labelling plate base. Plug-in labeling plate bases (50 pieces in one pack)	**SPR**	100549	1

Accessories *(continued)*

Electronic timer module

For use with:	Control circuit	Function	Time	Cat. no.	Ref. no.	Pack
Directly connected parallel to the coil terminals, allows simultaneous use with auxiliary contact blocks.						
RL4...	24-250V AC/DC	Delayed ON	0,1 - 2 sec.	**BETL02C**	113602	5
RL4...	24-250V AC/DC	Delayed ON	1,5 - 45 sec.	**BETL45C**	113603	5
RL4...	24-250V AC/DC	Delayed OFF	0,1 - 2 sec.	**BETL02D**	113604	5
RL4...	24-250V AC/DC	Delayed OFF	1,5 - 45 sec.	**BETL45D**	113605	5

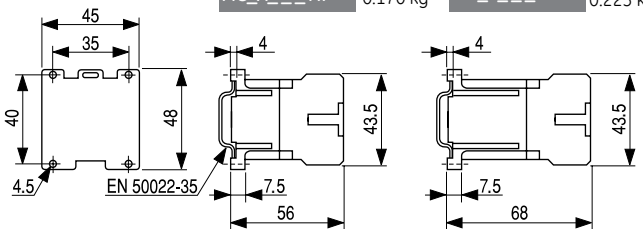
Dimensional drawings

Three and four pole minicontactors

Screw terminal

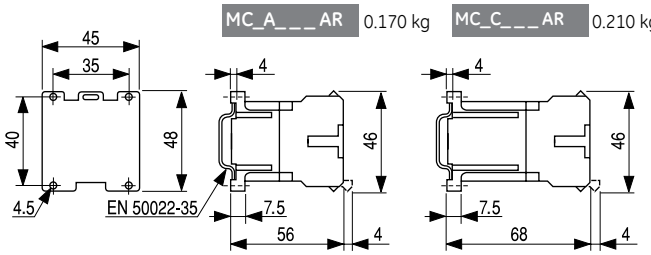
MC_A_ _ _AT 0.170 kg

MC_C_ _ _AT 0.210 kg
MC_I_ _ _ATD 0.225 kg
MC_K_ _ _ATD 0.225 kg



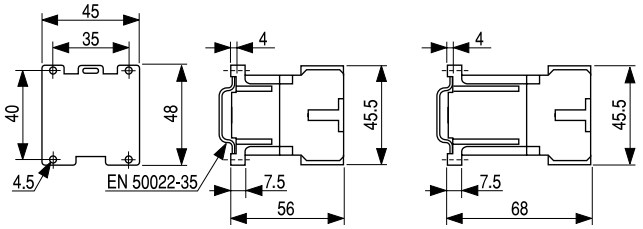
Ring terminal

MC_A_ _ _AR 0.170 kg
MC_C_ _ _AR 0.210 kg



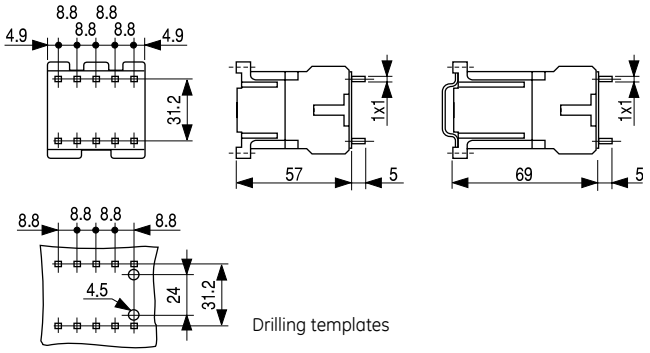
Terminal: faston 2x2,8 insulated

MC_A_ _ _AF 0.165 kg
MC_C_ _ _AF 0.210 kg



Terminal: printed circuit

MC_A_ _ _AI 0.165 kg
MC_C_ _ _AI 0.210 kg

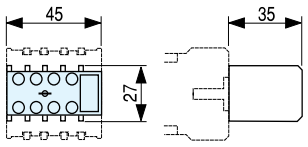


Drilling templates

Auxiliary contact block. *Lateral mounting*

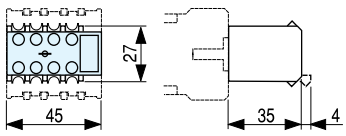
Screw terminal

MACN2 _ _AT - MARN2 _ _AT 0.025 kg
MACN4 _ _AT - MARN4 _ _AT 0.040 kg



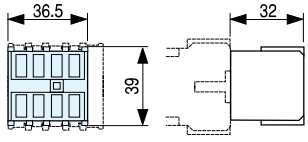
Ring terminal

MACN2 _ _AR - MARN2 _ _AR 0.025 kg
MACN4 _ _AR - MARN4 _ _AR 0.040 kg



Terminal: faston 2x2.8 insulated

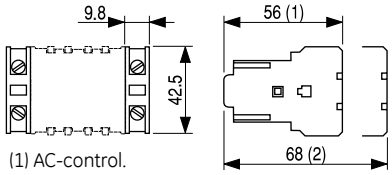
MACF4 _ _AF 0.035 kg
MARF4 _ _AF 0.035 kg



Auxiliary contact blocks. Lateral mounting

Screw terminal

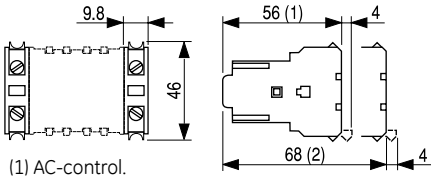
MACL_ _ _AT	0.013 kg
MARL_ _ _ATS	0.013 kg



(1) AC-control.
(2) DC-control.

Ring terminal

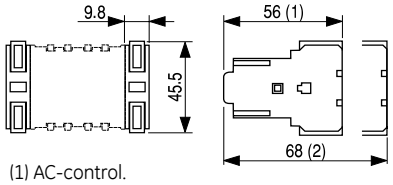
MACL_ _ _AR	0.013 kg
MARL_ _ _ARS	0.013 kg



(1) AC-control.
(2) DC-control.

Terminal: faston 2x2.8 insulated

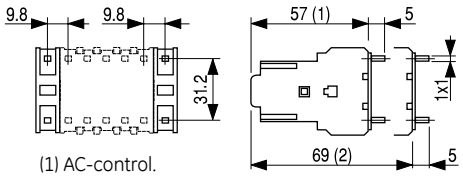
MACL _ _AF	0.009 kg
MARL _ _AFS	0.009 kg



(1) AC-control.
(2) DC-control.

Terminal: printed circuit

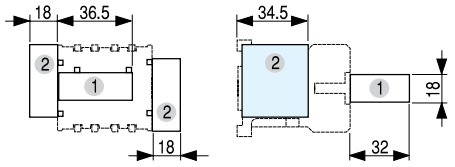
MACL _ _AI	0.009 kg
MARL _ _AIS	0.009 kg



(1) AC-control.
(2) DC-control.

Electronic timer block

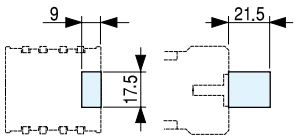
MREBC _0AC2	0.040 kg



(1) Frontal mounting
(2) Lateral mounting

Voltage suppressor block

MP0A_AE_	0.010 kg
MP0C_AE3	0.010 kg



Notes

Notes

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