



Auxiliary contactors (I_{th} = 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)
- Terminals protected against accidental contact in accordance with VDE 0106 T.100, VBG4
- Three coil terminals
- Facility to mount side and/or front instantaneous contact blocks, timed auxiliary contacts, mechanical latch, voltage suppressor blocks and interface modules
- Degree of protection IP20 in accordance with IEC 144



RL4RA031TN

Control circuit: alternating current up to 690V

Utilisation category				Control circ.	Contacts	Cat. no. ⁽¹⁾	Pack	Weight
AC15		DC13						
V	A	V	A					
120	10	24	6	AC	4 0 0 0	RL4RA040T ◆	20	0.280
230/220	10	48	4		3 1 0 0	RL4RA031T ◆	20	0.280
400/380	6	110	2		2 2 0 0	RL4RA022T ◆	20	0.280
440/415	5	220	0.7		0 4 0 0	RL4RA004T ◆	20	0.280
500	4	440	0.35		1 1 1 1	RL4RA022G ◆	20	0.280
690/660	2							

Spare coil **LB1A**◆ 5 0.063

Control circuit: direct current up to 440V

V	A	V	A	Control circ.	Contacts	Cat. no. ⁽¹⁾	Pack	Weight
120	10	24	6	DC	4 0 0 0	RL4RD040T ◆	20	0.490
230/220	10	48	4		3 1 0 0	RL4RD031T ◆	20	0.490
400/380	6	110	2		2 2 0 0	RL4RD022T ◆	20	0.490
440/415	5	220	0.7		0 4 0 0	RL4RD004T ◆	20	0.490
500	4	440	0.35		1 1 1 1	RL4RD022G ◆	20	0.490
690/660	2							

Spare coil **LB1D**◆ 5 0.205

Available coil voltages

Alternating current (V)

◆	C	D	F	G	J	K	M	N	S	U	V	W	X	Y	Z
50Hz		24	42	48	110	127		220 230		380 400		415	440	500	660 690
60Hz	24		48		120		220	277	240	480	440	460		600	

Alternating current (V) Dual-frequency coil

◆	1	2	3	4	5	6	7	8
50/60Hz	24	42	110 115	120	220	230	240	440

Direct current (V)

◆	B	D	E	F	G	H	I	J	K	N	P	R
Voltage	12	24	36	42	48	60	72	110	120 125	220	230	240

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



Accessories

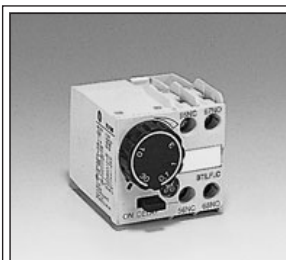
- Terminal numbering in accordance with EN 50005 and EN 50011
- Terminals protected against accidental contact in accordance with VDE 0106 T.100, VBG4
- Facility to mount up to four auxiliary contact blocks
- Combination of front/side contact blocks, see pages J.24 and J.25



BCLF10



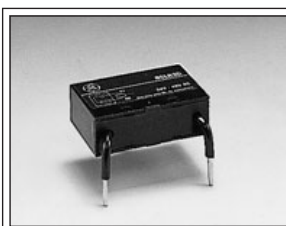
BRLL20



BTLF60C



RMLFN



BSLR ...

Instantaneous and timed auxiliary contact blocks

For use with	Mounting	Type	Contacts	Cat. no.	Pack	Weight
RL4R...	Frontal	one pole	1 0 0 0	BCLF10	10	0.015
			0 1 0 0	BCLF01	10	0.015
			0 0 1 0	BCLF10G	10	0.015
			0 0 0 1	BCLF01G	10	0.015
Side	two poles	2 0 0 0	BRLL20	10	0.048	
		1 1 0 0	BRLL11	10	0.048	

Pneumatic timer blocks

For use with	Mounting	Type	Contacts	Time	Cat. no.	Pack	Weight
RL4R...	Frontal	Delayed ON	1 1	0.1...30s	BTLF30C	10	0.085
			1 1	1... 60s	BTLF60C	10	0.085
	Frontal	Delayed OFF	1 1	0.1...30s	BTLF30D	10	0.085
			1 1	1...60s	BTLF60D	10	0.085
Sealing cover protection for pneumatic timer					BTLFX	5	0.001

Mechanical latch blocks

- Terminal numbering in accordance with EN 50005
- Disconnection of the auxiliary contactor either using an electrical pulse or manually
- Terminals protected against accidental contact in accordance with VDE 0106 T.100, VBG4
- Frontal selector allows for adaptation in function of the housing of the contactor

For use with	Cat. no. ⁽¹⁾	Pack	Weight
RL4R ...	RMLF ◆	20	0.082

Available voltages ⁽¹⁾

◆	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	

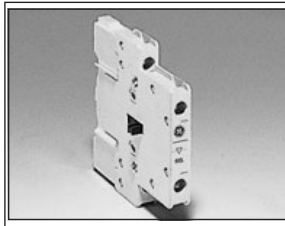
Transient voltage suppressor block

Directly connected parallel to the coil terminals A1-A2 without cables

Control circ.	For use with	Type	Ue	Cat. no.	Pack	Weight
AC	RL4RA...	R/C	12V to 48V	BSLR2G	10	0.020
			50V to 127V	BSLR2K	10	0.020
			130V to 250V	BSLR2R	10	0.020
DC	RL4RC ...	Diode	12V to 600V	BSLDZ	10	0.020
AC / DC	RL4RA ... RL4RC ...	Varistor	24V to 48V	BSLV3G	10	0.020
			50V to 127V	BSLV3K	10	0.020
			130V to 250V	BSLV3R	10	0.020
			277V to 500V	BSLV3U	10	0.020



Accessories

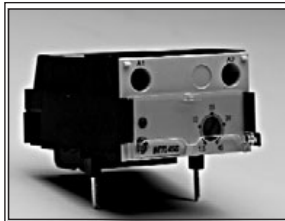


BELA

Mechanical interlock

Side mounted to the contactor

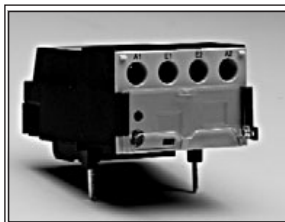
	Contacts	Cat. no.	Pack	Weight
Mechanical	- -	BELA	5	0.025
Mechanical / electrical	0 2	BELA02	5	0.025



BETL...

Electronic timer module

Control circ.	For use with	Type	Time	Cat. no.	Pack	Weight
24-250V AC/DC	RL... CL00 to CL10	Delayed ON	0.1...2 s.	BETL02C	5	0.040
			1.5...45 s.	BETL45C	5	0.040
		Delayed OFF	0.1...2 s.	BETL02D	5	0.040
			1.5...45 s.	BETL45D	5	0.040



IMRD

Interface module

Directly connected parallel to the coil terminals A1-A2

Voltage suppressor block to use with interface module, see K.16

Control circ.	For use with	Type	Ue (DC)	Cat. no.	Pack	Weight
24-250V AC	RL... CL00 to CL10	Relay	24V	IMRD	5	0.060
			48V	IMRG	5	0.060
24-250V DC	RL... CL00 to CL45	Relay + forced operation	24V	IMRFD	5	0.050
			48V	IMRFG	5	0.050
			24V	IMSSD	5	0.045
				IMAMS	5	0.045



IMRD

Transient voltage suppressor block to use with interface modules

To be plugged inside the interface module / electronic timers.

	For use with	Type	Cont. circ. AC/DC	Cat. no.	Pack	Weight
	RL... CL00...CL45...	R/C	24V...48V	IMRC2G	10	0.020
			50V...127V	IMRC2K	10	0.020
			130V...240V	IMRC2R	10	0.020
	RL... CL05A...CL10A...	R/C	24V...48V	IMRC3G	10	0.020
			50V...127V	IMRC3K	10	0.020
			130V...240V	IMRC3R	10	0.020
	RL... / CL...D...	Diode	12V...600V	IMD1Z	10	0.020
	RL... CL...	Varistor	24V...48V	IMV3G	10	0.020
			50V...127V	IMV3K	10	0.020
			130V...240V	IMV3R	10	0.020

Identification of contactors

	Cat. no.	Pack	Weight
Sheets of labels (10 sheets of 260 labels each)	EAT260	1	0.050
Plug-in labeling plate bases (50 pieces in one pack)	SPR	1	0.001



General

Maximum number of contacts	4
Rated thermal current (I _{th}) θ ≤ 55°C	20A
Rated operational voltage (U _e)	690V
Rated insulation voltage (U _i)	1000V

Conformity to standards

IEC 947-1	EN 90947	CSA C 22.2/14
IEC 947-5	BS 4794	EN 50005
CENELEC HD 410, 420	ASE 1025	EN 50011
NF C 63-110	NEMA ICS 1	VDE 0660/102
NF C63-140	UL-508	EN60947

Approvals

UL	DEMKO	Bureau Veritas
CSA	NEMKO	Lloyd's Register
SEMKO	FI	

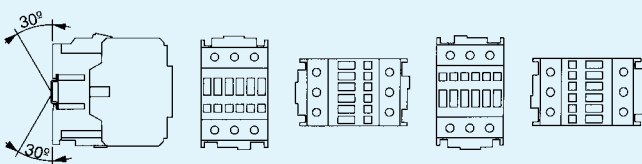
Ambient conditions

Storage temperature	- 55°C up to + 80°C
Operation temperature	- 40°C up to + 60°C
Altitude up to 3,000 m	Nominal values
Altitude from 3,000 to 4,000 m	90 % I _e 80 % U _e
Altitude from 4,000 to 5,000 m	80 % I _e 75 % U _e

Climatic resistance (IEC 68-2)

Continuous tests	40 / 125 / 56	Cyclical tests (6 cycles)	
Cold (72 h)		Humid heat	
- Temperature	- 40°C	First half-cycle (12 h)	
Dry heat (96 h)		- Low temperature	+ 25°C
- Temperature	+ 125°C	- Relative humidity	93 %
- Relative humidity	< 50 %	Second half-cycle (12 h)	
Humid heat (56 days)		- Low temperature	+ 55°C
- Temperature	+ 40°C	- Relative humidity	95 %
- Relative humidity	95 %		

Mounting positions



With the same pick-up and drop-out voltage
With the same rated power

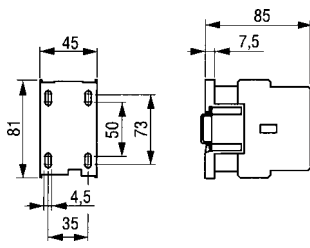
(1) Terminal with wire 1.5 mm² I_{th} = 16A / terminal with wire 1 mm² I_{th} = 10A.
Insulated terminal type B2.8 x 0.8 with wire 1 mm² I_{th} = 8A acc. to DIN 46247

Control circuit

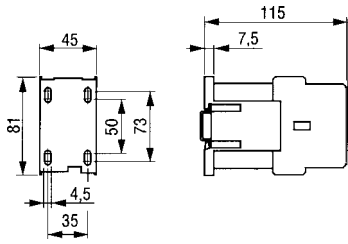
			RL4RA...	RL4RD...
Rated insulation voltage U _i	(V)		1000	1000
Standard voltages U _s				
50Hz	(V)		24 to 690	-
60Hz	(V)		24 to 600	-
DC	(V)		-	12 to 440
Voltage ⁽¹⁾				
Operating limits	xU _s		0.8 to 1.1	0.8 to 1.1
Pick-up	xU _s		0.65 to 0.75	0.45 to 0.65
Seal	xU _s		0.4 to 0.55	0.15 to 0.3
Consumption				
AC	Magnetic circuit closed (VA)		6	-
	Magnetic circuit open (VA)		45	-
DC	Magnetic circuit closed (W)		-	5.5
	Magnetic circuit open (W)		-	5.5
	Power dissipation (W)		2.4	5.5
Power factor				
Magnetic circuit closed	cos φ		0.34	-
Magnetic circuit open	cos φ		0.82	-
Opening and closing times				
at 0.8 to 1.1 U _s				
Making time at excitation NO	(ms)		6 to 25	35 to 65
Breaking time at desexcitation NO	(ms)		6 to 13	30 to 60
at U _s				
Making time at excitation NO	(ms)		8 to 20	40 to 50
Breaking time at desexcitation NO	(ms)		6 to 1	30 to 60
Mechanical endurance	#10 ⁶ ops.		15	15
Maximum rate no load	# ops./h		9000	3600



Auxiliary contactors



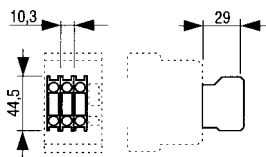
RL4RA...T .



RL4RD...T .

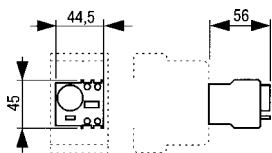
Auxiliary contact blocks

Instantaneous, frontal mounting



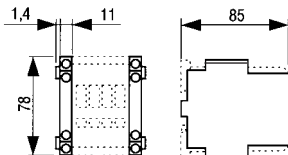
BCLF..

Timed, frontal mounting



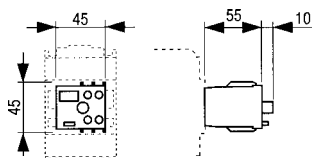
BTLF..

Instantaneous, lateral mounting



BRLL..

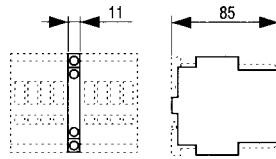
Mechanical latch, frontal mounting



RMLF..

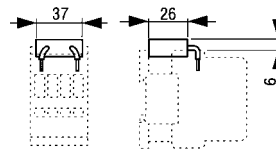
Accessories

Mechanical and mechanical/electrical interlock



BELA
BELA02

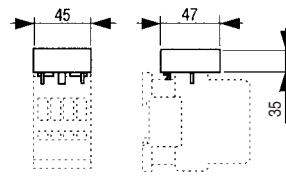
Transient voltage suppressor block



BSLR2 .
BSLDZ
BSLV3 .

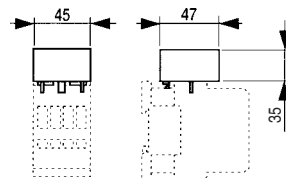
Electronic modules

Electronic timer block



BETL..C
BETL..D

Interface



IMR.
IMRF.
IMSSD
IMAMS