



Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U _i IEC/EN	V	690
Rated impulse withstand voltage U _{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th} ≤ 40°C	A	56
Operational current I _e	AC-1 (≤40°C)	A 56
	AC-1 (≤55°C)	A 45
	AC-1 (≤70°C)	A 40
	AC-3 (≤440V ≤55°C)	A 32
	AC-4 (400V)	A 13.5
Rated operational power AC-3 (T≤55°C)	230V	kW 8.8
	400V	kW 16
	415V	kW 17
	440V	kW 17
	500V	kW 20
	690V	kW 22
Rated operational power AC-1 (T≤40°C)	230V	kW 21
	400V	kW 36
	500V	kW 45
	690V	kW 62
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 30
	48V	A 26
	75V	A 22
	110V	A 8
	220V	A –
IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 32
	48V	A 32
	75V	A 28
	110V	A 25
	220V	A 3
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 32
	48V	A 32
	75V	A 32
	110V	A 27
	220V	A 23
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series		

	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	20
	48V	A	17
	75V	A	15
	110V	A	2,5
	220V	A	–
<hr/>			
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	25
	48V	A	22
	75V	A	20
	110V	A	15
	220V	A	3
<hr/>			
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	30
	48V	A	28
	75V	A	28
	110V	A	20
	220V	A	23
<hr/>			
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
<hr/>			
Protection fuse	gG (IEC)	A	63
	aM (IEC)	A	32
<hr/>			
Making capacity (RMS value)		A	320
<hr/>			
Breaking capacity at voltage	440V	A	256
	500V	A	240
	690V	A	192
<hr/>			
Resistance per pole (average value)		mΩ	2
<hr/>			
Power dissipation per pole (average value)	I _{th}	W	6
	AC-3	W	2
<hr/>			
Tightening torque for terminals	min	Nm	2.5
	max	Nm	3
	min	I _{bin}	1.8
	max	I _{bin}	2.2
<hr/>			
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8
	max	I _{bin}	0.74
<hr/>			
Max number of wires simultaneously connectable		Nr.	2

Conductor section

AWG/Kcmil			max	6
Flexible w/o lug conductor section			min	mm ² 2.5
			max	mm ² 16
Flexible c/w lug conductor section			min	mm ² 1
			max	mm ² 10
Flexible with insulated spade lug conductor section			min	mm ² 1
			max	mm ² 16

Power terminal protection according to IEC/EN 60529

IP20 when properly wired

Cable stripping length

main circuit	mm	10
command circuit	mm	8

Mechanical features

Operating position

normal allowable	Vertical plan ±30°
------------------	--------------------

Fixing

Screw / DIN rail 35mm

Weight

g 564

Operations

Mechanical life

cycles 20000000

Electrical life

cycles 1600000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1600000
mechanical load	cycles	20000000

EMC compatibility

yes

DC coil operating

DC rated control voltage

V 220

DC operating voltage

pick-up

min	%Us	70
max	%Us	125

drop-out

min	%Us	10
max	%Us	40

Average coil consumption ≤20°C

in-rush	W	5.4
holding	W	5.4

Max cycles frequency

Mechanical operation

cycles/h 3600

Operating times

Average time for Us control

in AC

Closing NO

min	ms	8
max	ms	24

Opening NO

min	ms	5
-----	----	---

	Closing NC	max	ms	15
		min	ms	9
	Opening NC	max	ms	20
		min	ms	9
<hr/>				
in DC	Closing NO	min	ms	54
		max	ms	66
	Opening NO	min	ms	14
		max	ms	17

UL technical data

Rated operational voltage AC (UL)	V	600
Full-load current (FLA) for three-phase AC motor	at 480V	A 27
	at 600V	A 27

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	3
230V	HP	7.5

for three-phase AC motor

200/208V	HP	10
220/240V	HP	10
460/480V	HP	20
575/600V	HP	25

General USE

Contactor

AC current	A	55
------------	---	----

Short-circuit protection fuse, 600V

High fault

Short circuit current	kA	100
Fuse rating	A	100
Fuse class		J

Standard fault

Short circuit current	kA	5
Fuse rating	A	125

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

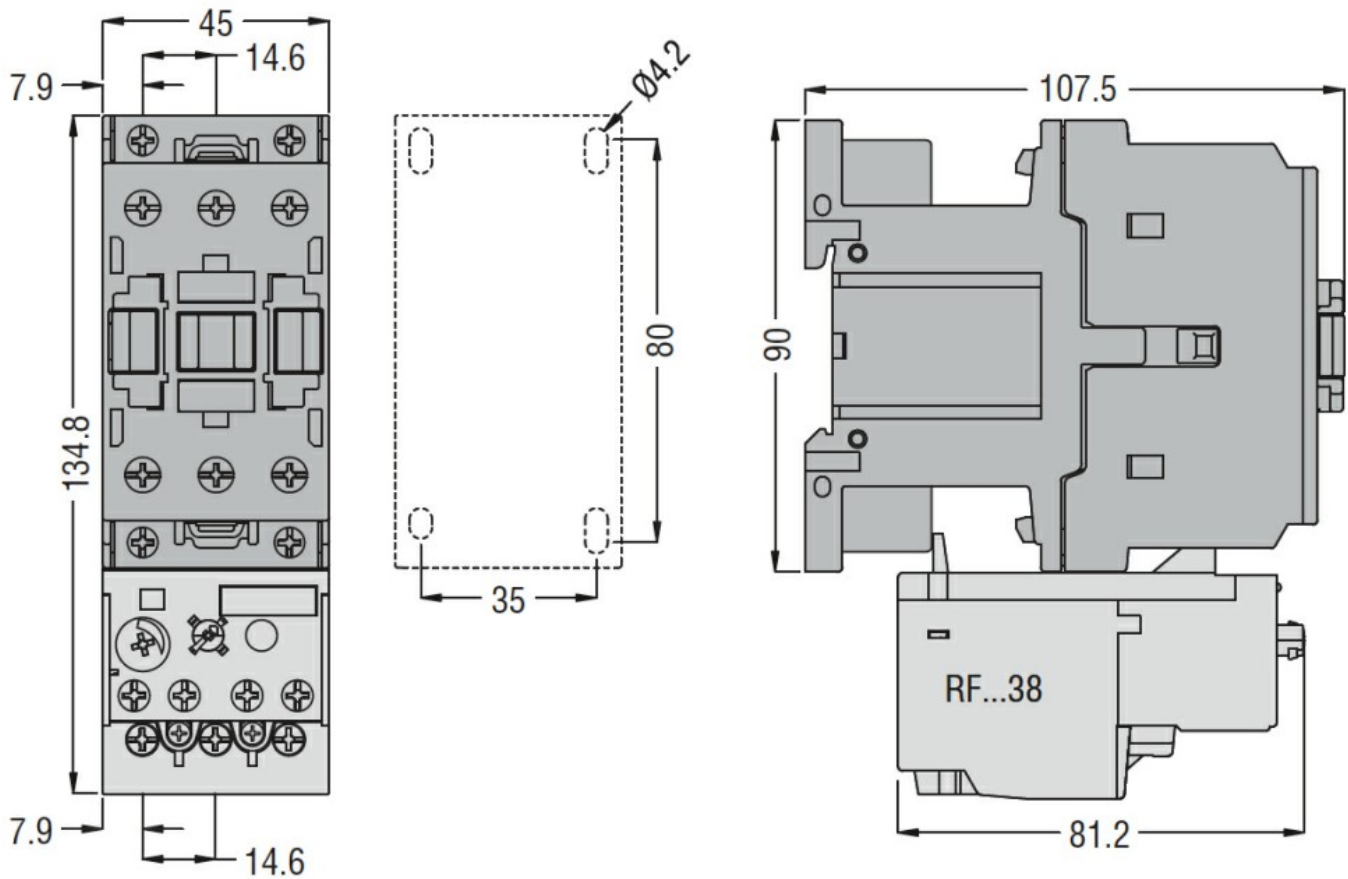
m	3000
---	------

Resistance & Protection

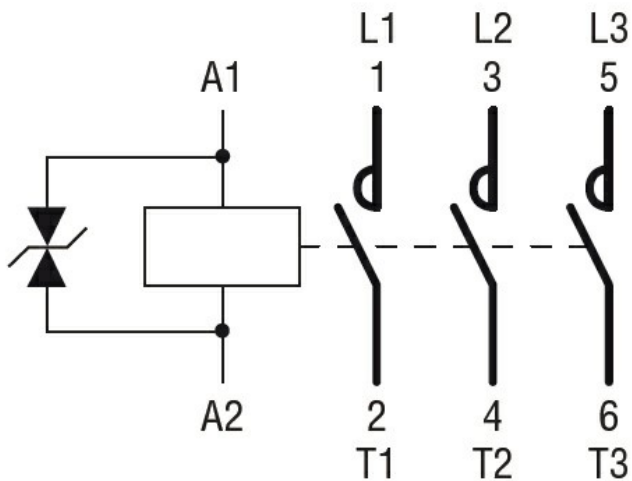
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

- CSA C22.2 n° 60947-1
- CSA C22.2 n° 60947-4-1
- IEC/EN 60335-2-89
- IEC/EN/BS 60947-1
- IEC/EN/BS 60947-4-1
- UL 60947-1
- UL 60947-4-1

Certificates

CCC

CSA C22.2 n. 60335-2-40:22 LZGH A2L

CSA C22.2 No. 60335-2-89:21 LZGH A2L

cULus

EAC

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching