



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 $I_{th} \leq 40^\circ\text{C}$	A		45
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	45
	AC-1 ($\leq 55^\circ\text{C}$)	A	36
	AC-1 ($\leq 70^\circ\text{C}$)	A	32
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	26
	AC-4 (400V)	A	11.5
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW	7.3
	400V	kW	13
	415V	kW	14
	440V	kW	14
	500V	kW	15.6
	690V	kW	18.5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW	17
	400V	kW	30
	500V	kW	37
	690V	kW	51
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	25
	48V	A	21
	75V	A	18
	110V	A	6
	220V	A	–
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	28
	48V	A	28
	75V	A	25
	110V	A	22
	220V	A	2
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	28
	48V	A	28
	75V	A	25
	110V	A	24
	220V	A	20
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	28
	48V	A	28
	75V	A	25
	110V	A	24

	≤24V	A	28
	48V	A	28
	75V	A	25
	110V	A	24
	220V	A	26
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	18
	48V	A	15
	75V	A	13
	110V	A	2
	220V	A	–
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	20
	48V	A	20
	75V	A	18
	110V	A	13
	220V	A	3
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	25
	48V	A	25
	75V	A	20
	110V	A	18
	220V	A	19
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	30
	48V	A	30
	75V	A	25
	110V	A	20
	220V	A	15
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Short-time allowable current for 10s (IEC/EN60947-1)		A	210
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Protection fuse	gG (IEC)	A	50
	aM (IEC)	A	32
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Making capacity (RMS value)		A	260
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Breaking capacity at voltage	440V	A	208
	500V	A	184
	690V	A	168
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Resistance per pole (average value)		mΩ	2
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Power dissipation per pole (average value)	I _{th}	W	4
	AC-3	W	1.4
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Tightening torque for terminals	min	Nm	2.5
	max	Nm	3
	min	I _{bin}	1.8
	max	I _{bin}	2.2
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8
	max	I _{bin}	0.74
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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 560

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 48

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
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	Closing NC	max	ms	15
		min	ms	9
	Opening NC	max	ms	20
		min	ms	9
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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	21
	at 600V	A	22

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	2
230V	HP	5

for three-phase AC motor

200/208V	HP	7.5
220/240V	HP	7.5
460/480V	HP	15
575/600V	HP	20

General USE

Contactor

AC current	A	45
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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	100

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

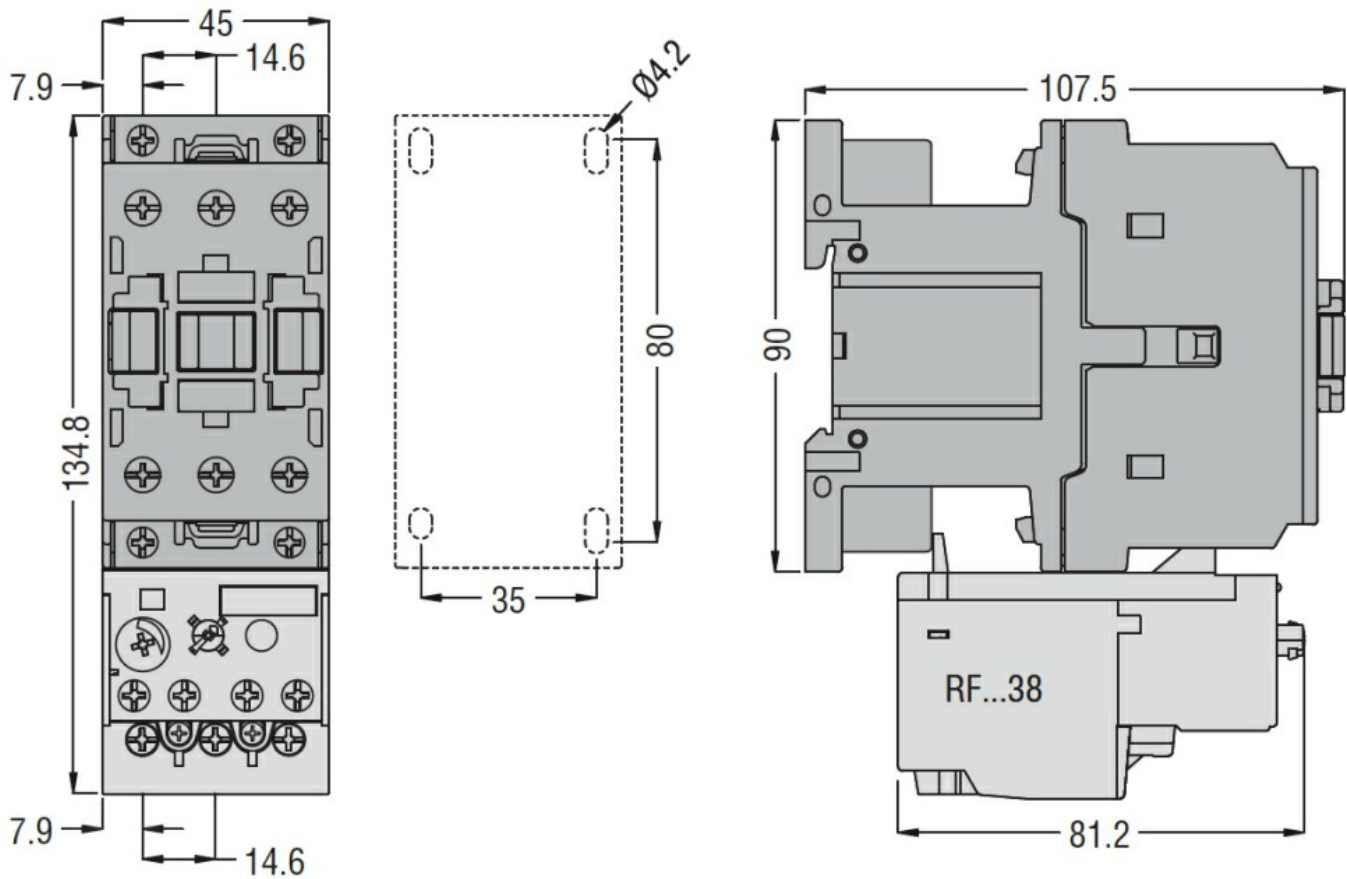
m	3000
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Resistance & Protection

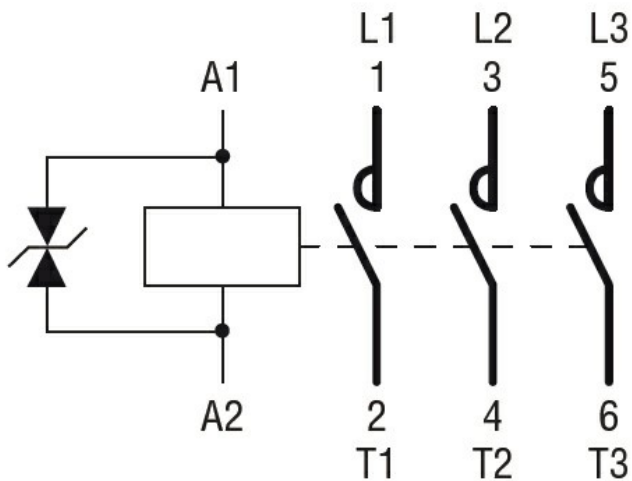
Pollution degree

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

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 26A, DC COIL, 48VDC

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