



### Contact characteristics

Number of poles	Nr.	4	
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	56	
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	56
	AC-1 ( $\leq 40^\circ\text{C}$ ) with 16mm <sup>2</sup> wire and fork end lug	A	60
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	45
	AC-1 ( $\leq 55^\circ\text{C}$ ) with 16mm <sup>2</sup> wire and fork end lug	A	48
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	40
	AC-1 ( $\leq 70^\circ\text{C}$ ) with 16mm <sup>2</sup> wire and fork end lug	A	42
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	38
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	AC-4 (400V)	A	15.5
	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
Short-time allowable current for 10s (IEC/EN60947-1)	A	320	
Protection fuse	gG (IEC)	A	63
	aM (IEC)	A	40
Making capacity (RMS value)	A	380	
Breaking capacity at voltage	440V	A	304
	500V	A	240
	690V	A	192
Resistance per pole (average value)	m $\Omega$	2	
Power dissipation per pole (average value)	$I_{th}$	W	6
	AC-3	W	2.9
Tightening torque for terminals	min	Nm	2.5
	max	Nm	3
	min	lbin	1.8
	max	lbin	2.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
	max	lbin	0.74

Max number of wires simultaneously connectable	Nr.	2	
Conductor section			
AWG/Kcmil	max	6	
Flexible w/o lug conductor section	min	mm <sup>2</sup>	2.5
	max	mm <sup>2</sup>	16
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	16
Power terminal protection according to IEC/EN 60529		IP20 when properly wired	
Cable stripping length			
	main circuit	mm	10
	command circuit	mm	8
<b>Mechanical features</b>			
Operating position	normal allowable	Vertical plan ±30°	
Fixing		Screw / DIN rail 35mm	
Weight	g	510	
<b>Operations</b>			
Mechanical life	cycles	20000000	
Electrical life	cycles	1400000	
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	1400000
	mechanical load	cycles	20000000
EMC compatibility		yes	
<b>AC coil operating</b>			
Rated AC voltage at 50/60Hz	V	230	
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	85
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush	VA	75
	holding	VA	9

of 50/60Hz coil powered at 60Hz

in-rush	VA	70
holding	VA	6.5

of 60Hz coil powered at 60Hz

in-rush	VA	75
holding	VA	9

Dissipation at holding  $\leq 20^{\circ}\text{C}$  50Hz

W	2.5
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**Max cycles frequency**

Mechanical operation

cycles/h	3600
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**Operating times**

Average time for Us control

in AC

Closing NO

min	ms	8
max	ms	24

Opening NO

min	ms	5
max	ms	15

Closing NC

min	ms	11
max	ms	29

Opening NC

min	ms	6
max	ms	14

**UL technical data**

Rated operational voltage AC (UL)

V	600
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Full-load current (FLA) for three-phase AC motor

at 480V	A	40
at 600V	A	32

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	15
460/480V	HP	30
575/600V	HP	30

General USE

Contactors

AC current	A	55
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**Ambient conditions**

Temperature

Operating temperature

min	$^{\circ}\text{C}$	-50
max	$^{\circ}\text{C}$	70

Storage temperature

min	$^{\circ}\text{C}$	-60
max	$^{\circ}\text{C}$	80

Max altitude

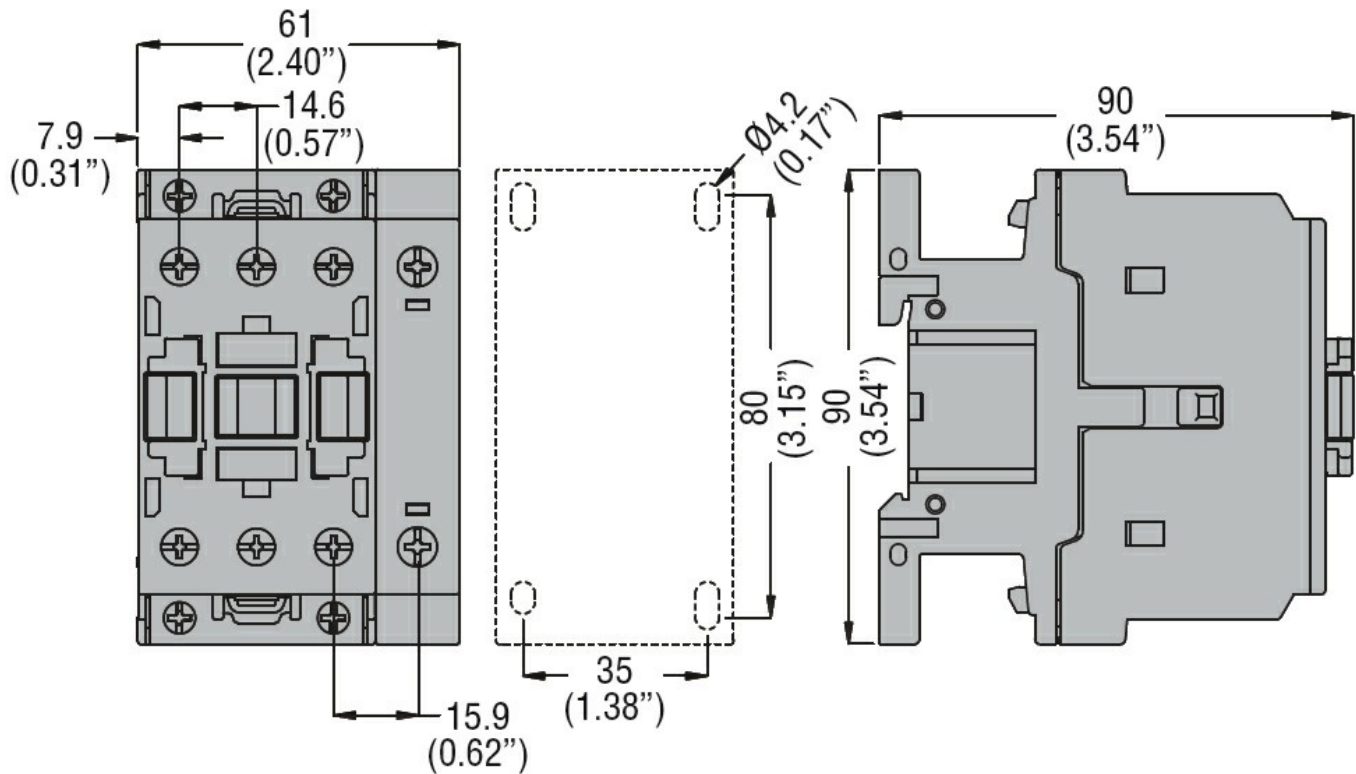
m	3000
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**Resistance & Protection**

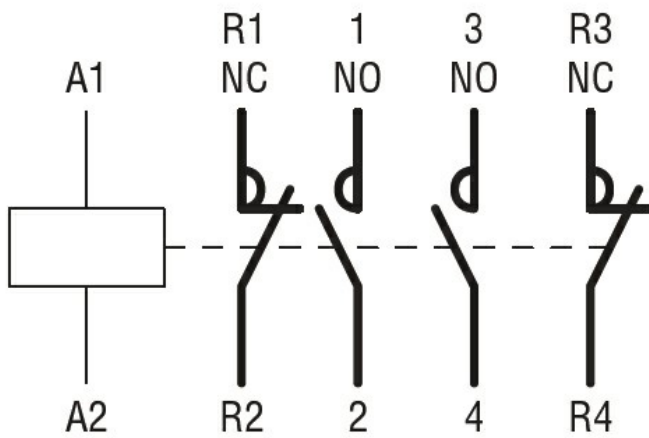
Pollution degree

3
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**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

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UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching