



### Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U <sub>i</sub> IEC/EN	V	690
Rated impulse withstand voltage U <sub>imp</sub>	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub> ≤ 40°C	A	45
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 45
	AC-1 (≤55°C)	A 36
	AC-1 (≤70°C)	A 32
	AC-3 (≤440V ≤55°C)	A 26
	AC-4 (400V)	A 11.5
Rated operational power AC-1 (T≤40°C)	230V	kW 17
	400V	kW 30
	500V	kW 37
	690V	kW 51
Short-time allowable current for 10s (IEC/EN60947-1)	A	210
Protection fuse	gG (IEC)	A 50
	aM (IEC)	A 32
Making capacity (RMS value)	A	260
Breaking capacity at voltage	440V	A 208
	500V	A 184
	690V	A 168
Resistance per pole (average value)	mΩ	2
Power dissipation per pole (average value)	I <sub>th</sub>	W 4
	AC-3	W 1.4
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

**Mechanical features**

Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	660

**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	12
DC operating voltage			
pick-up	min	%Us	80
	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
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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	9
		max	ms	20
	Opening NC			
		min	ms	9
		max	ms	17
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	in DC			
	Closing NO			
		min	ms	54
		max	ms	66
	Opening NO			
		min	ms	14
		max	ms	17
	Closing NC			
		min	ms	23
		max	ms	28
	Opening NC			
		min	ms	46
		max	ms	56

**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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**Ambient conditions**

Temperature

Operating temperature

	min	°C	-50
	max	°C	70

Storage temperature

	min	°C	-60
	max	°C	80

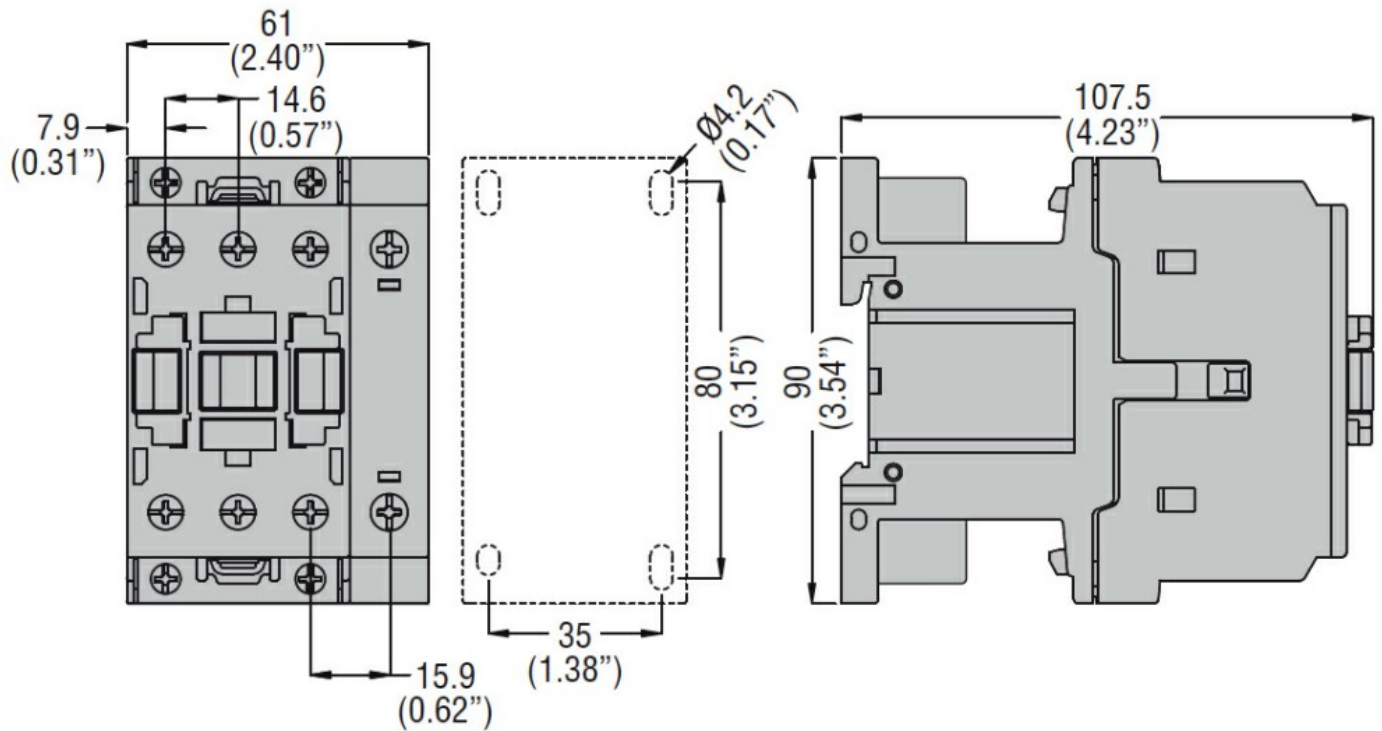
Max altitude

	m	3000
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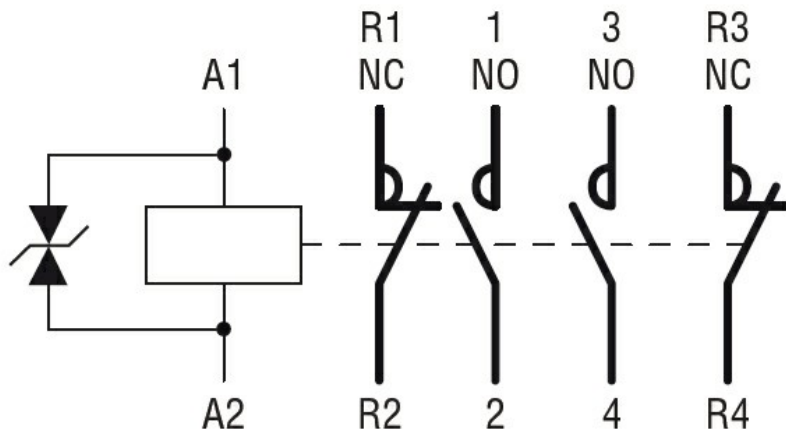
**Resistance & Protection**

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

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