



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} ≤ 40°C	A	45
Operational current I _e	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 _{th}	W 4
	AC-3	W 1.4
Tightening torque for terminals	min	Nm 2.5
	max	Nm 3
	min	I _{bin} 1.8
	max	I _{bin} 2.2
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	I _{bin} 0.8
	max	I _{bin} 0.74
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
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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	518

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
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AC coil operating

Rated AC voltage at 60Hz		V	460
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AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55

AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz			
	in-rush	VA	75
	holding	VA	9

Dissipation at holding ≤20°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			

Closing NC	min	ms	5
	max	ms	15
Opening NC	min	ms	11
	max	ms	29
	min	ms	6
	max	ms	14

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

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

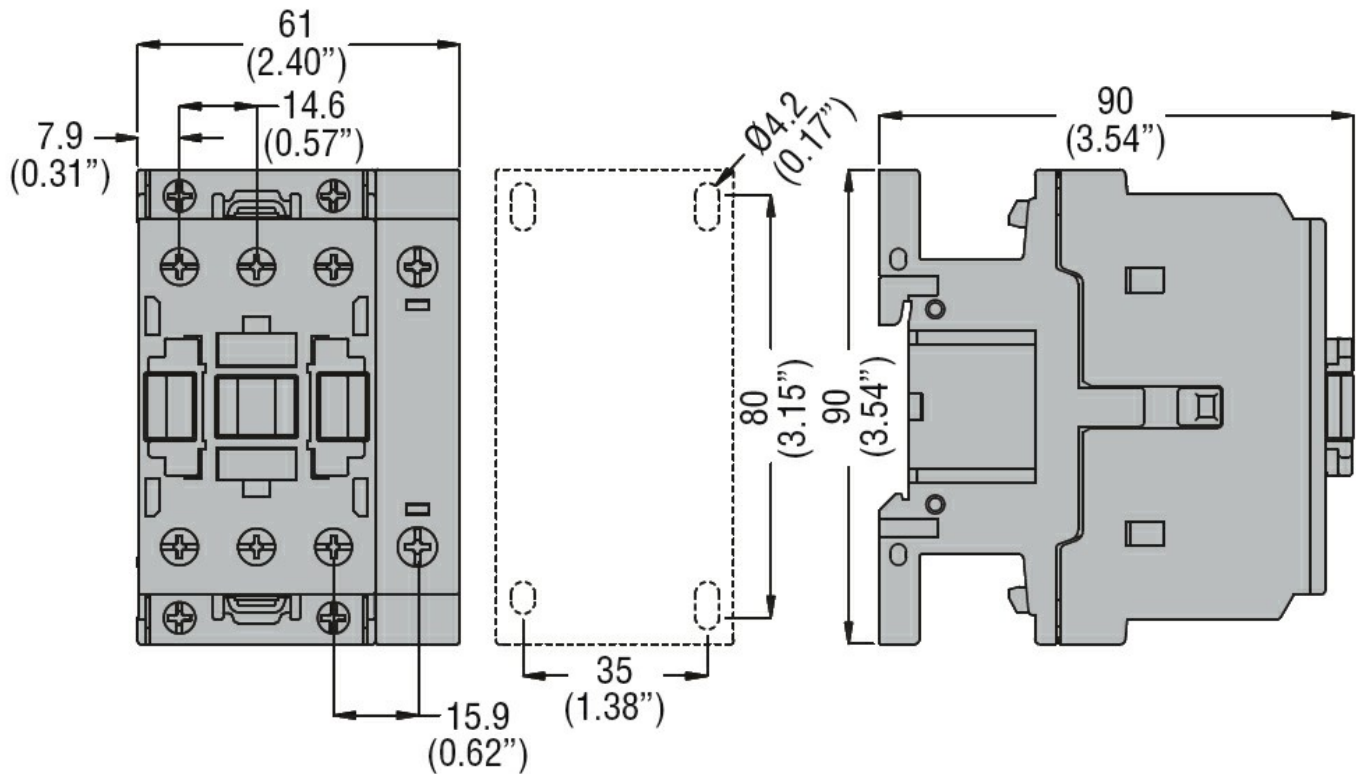
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Resistance & Protection

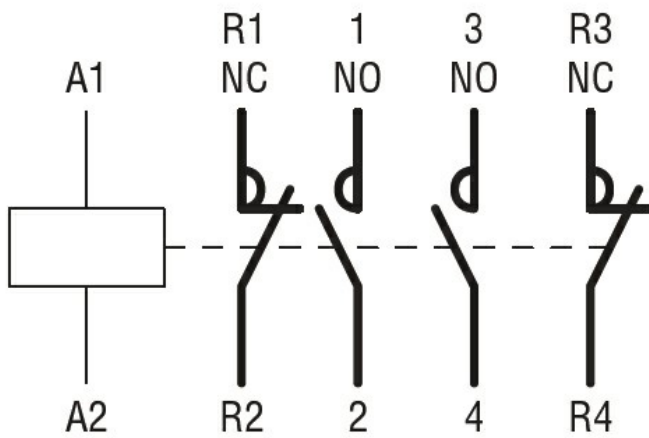
Pollution degree

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