



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
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	665

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	110
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	
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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

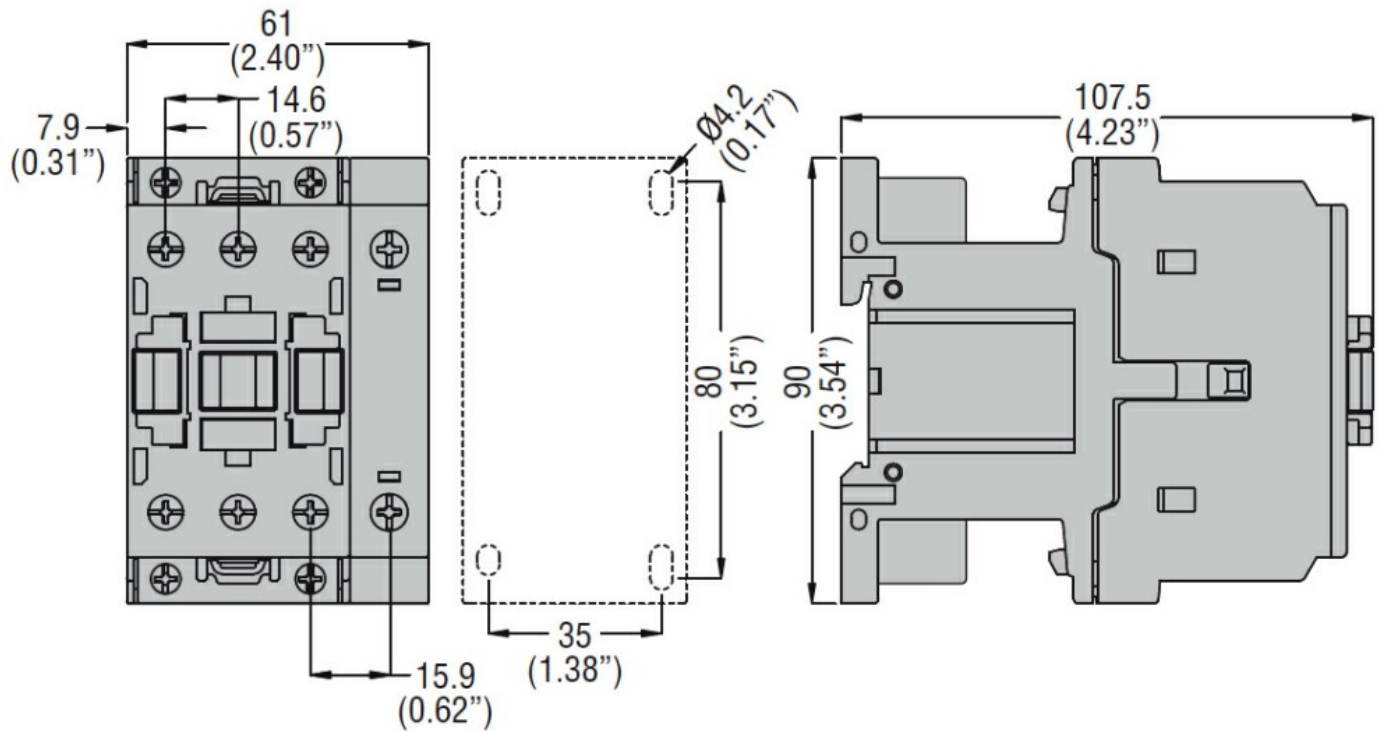
Operating temperature			
	min	°C	-50
	max	°C	70
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Storage temperature			
	min	°C	-60
	max	°C	80

Max altitude m 3000

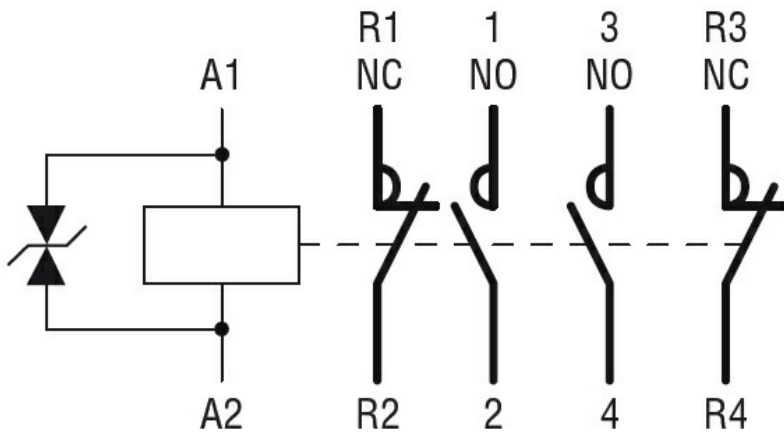
Resistance & Protection

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