



### 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	25
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 25
	AC-1 (≤55°C)	A 20
	AC-1 (≤70°C)	A 18
	AC-3 (≤440V ≤55°C)	A 9
	AC-4 (400V)	A 4.9
Rated operational power AC-1 (T≤40°C)	230V	kW 9.5
	400V	kW 16
	500V	kW 21
	690V	kW 27
Short-time allowable current for 10s (IEC/EN60947-1)	A	150
Protection fuse	gG (IEC)	A 25
	aM (IEC)	A 10
Making capacity (RMS value)	A	90
Breaking capacity at voltage	440V	A 72
	500V	A 72
	690V	A 71
Resistance per pole (average value)	mΩ	2.5
Power dissipation per pole (average value)	I <sub>th</sub>	W 1.6
	AC-3	W 0.2
Tightening torque for terminals	min	Nm 1.5
	max	Nm 1.8
	min	I <sub>bin</sub> 1.1
	max	I <sub>bin</sub> 1.5
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	I <sub>bin</sub> 0.8
	max	I <sub>bin</sub> 0.74
Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	

	max		10
Flexible w/o lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	6
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	4
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	6

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°
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Fixing			Screw / DIN rail 35mm
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Weight		g	348
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**Operations**

Mechanical life		cycles	20000000
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Electrical life		cycles	2000000
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**Safety related data**

Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	2000000
	mechanical load	cycles	20000000

EMC compatibility			yes
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**AC coil operating**

Rated AC voltage at 60Hz		V	230
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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	10
	max	ms	20
Opening NC	min	ms	14
	max	ms	28
	min	ms	7
	max	ms	18

**UL technical data**

Rated operational voltage AC (UL) V 600

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

at 480V	A	7.6
at 600V	A	9

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	0.8
230V	HP	2

for three-phase AC motor

200/208V	HP	3
220/240V	HP	3
460/480V	HP	5
575/600V	HP	7.5

General USE

Contactor AC current A 25

**Ambient conditions**

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

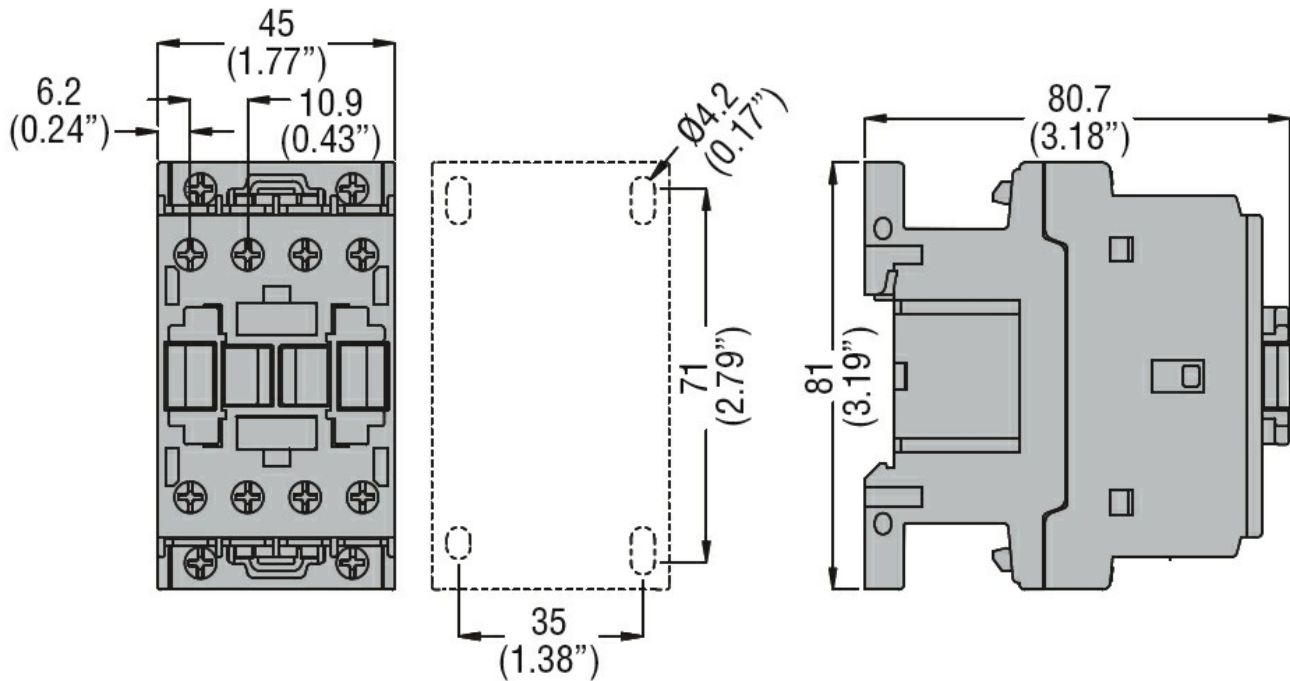
min	°C	-60
max	°C	80

Max altitude m 3000

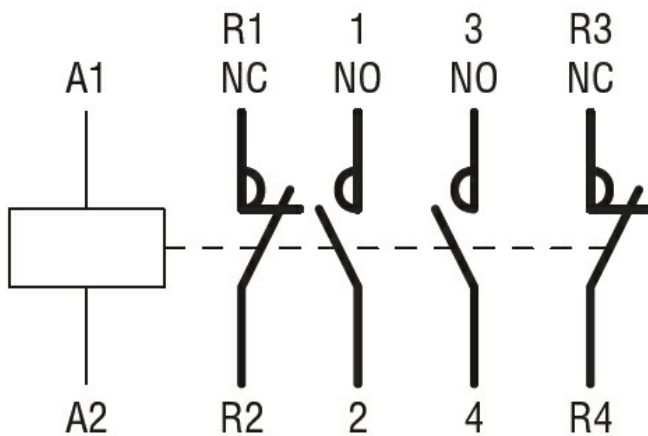
**Resistance & Protection**

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