



### 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	56
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 56
	AC-1 (≤40°C) with 16mm <sup>2</sup> wire and fork end lug	A 60
	AC-1 (≤55°C)	A 45
	AC-1 (≤55°C) with 16mm <sup>2</sup> wire and fork end lug	A 48
	AC-1 (≤70°C)	A 40
	AC-1 (≤70°C) with 16mm <sup>2</sup> wire and fork end lug	A 42
Rated operational power AC-1 (T≤40°C)	AC-3 (≤440V ≤55°C)	A 38
	AC-4 (400V)	A 15.5
	230V	kW 21
	400V	kW 36
	500V	kW 45
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	690V	kW 62
	≤24V	A 35
	48V	A 30
	75V	A 23
	110V	A 8
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	220V	A –
	≤24V	A 36
	48V	A 34
	75V	A 29
	110V	A 32
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	220V	A 4
	≤24V	A 36
	48V	A 34
	75V	A 33
	110V	A 34
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series	220V	A 30
	≤24V	A 36
	48V	A 34
	75V	A 33
	110V	A 34
	≤24V	A 36
	48V	A 34
	75V	A 33
	110V	A 34

	220V	A	38
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	24
	48V	A	20
	75V	A	17
	110V	A	2,5
	220V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	28
	48V	A	25
	75V	A	22
	110V	A	18
	220V	A	3
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	25
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	15
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)		mΩ	2
Power dissipation per pole (average value)	I <sub>th</sub>	W	6
	AC-3	W	2.9
Tightening torque for terminals	min	Nm	2.5
	max	Nm	3
	min	I <sub>bin</sub>	1.8
	max	I <sub>bin</sub>	2.2
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	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	670
<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>DC coil operating</b>			
DC rated control voltage		V	125
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
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	3600
<b>Operating times</b>			
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
in DC				
	Closing NO	min	ms	54
		max	ms	66
	Opening NO	min	ms	14
		max	ms	17

**UL technical data**

Rated operational voltage AC (UL)		V	600
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**

Contactor	AC current	A	55
	Short-circuit protection fuse, 600V		
High fault	Short circuit current	kA	100
	Fuse rating	A	100
	Fuse class		J
Standard fault	Short circuit current	kA	5
	Fuse rating	A	150

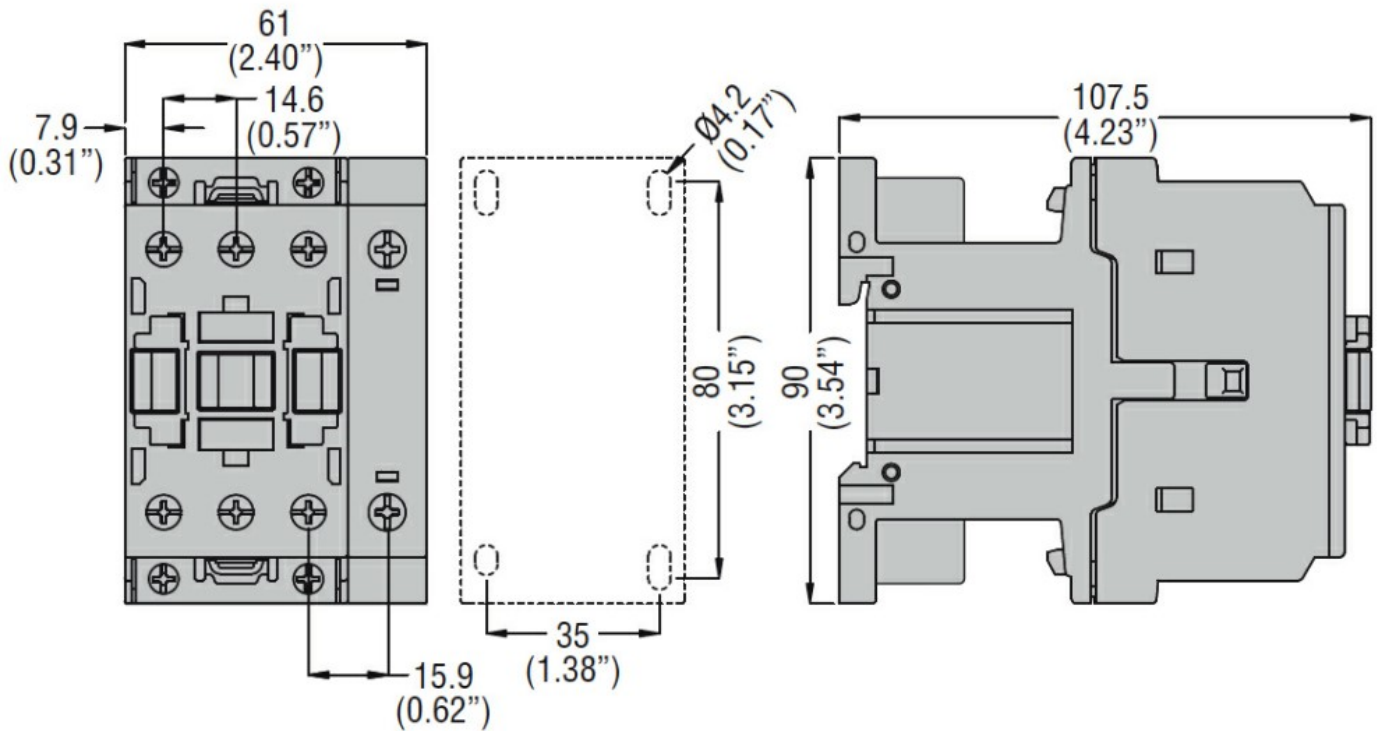
**Ambient conditions**

Temperature	Operating temperature	min	°C	-50
		max	°C	70
	Storage temperature	min	°C	-60
		max	°C	80
Max altitude		m	3000	

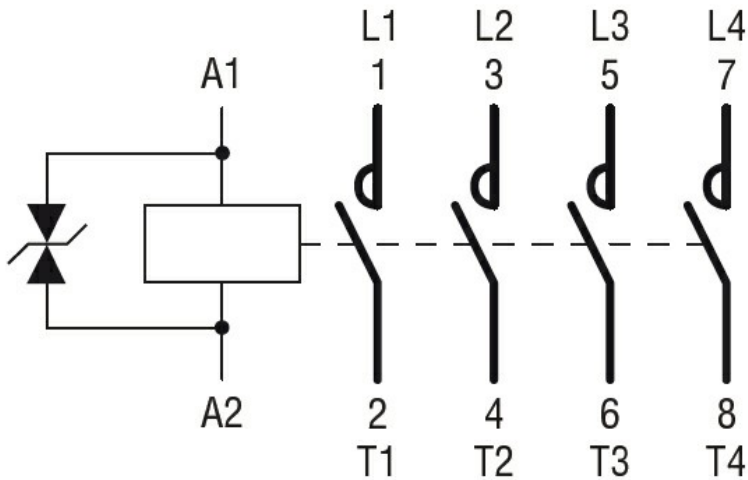
**Resistance & Protection**

Pollution degree			3
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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

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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