



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

	220V	A	38
IEC max current Ie 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 Ie 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 Ie 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 Ie 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)			
	Ith	W	6
	AC-3	W	2.9
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	Ibin	1.8
	max	Ibin	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
	AWG/Kcmil		
	max		6
Flexible w/o lug conductor section			

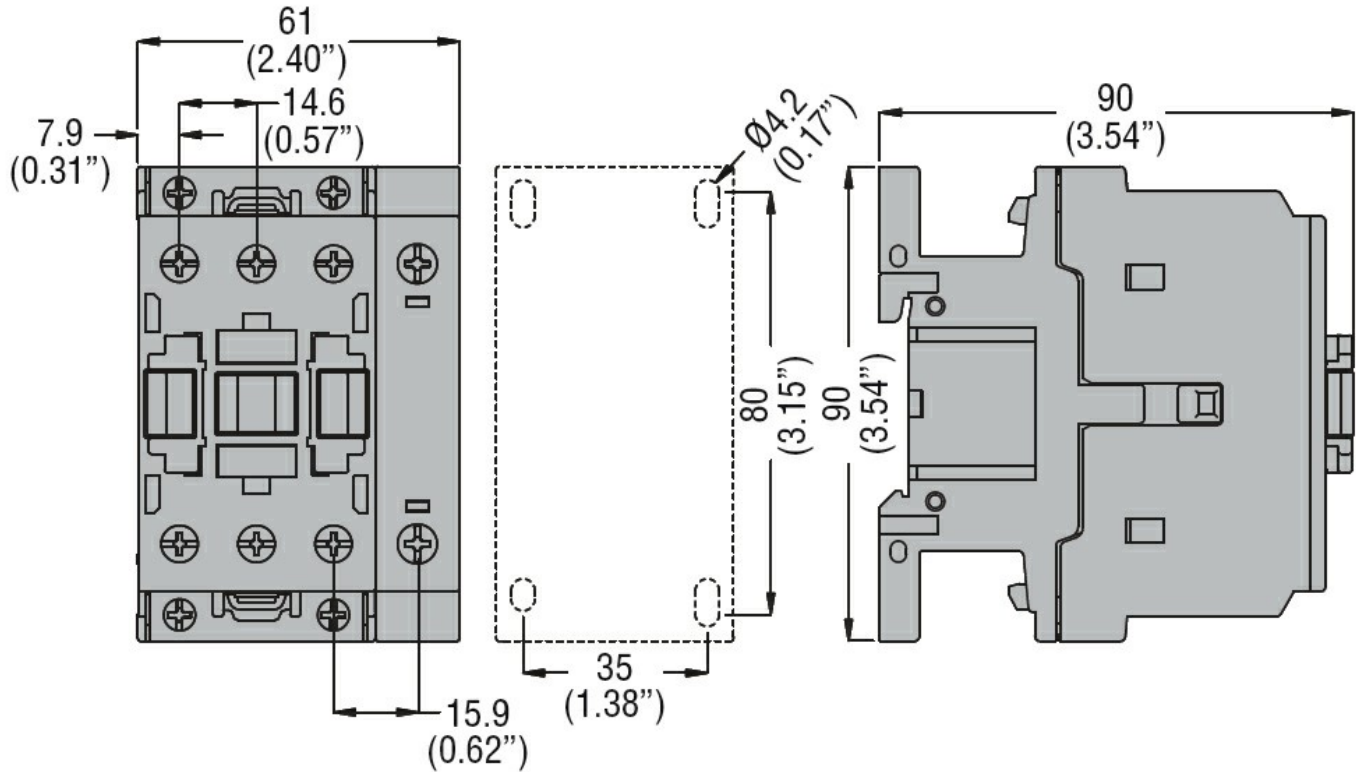
	min	mm <sup>2</sup>	2.5
	max	mm <sup>2</sup>	16
Flexible c/w lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	16
Power terminal protection according to IEC/EN 60529			IP20 when properly 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	513
<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>AC coil operating</b>			
Rated AC voltage at 50/60Hz		V	48
AC operating voltage			
	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	85
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
	of 50/60Hz coil powered at 50Hz		
	in-rush	VA	75
	holding	VA	9
	of 50/60Hz coil powered at 60Hz		
	in-rush	VA	70
	holding	VA	6.5
	of 60Hz coil powered at 60Hz		
	in-rush	VA	75

	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
<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
<b>UL technical data</b>			
Rated operational voltage AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	40
	at 600V	A	32
<b>Yielded mechanical performance</b>			
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
<b>General USE</b>			
Contactor			
	AC current	A	55
<b>Short-circuit protection fuse, 600V</b>			
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
<b>Ambient conditions</b>			
<b>Temperature</b>			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
<b>Resistance &amp; Protection</b>			

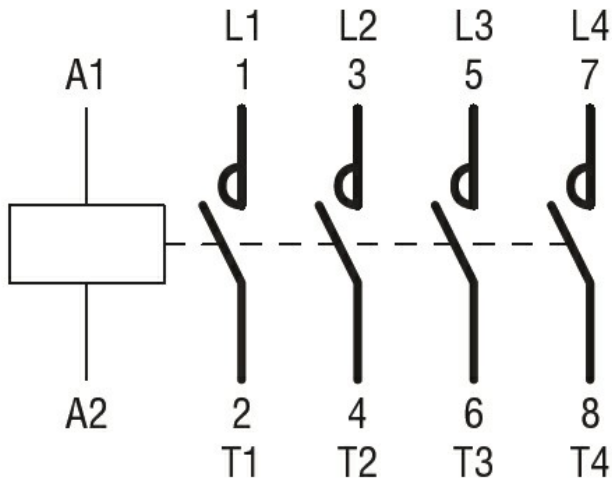
Pollution degree

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

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CSA C22.2 No. 60335-2-89:21 LZGH A2L

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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