



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

	220V	A	38
IEC max current I _e 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 _e 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 _e 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 _e 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 _{th}	W	6
	AC-3	W	2.9
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	664
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	1400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	1400000
	mechanical load	cycles	20000000
EMC compatibility			yes
DC coil operating			
DC rated control voltage		V	48
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
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
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

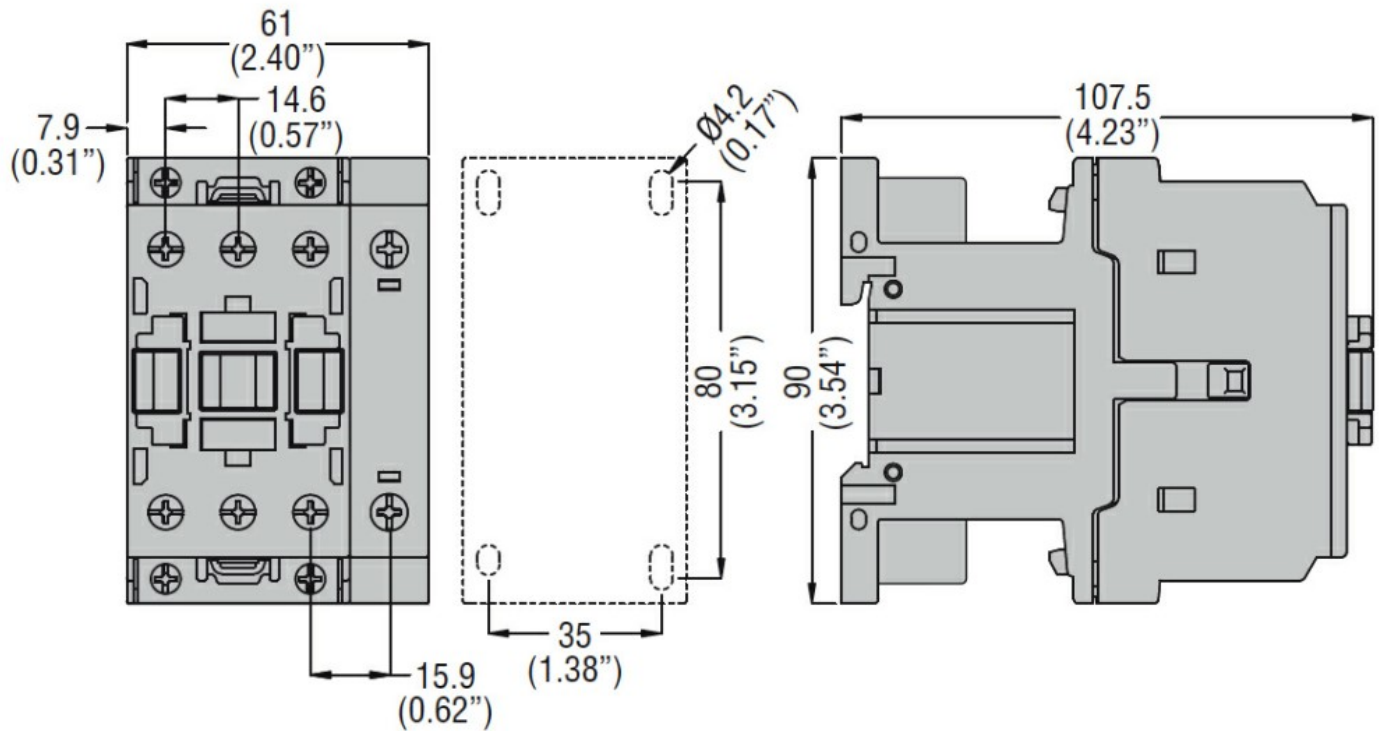
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80

Max altitude		m	3000
--------------	--	---	------

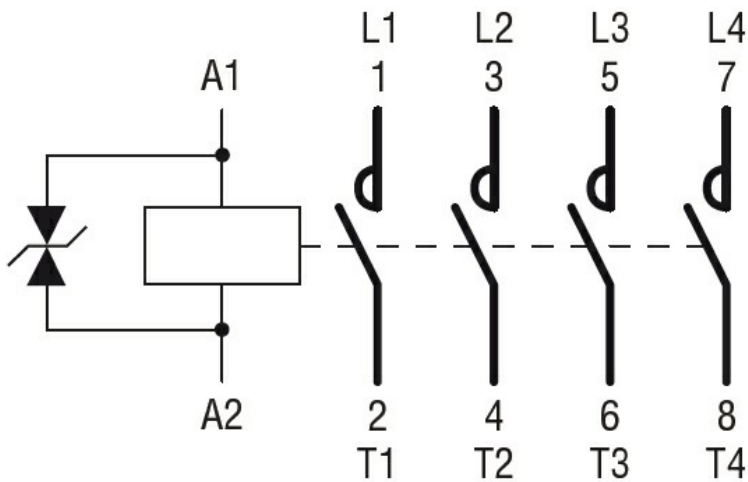
Resistance & Protection

Pollution degree			3
------------------	--	--	---

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