



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 lenght			
	main circuit	mm	10
	command circuit	mm	8
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	670
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
AC coil operating			
AC operating voltage			
	of 50/60Hz coil powered at 50Hz drop-out		
	max	%Us	55
DC coil operating			
DC rated control voltage		V	48
DC operating voltage			
	pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	10
	max	%Us	40
Average coil consumption ≤20°C			
	in-rush	W	2.4
	holding	W	2.4
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control in AC			
	Closing NO		
	min	ms	8

in DC	Opening NO	max	ms	24
		min	ms	5
	Closing NC	max	ms	15
		min	ms	9
	Opening NC	max	ms	20
		min	ms	9
		max	ms	17
		min	ms	76
	Closing NO	max	ms	92
		min	ms	16
	Opening NO	max	ms	20
		min	ms	16
	Closing NC	max	ms	31
		min	ms	25
	Opening NC	max	ms	71
		min	ms	63
		max	ms	71
		min	ms	63
	Closing NO	max	ms	92
		min	ms	76

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
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
-----------	------------	------

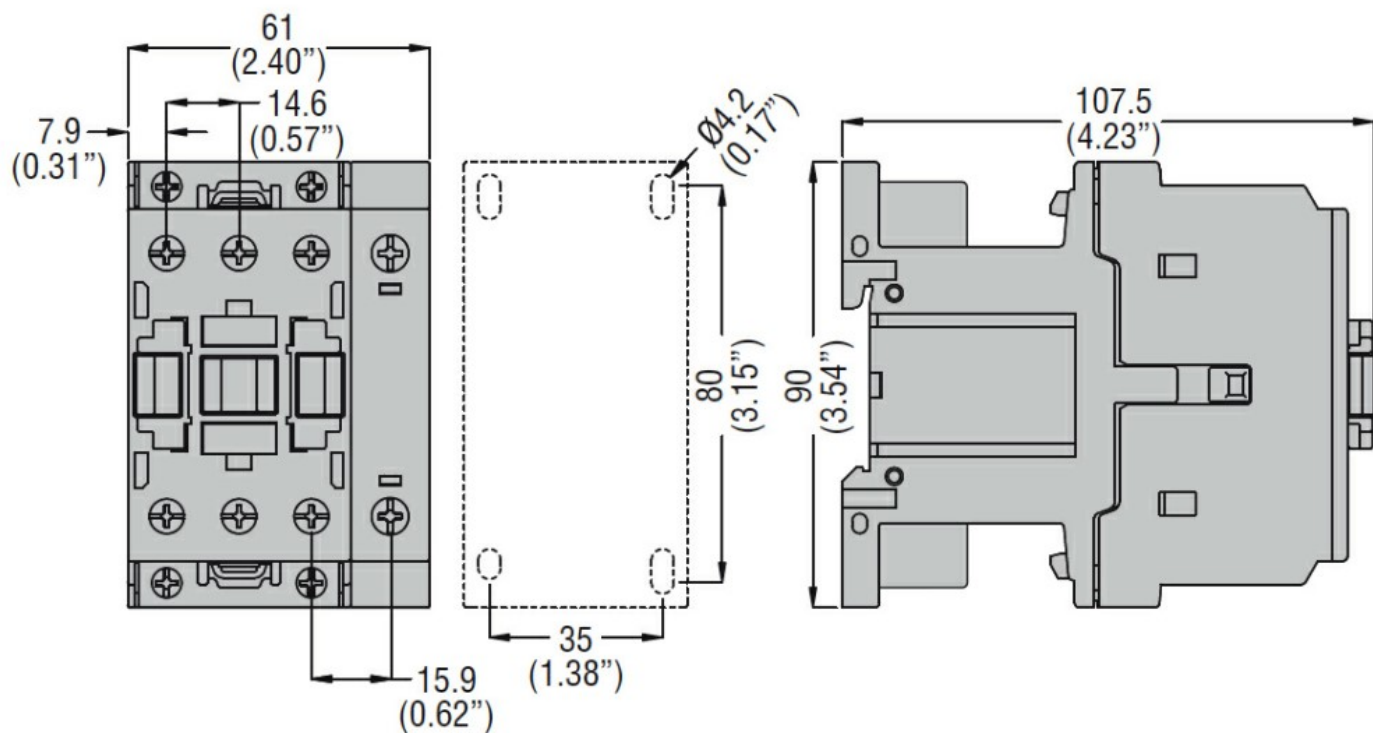
Ambient conditions

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

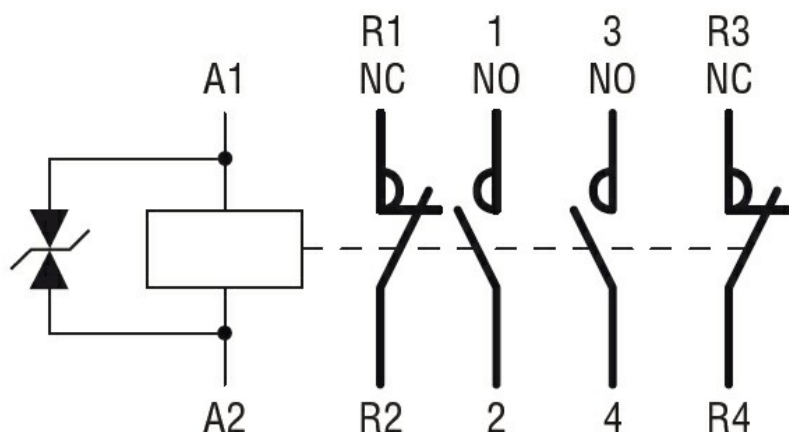
Max altitude	m	3000
--------------	---	------

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