

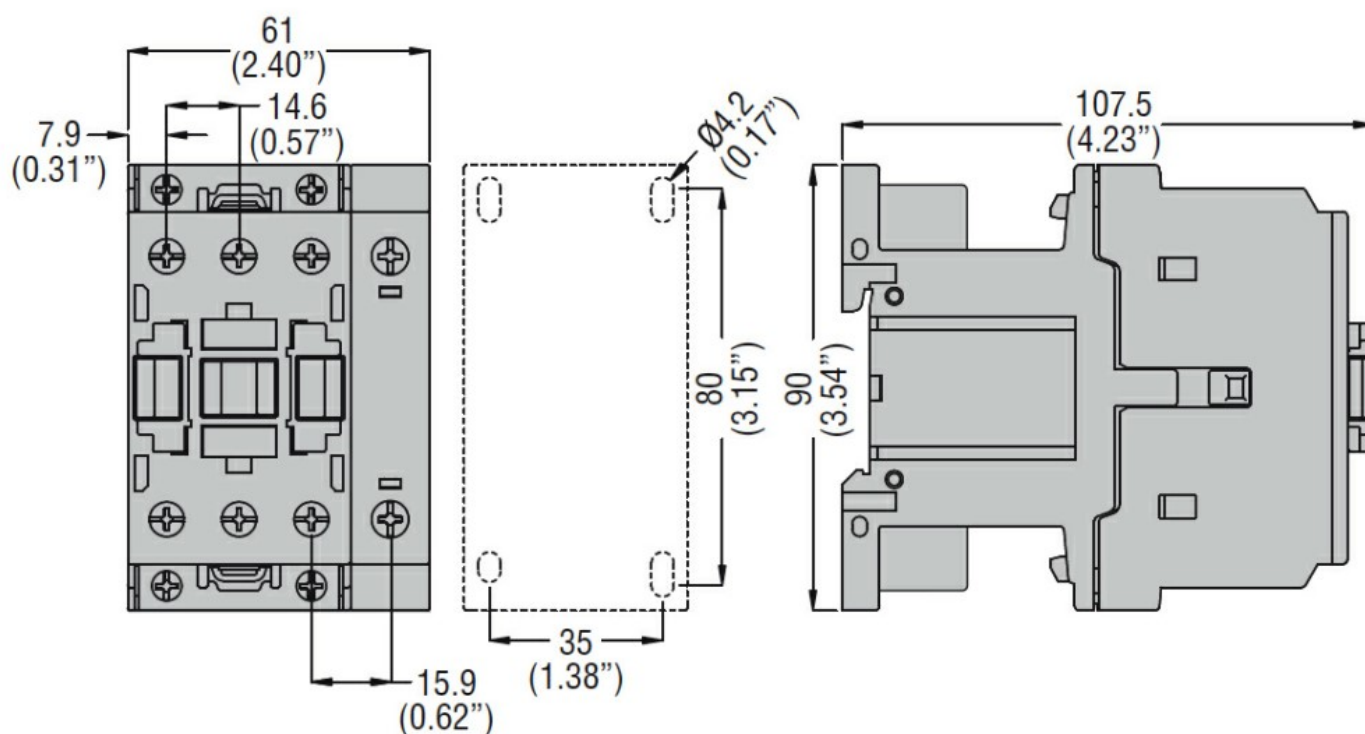


Contact characteristics

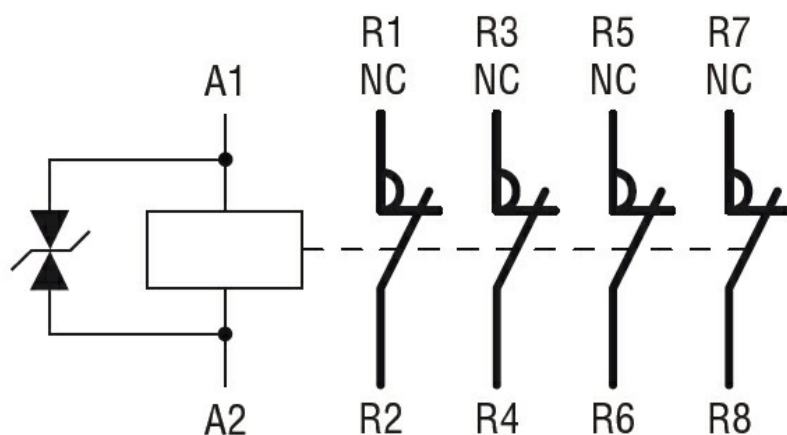
Number of poles	Nr.	4
Rated insulation voltage U _i IEC/EN	V	690
Rated impulse withstand voltage U _{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th} ≤ 40°C	A	45
Operational current I _e	AC-1 (≤40°C)	A 45
	AC-1 (≤55°C)	A 36
	AC-1 (≤70°C)	A 32
	AC-3 (≤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	665
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
DC coil operating			
DC rated control voltage		V	24
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 NC				
		min	ms	23
		max	ms	28
Opening NC				
		min	ms	46
		max	ms	56
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