



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 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	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

		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
<hr/>				
	in DC			
	Closing NO			
		min	ms	76
		max	ms	92
	Opening NO			
		min	ms	16
		max	ms	20
	Closing NC			
		min	ms	25
		max	ms	31
	Opening NC			
		min	ms	63
		max	ms	71

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
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Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

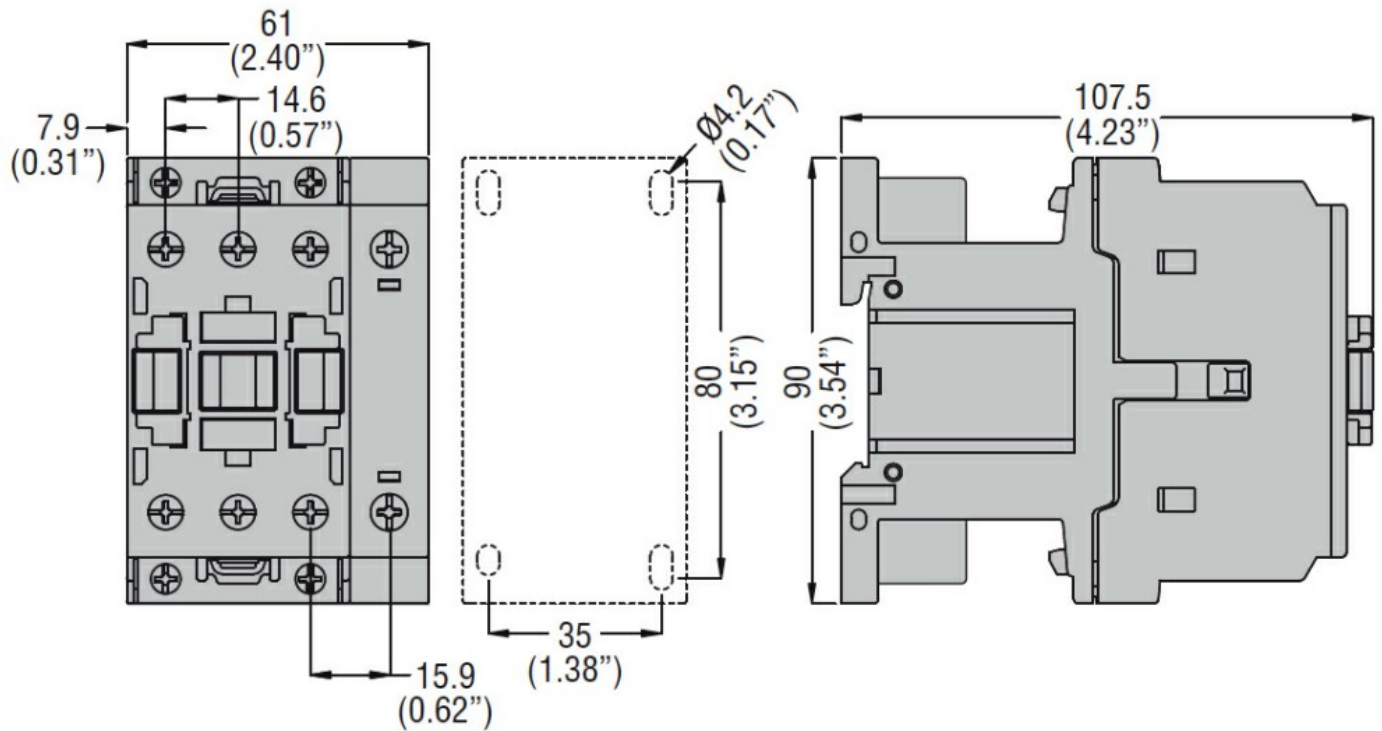
m	3000
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Resistance & Protection

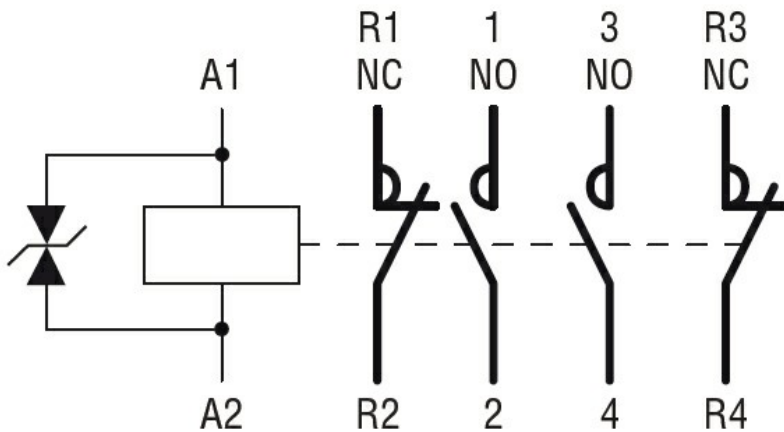
Pollution degree

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