



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	510
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				
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

Max cycles frequency

Mechanical operation		cycles/h	3600
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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	11
	max	ms	29
Opening NC	min	ms	6
	max	ms	14

UL technical data

Rated operational voltage AC (UL)		V	600
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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

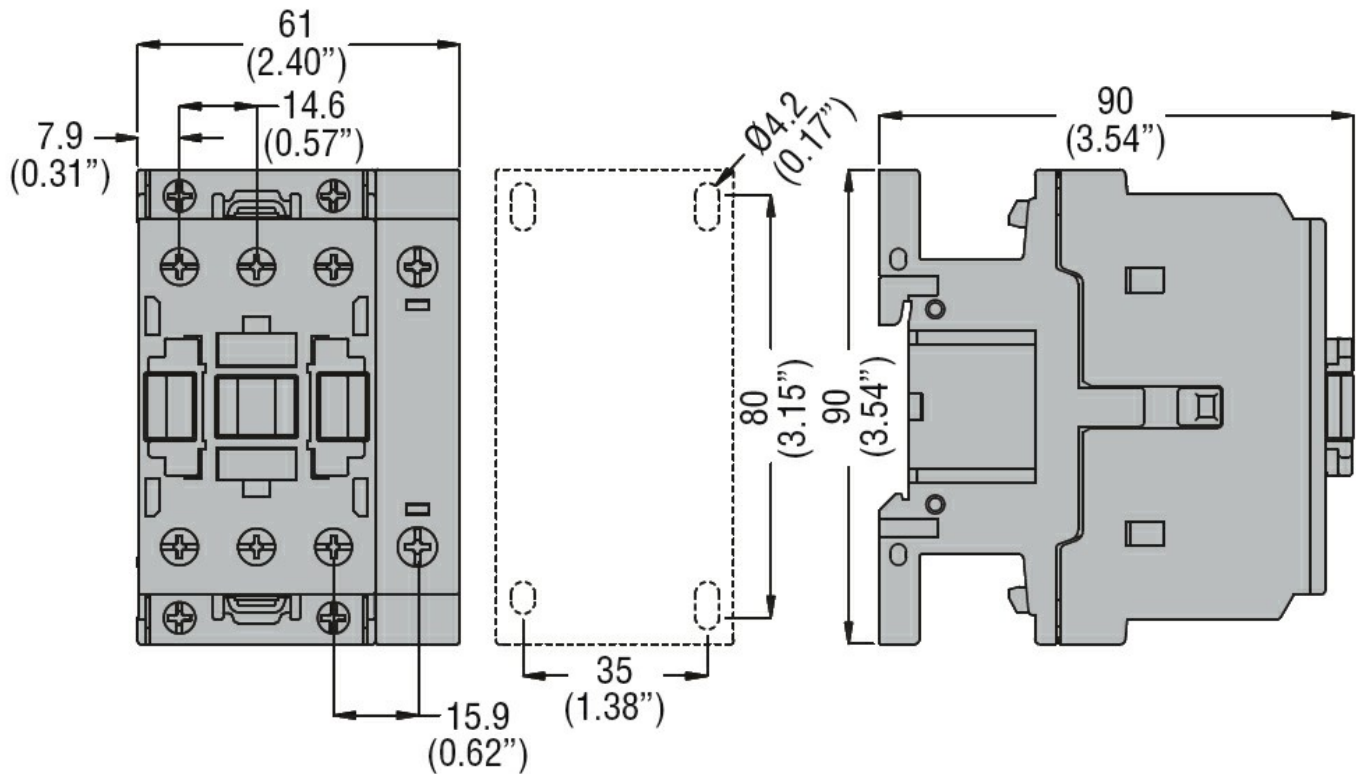
m	3000
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Resistance & Protection

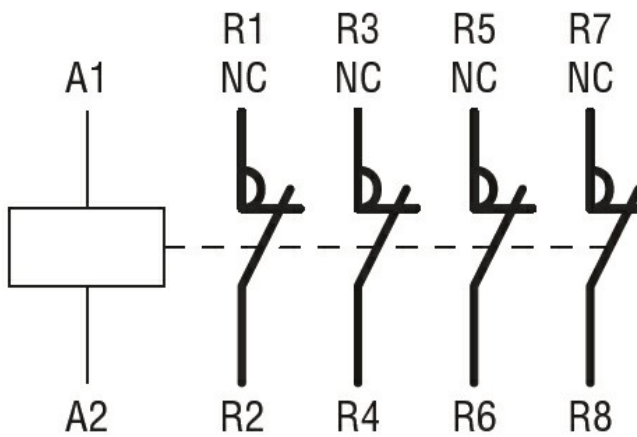
Pollution degree

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