



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
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	lbin 1.8
	max	lbin 2.2
Tightening torque for coil terminal		
	min	Nm 0.8
	max	Nm 1
	min	lbin 0.8
	max	lbin 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	665
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
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

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	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

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

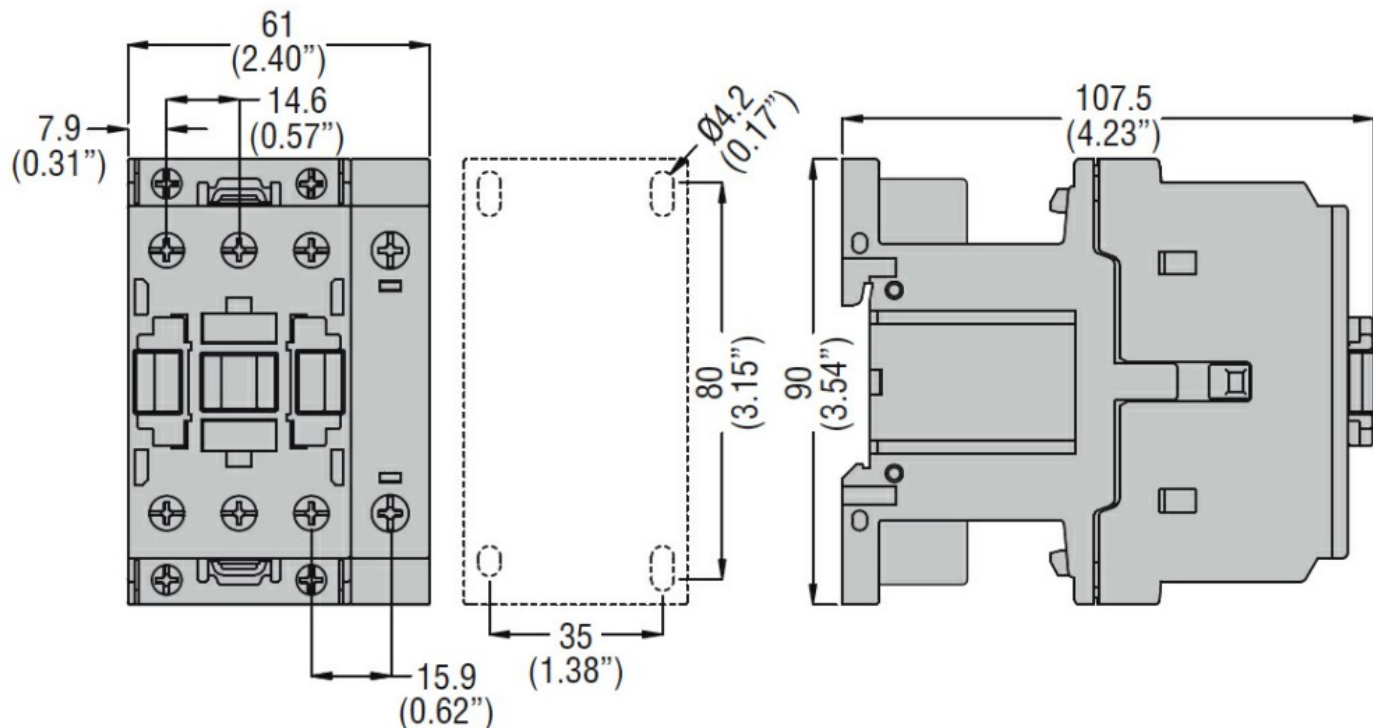
Max altitude m 3000

Resistance & Protection

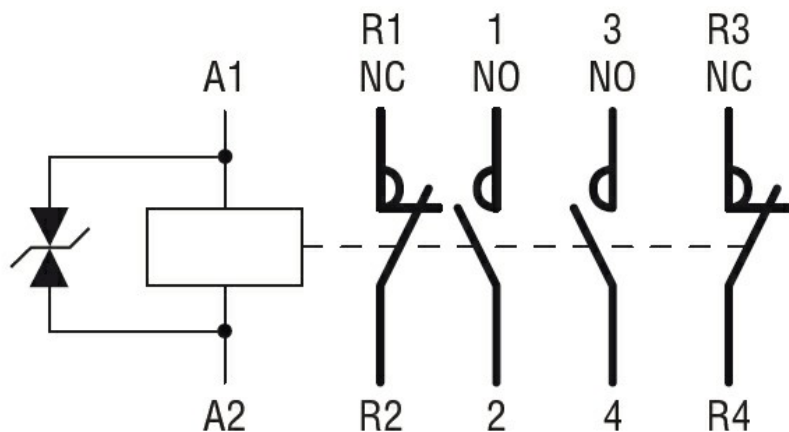
Pollution degree

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