



Contact characteristics

Number of poles	Nr.	3	
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 $I_{th} \leq 40^\circ C$	A	56	
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A	56
	AC-1 ($\leq 40^\circ C$) with 16mm ² wire and fork end lug	A	60
	AC-1 ($\leq 55^\circ C$)	A	45
	AC-1 ($\leq 55^\circ C$) with 16mm ² wire and fork end lug	A	48
	AC-1 ($\leq 70^\circ C$)	A	40
	AC-1 ($\leq 70^\circ C$) with 16mm ² wire and fork end lug	A	42
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	38
Rated operational power AC-3 ($T \leq 55^\circ C$)	AC-4 (400V)	A	15.5
	230V	kW	11
	400V	kW	18.5
	415V	kW	18.5
	440V	kW	18.5
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
	IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A
48V		A	30
75V		A	23
110V		A	8
220V		A	–
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series		$\leq 24V$	A
	48V	A	34
	75V	A	29
	110V	A	32
	220V	A	4
	IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A
48V		A	34
75V		A	33

	110V	A	34
	220V	A	30
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	36
	48V	A	34
	75V	A	33
	110V	A	34
	220V	A	38
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	24
	48V	A	20
	75V	A	17
	110V	A	2,5
	220V	A	–
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	28
	48V	A	25
	75V	A	22
	110V	A	18
	220V	A	3
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	25
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	A	15
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	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	429
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			
Rated AC voltage at 50/60Hz		V	24
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%U _s	80
	max	%U _s	110
drop-out	min	%U _s	20
	max	%U _s	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%U _s	85
	max	%U _s	110
drop-out	min	%U _s	20
	max	%U _s	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	
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	
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
Short-circuit protection fuse, 600V					
High fault			Short circuit current	kA	100
		Fuse rating	A	100	
		Fuse class	J		
Standard fault			Short circuit current	kA	5
		Fuse rating	A	150	

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

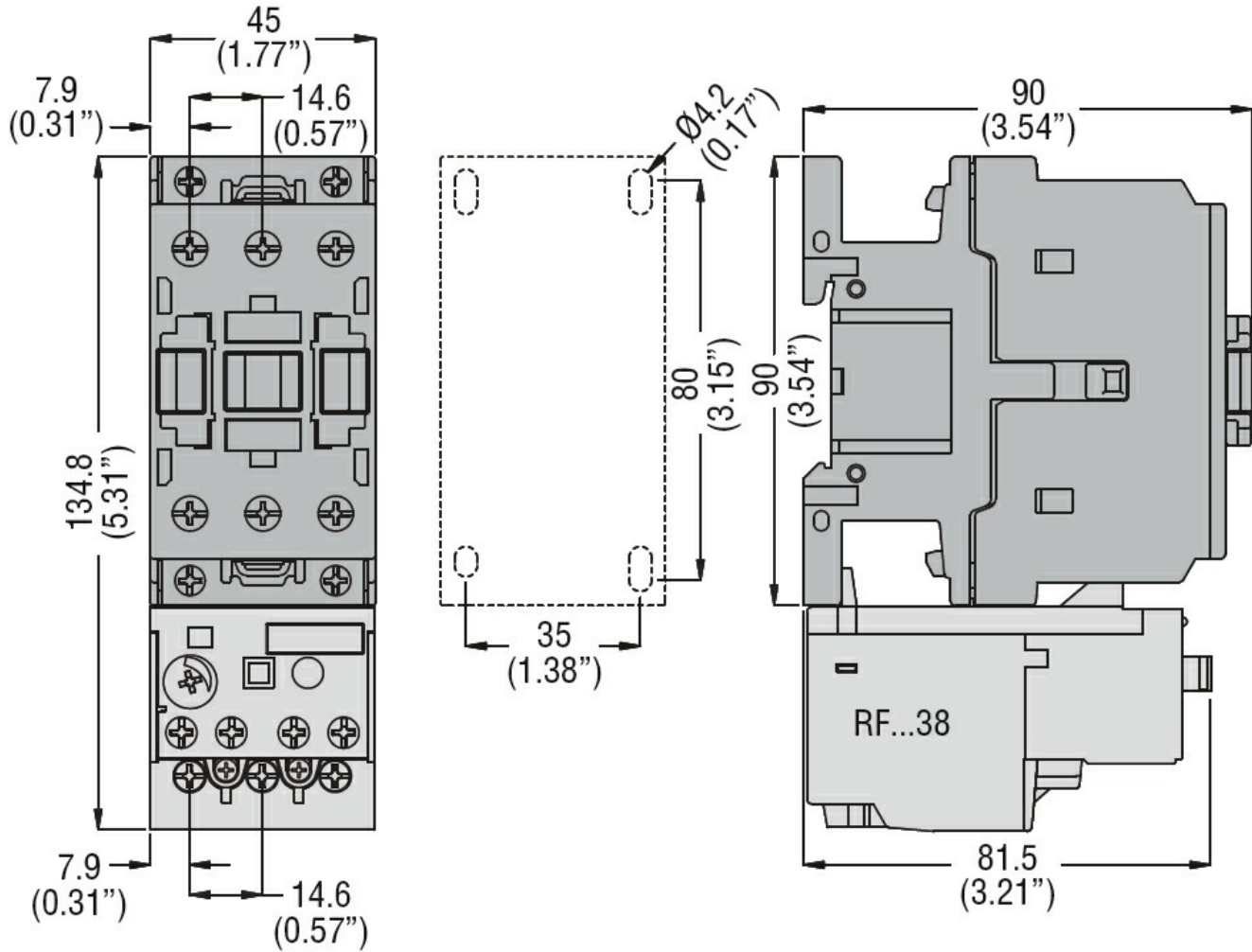
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Resistance & Protection

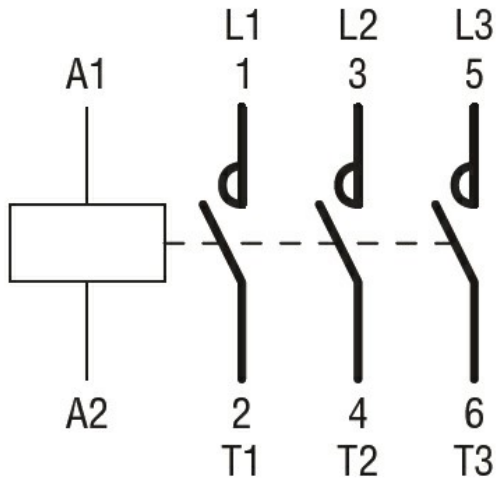
Pollution degree

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