



Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	115
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 115
	AC-1 ($\leq 55^\circ\text{C}$)	A 95
	AC-1 ($\leq 70^\circ\text{C}$)	A 80
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 95
	AC-4 (400V)	A 45
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 30
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 55
	690V	kW 55
	1000V	kW 37
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 94
	400V	A 94
	415V	A 94
	440V	A 94
	500V	A 78
	690V	A 57
	1000V	A 28
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 77
	48V	A 66
	75V	A 66
	110V	A 8
	220V	A —
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A 110
	48V	A 110
	75V	A 110
	110V	A 90
	220V	A 9
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 110
	48V	A 110

	75V	A	110
	110V	A	93
	220V	A	95
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	115
	48V	A	115
	75V	A	115
	110V	A	110
	220V	A	115
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	45
	48V	A	33
	75V	A	33
	110V	A	3
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	65
	48V	A	55
	75V	A	55
	110V	A	43
	220V	A	5
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	86
	48V	A	75
	75V	A	75
	110V	A	64
	220V	A	64
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	96
	48V	A	95
	75V	A	95
	110V	A	80
	220V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		A	640
Protection fuse			
	gG (IEC)	A	125
	aM (IEC)	A	100
Making capacity (RMS value)		A	950
Breaking capacity at voltage			
	440V	A	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	Ith	W	7.9
	AC-3	W	5.4
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	3
	max	Ibin	3.7
Tightening torque for coil terminal			
	min	Nm	0.8

	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Max number of wires simultaneously connectable	Nr.		2
Conductor section	Flexible w/o lug conductor section		
	min	mm²	1.5
	max	mm²	35
Power terminal protection according to IEC/EN 60529	IP20		
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g		1
Operations			
Mechanical life	cycles		15000000
Electrical life	cycles		1100000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles cycles	1100000 15000000
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min max	V V	20 48
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up		
	min max	%Us %Us	85 Us min 110 Us max
	drop-out		
	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz pick-up		
	min max	%Us %Us	85 Us min 110 Us max
	drop-out		
	max	%Us	≤70 Us min
AC average coil consumption at 20°C	of 50/60Hz coil powered at 50Hz		
	in-rush holding	VA VA	90 2.7
	of 50/60Hz coil powered at 60Hz		
	in-rush holding	VA VA	90 2.7
	of 60Hz coil powered at 60Hz		
	in-rush holding	VA VA	90 2.7
Dissipation at holding ≤20°C 50Hz	W		1...2.5
DC coil operating			
DC rated control voltage			

		min	V	20
		max	V	48
max			V	48
DC operating voltage				
pick-up		min	%Us	80 Us min
		max	%Us	110 Us max
drop-out		max	%Us	≤70 Us min
Average coil consumption ≤20°C				
		in-rush	W	67
		holding	W	1.3
Max cycles frequency				
Mechanical operation		cycles/h		1500
Operating times				
Average time for Us control				
in AC				
Closing NO		min	ms	12
		max	ms	28
Opening NO		min	ms	8
		max	ms	22
in DC				
Closing NO		min	ms	40
		max	ms	85
Opening NO		min	ms	20
		max	ms	55
UL technical data				
Rated operational voltage AC (UL)			V	600
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	77
		at 600V	A	77
Yielded mechanical performance				
for three-phase AC motor				
		200/208V	HP	25
		220/240V	HP	30
		460/480V	HP	60
		575/600V	HP	75
General USE				
Contactor				
		AC current	A	115
Short-circuit protection fuse, 600V				
High fault				
		Short circuit current	kA	100
		Fuse rating	A	200
		Fuse class		J
Standard fault				
		Short circuit current	kA	10
		Fuse rating	A	200
		Fuse class		RK5
Ambient conditions				

Temperature

Operating temperature

min	°C	-50
max	°C	70

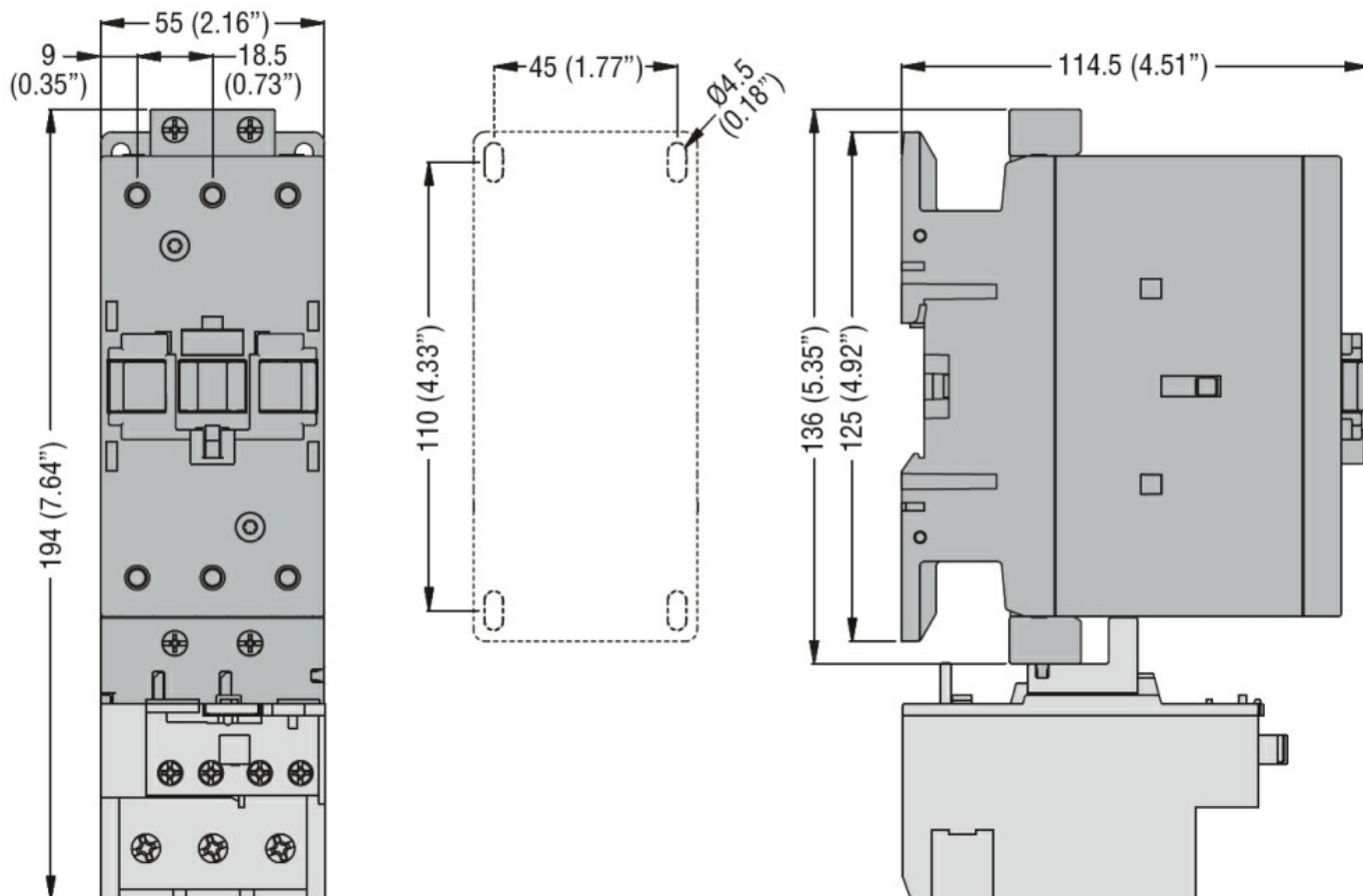
Storage temperature

min	°C	-60
max	°C	80

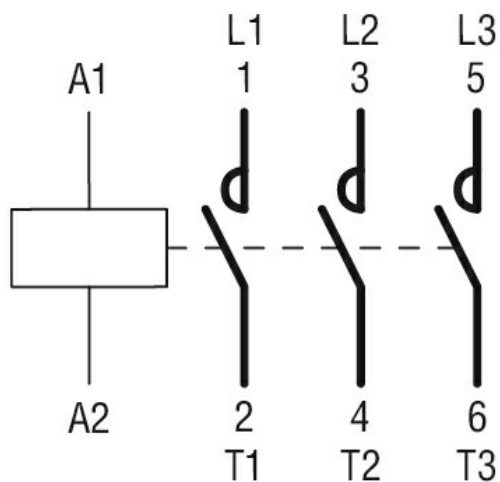
Max altitude

m	3000
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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