



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 $I_{th} \leq 40^\circ C$	A		165
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A	165
	AC-1 ($\leq 55^\circ C$)	A	135
	AC-1 ($\leq 70^\circ C$)	A	118
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	150
	AC-4 (400V)	A	70
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
Rated operational current AC-3 ($T \leq 55^\circ C$)	230V	A	150
	400V	A	150
	415V	A	150
	440V	A	150
	500V	A	128
	690V	A	113
	1000V	A	51
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A	165
	48V	A	165
	75V	A	150
	110V	A	10
	220V	A	–
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	A	14
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A	165
	48V	A	165

	75V	A	165
	110V	A	160
	220V	A	150
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IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	165
	220V	A	165
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	165
	48V	A	60
	75V	A	44
	110V	A	6
	220V	A	–
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
	220V	A	7
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
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Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
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Protection fuse	gG (IEC)	A	250
	aM (IEC)	A	160
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage	440V	A	1200
	500V	A	1025
	690V	A	905
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Resistance per pole (average value)		mΩ	0.45
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Power dissipation per pole (average value)	I _{th}	W	12
	AC-3	W	10.1
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Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
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Tightening torque for coil terminal	min	Nm	0.8

		max	Nm	1
		min	I _{bin}	0.59
		max	I _{bin}	0.74
Conductor section				
	AWG/Kcmil			
		max		2/0
Flexible w/o lug conductor section				
		min	mm ²	1.5
		max	mm ²	70
Flexible c/w lug conductor section				
		min	mm ²	1.5
		max	mm ²	70
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position				
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	2020
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	800000
		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60Hz			V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz drop-out			
		max	%Us	55
	of 60Hz coil powered at 60Hz pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consumption at 20°C				
	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20
Dissipation at holding ≤20°C 50Hz			W	6.5
Max cycles frequency				
Mechanical operation			cycles/h	1500
Operating times				
Average time for U _s control in AC				
	Closing NO			
		min	ms	45
		max	ms	32

Opening NO

min	ms	9
max	ms	24

UL technical data

Rated operational voltage AC (UL)	V	600
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Yielded mechanical performance

for three-phase AC motor

200/208V	HP	50
220/240V	HP	50
460/480V	HP	100
575/600V	HP	125

General USE

Contactor

AC current	A	165
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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	250
Fuse class		RK5

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

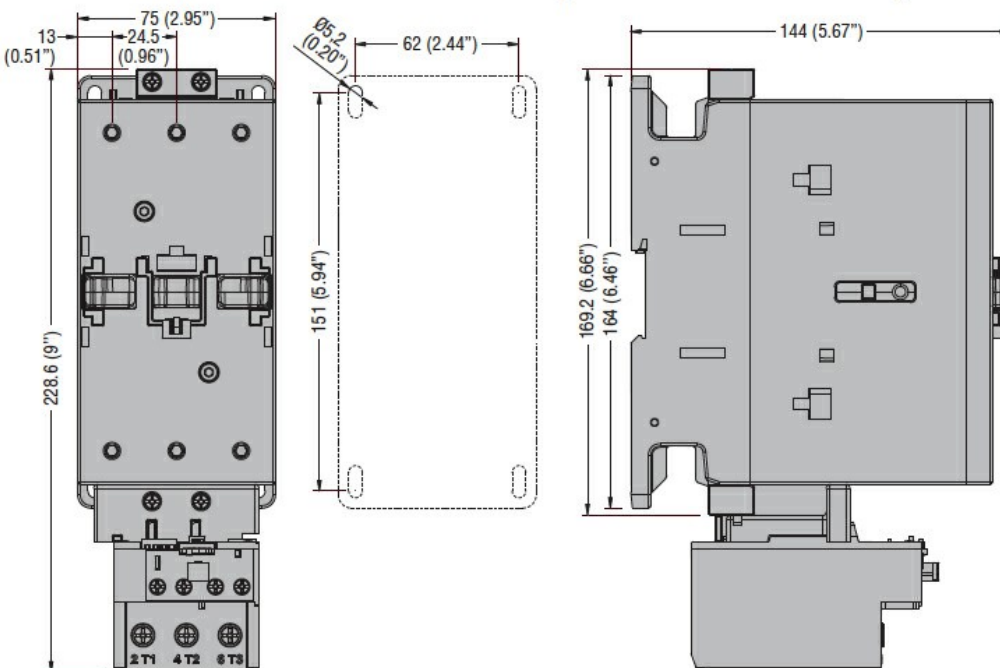
Storage temperature

min	°C	-60
max	°C	80

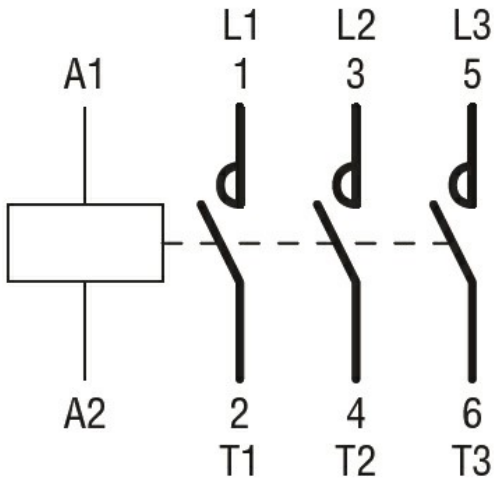
Max altitude

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

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching