



### 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	165
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 165
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 135
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 118
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A 150
	AC-4 (400V)	A 70
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	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 ( $T \leq 55^\circ\text{C}$ )	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 $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 165
	48V	A 165
	75V	A 150
	110V	A 10
	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 165
	48V	A 165
	75V	A 165
	110V	A 150
	220V	A 14
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 165
	48V	A 165

	75V	A	165
	110V	A	160
	220V	A	150
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IEC max current I <sub>e</sub> 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 <sub>e</sub> 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 <sub>e</sub> 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 <sub>e</sub> 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 <sub>e</sub> 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 <sub>th</sub>	W	12
	AC-3	W	10.1
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Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I <sub>bin</sub>	4.4
	max	I <sub>bin</sub>	5.2
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Tightening torque for coil terminal			
	min	Nm	0.8

		max	Nm	1
		min	I <sub>bin</sub>	0.59
		max	I <sub>bin</sub>	0.74
<b>Conductor section</b>				
	AWG/Kcmil			
		max		2/0
<b>Flexible w/o lug conductor section</b>				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	70
<b>Flexible c/w lug conductor section</b>				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	70
Power terminal protection according to IEC/EN 60529				IP20 front
<b>Mechanical features</b>				
<b>Operating position</b>				
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	2020
<b>Operations</b>				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
		rated load mechanical load	cycles	800000
			cycles	15000000
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 60Hz			V	220
<b>AC operating voltage</b>				
	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
<b>AC average coil consumption at 20°C</b>				
	of 60Hz coil powered at 60Hz			
		in-rush holding	VA	300
			VA	20
Dissipation at holding ≤20°C 50Hz			W	6.5
<b>Max cycles frequency</b>				
Mechanical operation			cycles/h	1500
<b>Operating times</b>				
Average time for U <sub>s</sub> 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

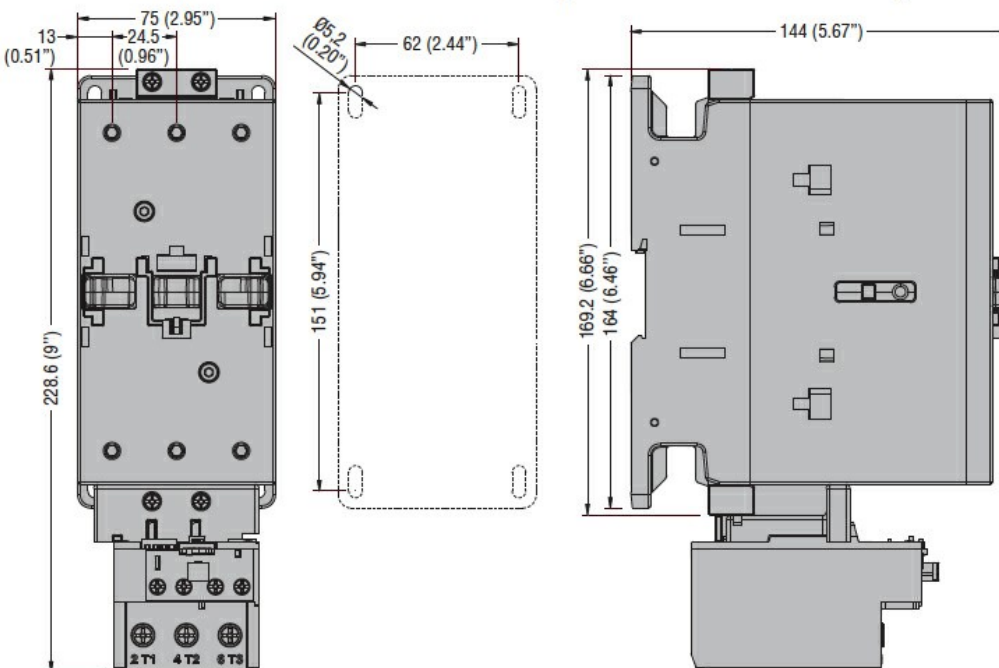
Storage temperature

min	°C	-60
max	°C	80

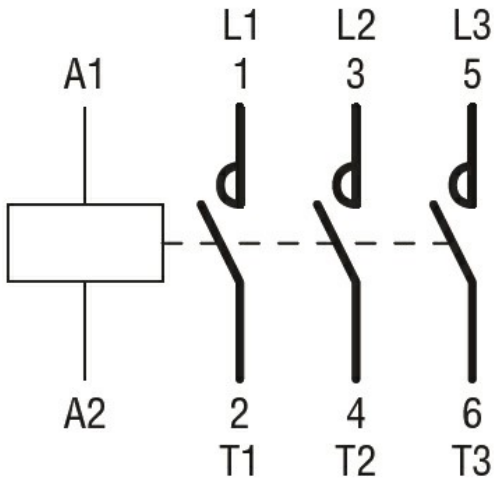
Max altitude

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