



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	160
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 160
	AC-1 ($\leq 55^\circ C$)	A 130
	AC-1 ($\leq 70^\circ C$)	A 115
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 115
	AC-4 (400V)	A 54
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW 37
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 75
	690V	kW 110
	1000V	kW 55
Rated operational current AC-3 ($T \leq 55^\circ C$)	230V	A 115
	400V	A 115
	415V	A 115
	440V	A 115
	500V	A 106
	690V	A 106
	1000V	A 39
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A 160
	48V	A 160
	75V	A 120
	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 160
	48V	A 160
	75V	A 160
	110V	A 130
	220V	A 14
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A 160
	48V	A 160

	75V	A	160
	110V	A	140
	220V	A	145
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IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	160
	48V	A	160
	75V	A	160
	110V	A	160
	220V	A	160
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	160
	48V	A	50
	75V	A	40
	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	160
	48V	A	72
	75V	A	65
	110V	A	65
	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	160
	48V	A	150
	75V	A	100
	110V	A	100
	220V	A	92
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IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	160
	48V	A	120
	75V	A	120
	110V	A	125
	220V	A	115
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Short-time allowable current for 10s (IEC/EN60947-1)		A	920
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Protection fuse			
	gG (IEC)	A	200
	aM (IEC)	A	125
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage			
	440V	A	1200
	500V	A	850
	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	11.5
	AC-3	W	6.0
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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	1200000
Safety related data				
Performance level B10d according to EN/ISO 13489-1		rated load	cycles	1200000
		mechanical load	cycles	15000000
AC coil operating				
Rated AC voltage at 50/60Hz			V	48
AC operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%Us	85
		max	%Us	110
	drop-out	min	%Us	40
		max	%Us	55
AC average coil consumption at 20°C	of 50/60Hz coil powered at 50Hz	in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz	in-rush	VA	275
		holding	VA	17
	of 60Hz coil powered at 60Hz	in-rush	VA	300
		holding	VA	20

Max cycles frequency

Mechanical operation cycles/h 1500

Operating times

Average time for Us control
in AC

	Closing NO		min	ms	16
			max	ms	32
	Opening NO		min	ms	9
			max	ms	24

UL technical data

Rated operational voltage AC (UL) V 600

Yielded mechanical performance

for three-phase AC motor

	200/208V	HP	40
	220/240V	HP	40
	460/480V	HP	75
	575/600V	HP	100

General USE

Contactor

AC current A 165

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

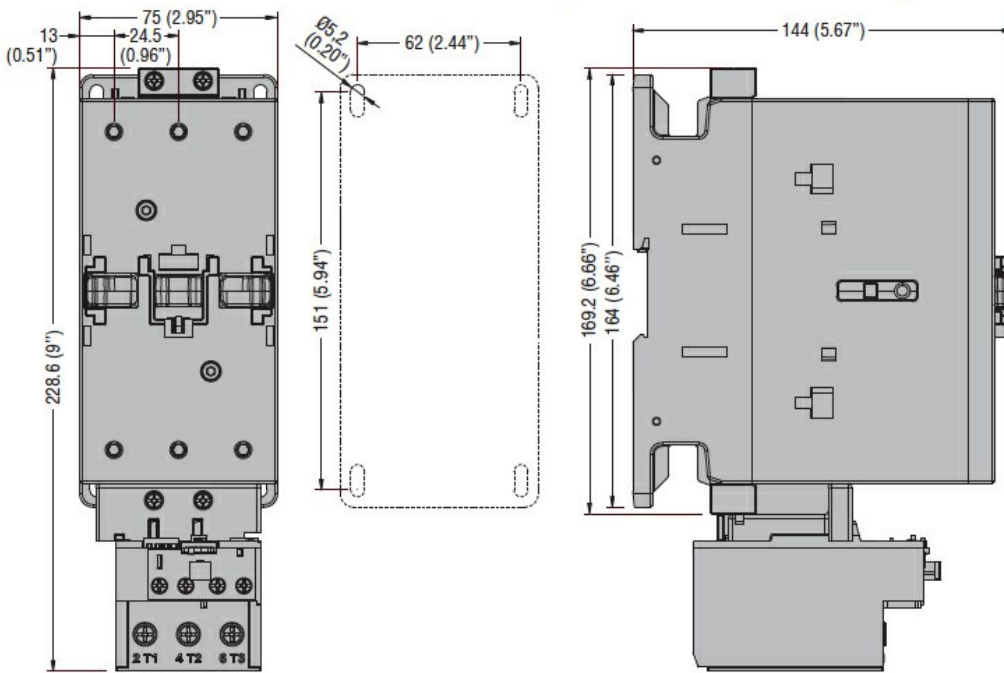
Storage temperature

	min	°C	-60
	max	°C	+80

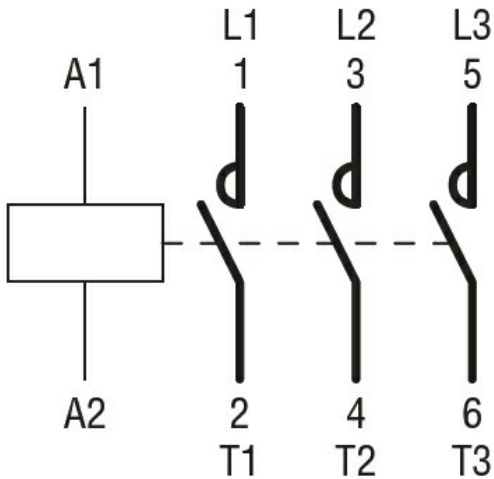
Max altitude

m 3000

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