



Contact characteristics

Number of poles	Nr.	4
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	160
Operational current I_e		
	AC-1 ($\leq 40^\circ\text{C}$)	A 160
	AC-1 ($\leq 55^\circ\text{C}$)	A 130
	AC-1 ($\leq 70^\circ\text{C}$)	A 115
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 115
	AC-4 (400V)	A 54
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)		
	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 $L/R \leq 1\text{ms}$ with 1 poles in series		
	$\leq 24\text{V}$	A 160
	48V	A 160
	75V	A 120
	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 160
	48V	A 160
	75V	A 160
	110V	A 130
	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 160
	48V	A 160
	75V	A 160
	110V	A 140
	220V	A 145
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series		
	$\leq 24\text{V}$	A 160
	48V	A 160
	75V	A 160
	110V	A 160

	220V	A	160
IEC max current Ie 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	–
IEC max current Ie 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
IEC max current Ie 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
IEC max current Ie 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
Short-time allowable current for 10s (IEC/EN60947-1)		A	920
Protection fuse	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1500
Breaking capacity at voltage	440V	A	1200
	500V	A	850
	690V	A	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)	Ith	W	11.5
	AC-3	W	6.0
Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	Ibin	4.4
	max	Ibin	5.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Conductor section	AWG/Kcmil		
	max		2/0
Flexible w/o lug conductor section	min	mm ²	1.5

		max	mm²	70
Flexible c/w lug conductor section		min	mm²	1.5
		max	mm²	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	2420
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 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
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
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

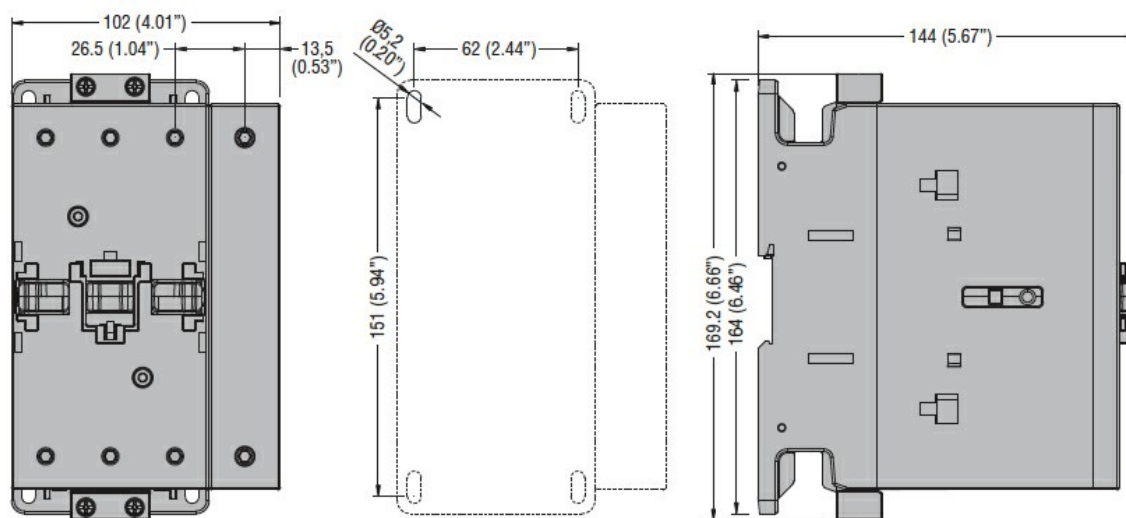
Storage temperature

min	°C	-60
max	°C	+80

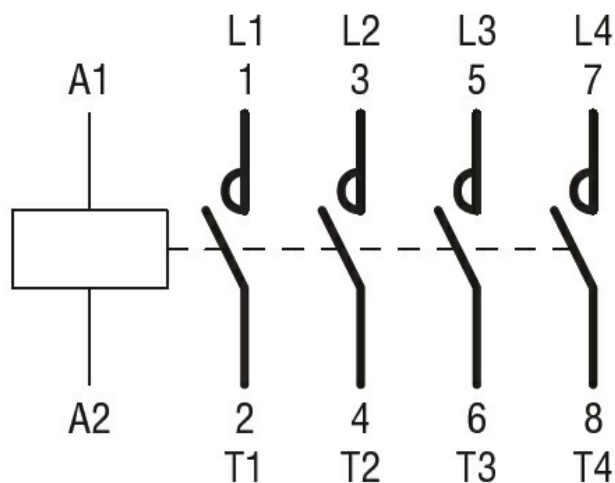
Max altitude

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

EAC

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching