



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	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 power AC-3 ($T \leq 55^\circ\text{C}$)	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 ($T \leq 55^\circ\text{C}$)	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

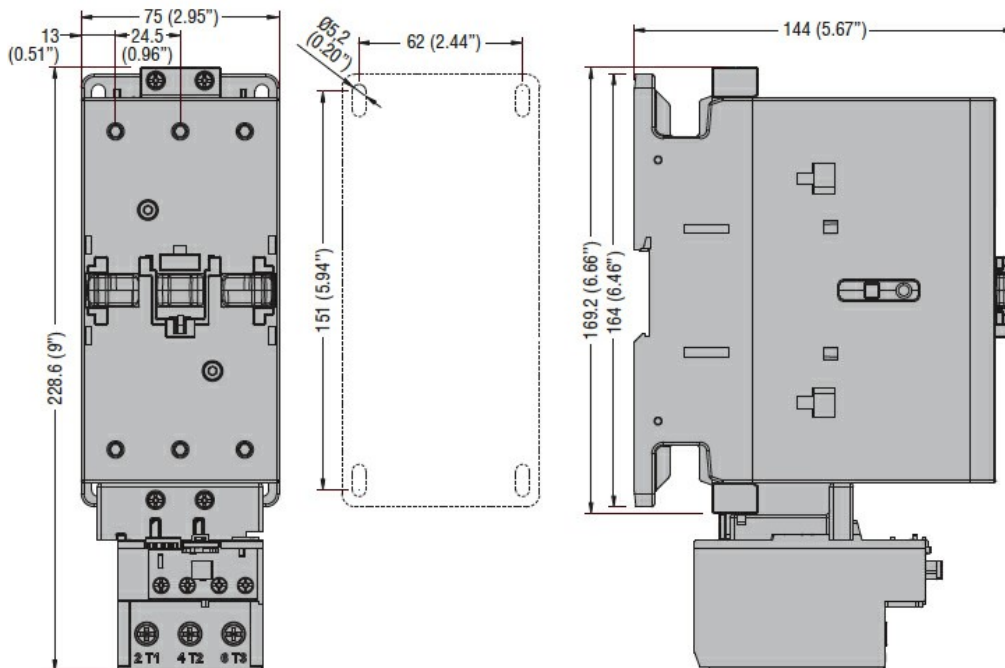
	75V	A	160
	110V	A	140
	220V	A	145
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	160
	48V	A	160
	75V	A	160
	110V	A	160
	220V	A	160
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	160
	48V	A	50
	75V	A	40
	110V	A	6
	220V	A	–
IEC max current Ie 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	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	2060
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, 60Hz				
		min	V	20
		max	V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%U _s	85 U _s min
		max	%U _s	110
	drop-out	max	%U _s	≤70 U _s min
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%U _s	85 U _s min
		max	%U _s	110 U _s max
	drop-out	max	%U _s	≤70 U _s min
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	130
		holding	VA	3.5
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	130
		holding	VA	3.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	130
		holding	VA	3.5

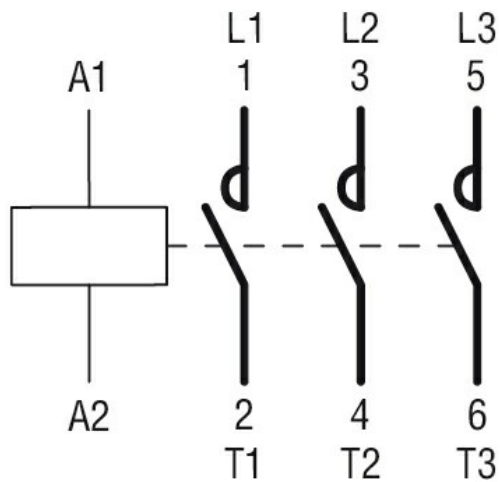
Dissipation at holding ≤20°C 50Hz		W	1.3...1,5
DC coil operating			
DC rated control voltage		min	V 20
		max	V 48
max		V	48
DC operating voltage			
pick-up	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out			
		max	%Us ≤70 Us min
Average coil consumption ≤20°C			
		in-rush	W 76
		holding	W 1.7
Max cycles frequency			
Mechanical operation		cycles/h	1500
Operating times			
Average time for Us control			
in AC			
		Closing NO	
		min	ms 45
		max	ms 90
		Opening NO	
		min	ms 24
		max	ms 60
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