



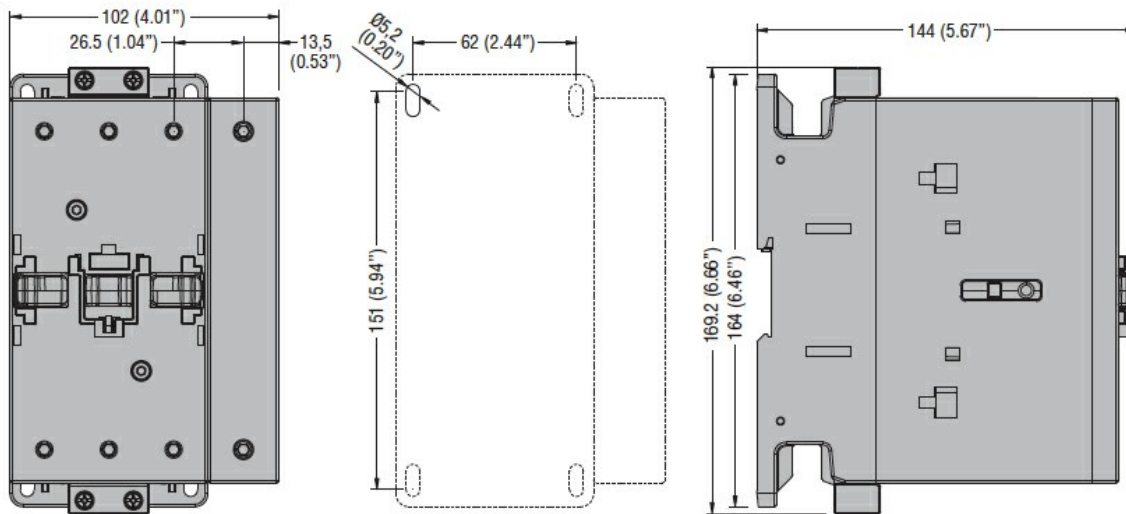
Contact characteristics

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} ≤ 40°C	A	140
Operational current I _e	AC-1 (≤40°C)	A 140
	AC-1 (≤55°C)	A 115
	AC-1 (≤70°C)	A 100
	AC-3 (≤440V ≤55°C)	A 95
	AC-4 (400V)	A 45
Rated operational current AC-3 (T≤55°C)	230V	A 95
	400V	A 95
	415V	A 95
	440V	A 95
	500V	A 95
	690V	A 93
	1000V	A 33
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 140
	48V	A 140
	75V	A 100
	110V	A 10
	220V	A –
IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 140
	48V	A 140
	75V	A 140
	110V	A 110
	220V	A 12
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 140
	48V	A 140
	75V	A 155
	110V	A 120
	220V	A 125
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A 140
	48V	A 140
	75V	A 155
	110V	A 140

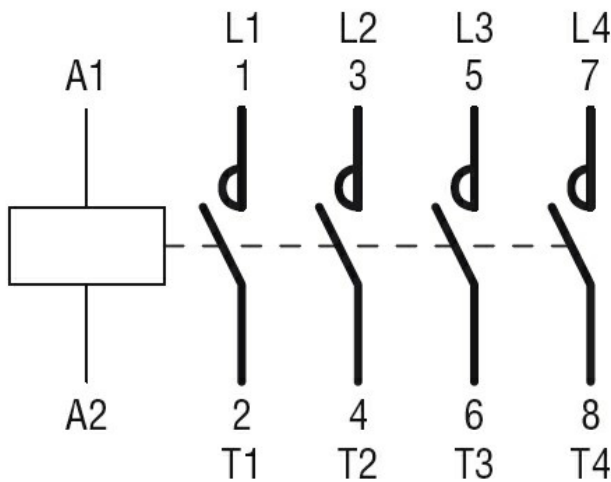
	220V	A	140
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	140
	48V	A	44
	75V	A	36
	110V	A	6
	220V	A	–
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	140
	48V	A	63
	75V	A	60
	110V	A	55
	220V	A	7
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	140
	48V	A	115
	75V	A	90
	110V	A	85
	220V	A	76
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	140
	48V	A	110
	75V	A	110
	110V	A	105
	220V	A	95
Short-time allowable current for 10s (IEC/EN60947-1)		A	760
Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	100
Making capacity (RMS value)		A	1200
Breaking capacity at voltage			
	440V	A	1100
	500V	A	775
	690V	A	745
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	I _{th}	W	8.8
	AC-3	W	4.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	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	2460
Auxiliary contact characteristics			
Thermal current I _{th}		A	140
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	1400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1400000
		cycles	15000000
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min	V	60
	max	V	110
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out	max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz pick-up	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out	max	%Us	≤70 Us min
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz	in-rush holding	VA	130
		VA	3.5
of 50/60Hz coil powered at 60Hz	in-rush holding	VA	130
		VA	3.5
of 60Hz coil powered at 60Hz	in-rush holding	VA	130
		VA	3.5
Dissipation at holding ≤20°C 50Hz		W	1.3...1,5
DC coil operating			
DC rated control voltage	min	V	60
	max	V	110
max		V	110

DC operating voltage			
pick-up	min	%Us	80 Us min
	max	%Us	110 Us max
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drop-out	max	%Us	≤70 Us min
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Average coil consumption ≤20°C			
	in-rush	W	76
	holding	W	1.7
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Max cycles frequency			
Mechanical operation		cycles/h	1500
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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
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in DC			
Closing NO	min	ms	45
	max	ms	85
Opening NO	min	ms	24
	max	ms	60
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UL technical data			
Rated operational voltage AC (UL)		V	600
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General USE			
Contactor			
	AC current	A	150
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Short-circuit protection fuse, 600V			
High fault			
	Short circuit current	kA	100
	Fuse rating	A	200
	Fuse class		J
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Standard fault			
	Short circuit current	kA	10
	Fuse rating	A	250
	Fuse class		RK5
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Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
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Storage temperature			
	min	°C	-60
	max	°C	+80
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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
EAC
UL 60335-2-40 LZGH A2L
UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching