



### Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U <sub>i</sub> IEC/EN	V	1000
Rated impulse withstand voltage U <sub>imp</sub>	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub> ≤ 40°C	A	100
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 100
	AC-1 (≤55°C)	A 80
	AC-1 (≤70°C)	A 70
	AC-3 (≤440V ≤55°C)	A 65
	AC-4 (400V)	A 31
Rated operational power AC-3 (T≤55°C)	230V	kW 18.5
	400V	kW 30
	415V	kW 37
	440V	kW 37
	500V	kW 37
	690V	kW 45
	1000V	kW 30
Rated operational current AC-3 (T≤55°C)	230V	A 65
	400V	A 65
	415V	A 65
	440V	A 65
	500V	A 53
	690V	A 47
	1000V	A 25
Rated operational power AC-1 (T≤40°C)	230V	kW 38
	400V	kW 65
	500V	kW 82
	690V	kW 114
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 50
	48V	A 50
	75V	A 50
	110V	A 8
	220V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 70
	48V	A 70
	75V	A 70

	110V	A	60
	220V	A	9
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	70
	48V	A	70
	75V	A	70
	110V	A	60
	220V	A	90
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	70
	48V	A	70
	75V	A	70
	110V	A	70
	220V	A	110
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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	35
	48V	A	25
	75V	A	25
	110V	A	3
	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	45
	48V	A	40
	75V	A	40
	110V	A	30
	220V	A	5
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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	55
	48V	A	50
	75V	A	50
	110V	A	35
	220V	A	52
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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	60
	48V	A	60
	75V	A	60
	110V	A	50
	220V	A	65
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Short-time allowable current for 10s (IEC/EN60947-1)		A	640
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Protection fuse			
	gG (IEC)	A	125
	aM (IEC)	A	80
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Making capacity (RMS value)		A	650
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Breaking capacity at voltage			
	440V	A	520
	500V	A	425
	690V	A	376
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Resistance per pole (average value)		mΩ	0.8
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	8
	AC-3	W	3.4
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Tightening torque for terminals			
	min	Nm	4

		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
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Tightening torque for coil terminal				
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
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Max number of wires simultaneously connectable				
			Nr.	2
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Conductor section				
	AWG/Kcmil			
		max		2
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Flexible w/o lug conductor section				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	35
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Flexible c/w lug conductor section				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	35
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Power terminal protection according to IEC/EN 60529				
				IP20 front
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<b>Mechanical features</b>				
Operating position				
		normal allowable		Vertical plan ±30°
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Fixing				
				Screw / DIN rail 35mm
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Weight				
			g	1020
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<b>Operations</b>				
Mechanical life				
			cycles	15000000
Electrical life				
			cycles	1400000
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<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1400000
		mechanical load	cycles	15000000
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EMC compatibility				
				yes
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<b>AC coil operating</b>				
Rated AC voltage at 60Hz				
			V	230
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AC operating voltage				
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
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AC average coil consumption at 20°C				
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
		holding	VA	15
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Dissipation at holding ≤20°C 50Hz				
			W	5
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<b>Max cycles frequency</b>				
Mechanical operation				
			cycles/h	3600
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<b>Operating times</b>				
Average time for Us control				

in AC	Closing NO	min	ms	12	
		max	ms	28	
	Opening NO	min	ms	8	
		max	ms	22	
	in DC	Closing NO	min	ms	40
			max	ms	85
Opening NO		min	ms	20	
		max	ms	55	

**UL technical data**

Rated operational voltage AC (UL)	V	600
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Full-load current (FLA) for three-phase AC motor	at 480V	A	65
	at 600V	A	62

Yielded mechanical performance for three-phase AC motor	200/208V	HP	20
	220/240V	HP	25
	460/480V	HP	50
	575/600V	HP	60

General USE	Contactor	AC current	A	100
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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	200
		Fuse class		RK5

**Ambient conditions**

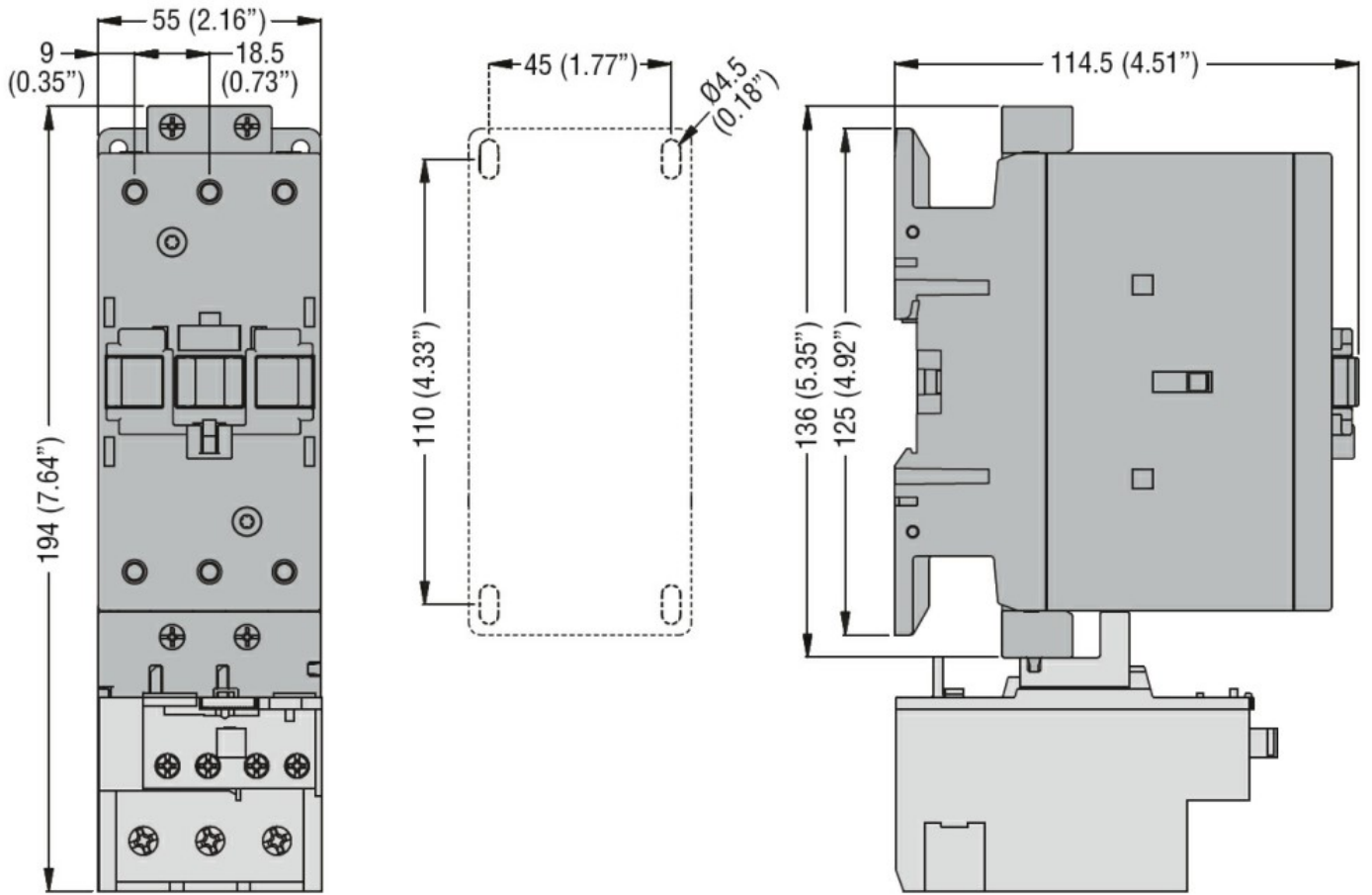
Temperature	Operating temperature	min	°C	-50
		max	°C	70
		Storage temperature		
	min	°C	-60	
	max	°C	80	

Max altitude	m	3000
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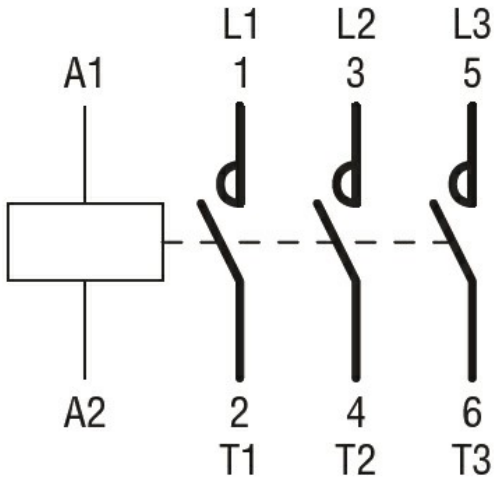
**Resistance & Protection**

Pollution degree	3
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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