



### 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	115
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 115
	AC-1 (≤55°C)	A 95
	AC-1 (≤70°C)	A 80
	AC-3 (≤440V ≤55°C)	A 80
	AC-4 (400V)	A 38
Rated operational power AC-3 (T≤55°C)	230V	kW 22
	400V	kW 45
	415V	kW 45
	440V	kW 45
	500V	kW 55
	690V	kW 55
	1000V	kW 37
Rated operational current AC-3 (T≤55°C)	230V	A 80
	400V	A 80
	415V	A 80
	440V	A 80
	500V	A 78
	690V	A 57
	1000V	A 28
Rated operational power AC-1 (T≤40°C)	230V	kW 43
	400V	kW 76
	500V	kW 95
	690V	kW 120
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 70
	48V	A 60
	75V	A 60
	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 100
	48V	A 100
	75V	A 100

	110V	A	80
	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	100
	48V	A	100
	75V	A	100
	110V	A	85
	220V	A	95
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	100
	48V	A	100
	75V	A	100
	110V	A	100
	220V	A	115
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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	40
	48V	A	30
	75V	A	30
	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	60
	48V	A	50
	75V	A	50
	110V	A	40
	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	80
	48V	A	70
	75V	A	70
	110V	A	60
	220V	A	64
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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	90
	48V	A	90
	75V	A	90
	110V	A	75
	220V	A	80
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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	800
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Breaking capacity at voltage			
	440V	A	640
	500V	A	625
	690V	A	456
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Resistance per pole (average value)		mΩ	0.6
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	7.9
	AC-3	W	3.8
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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 1300000
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<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	1300000
		mechanical load	cycles	15000000
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EMC compatibility				yes
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<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz				V 48
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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
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of 50/60Hz coil powered at 60Hz				
				pick-up
		min	%Us	85
		max	%Us	110
				drop-out
		min	%Us	40
		max	%Us	55
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AC average coil consumption at 20°C				
of 50/60Hz coil powered at 50Hz				
		in-rush	VA	210

	holding	VA	15
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz			
	in-rush	VA	210
	holding	VA	15
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	5
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	3600
<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
<b>UL technical data</b>			
Rated operational voltage AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	77
	at 600V	A	77
Yielded mechanical performance			
for three-phase AC motor			
	200/208V	HP	25
	220/240V	HP	30
	460/480V	HP	60
	575/600V	HP	75
General USE			
Contactor			
	AC current	A	115
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
<b>Ambient conditions</b>			
Temperature			
Operating temperature			
	min	$^{\circ}\text{C}$	-50
	max	$^{\circ}\text{C}$	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

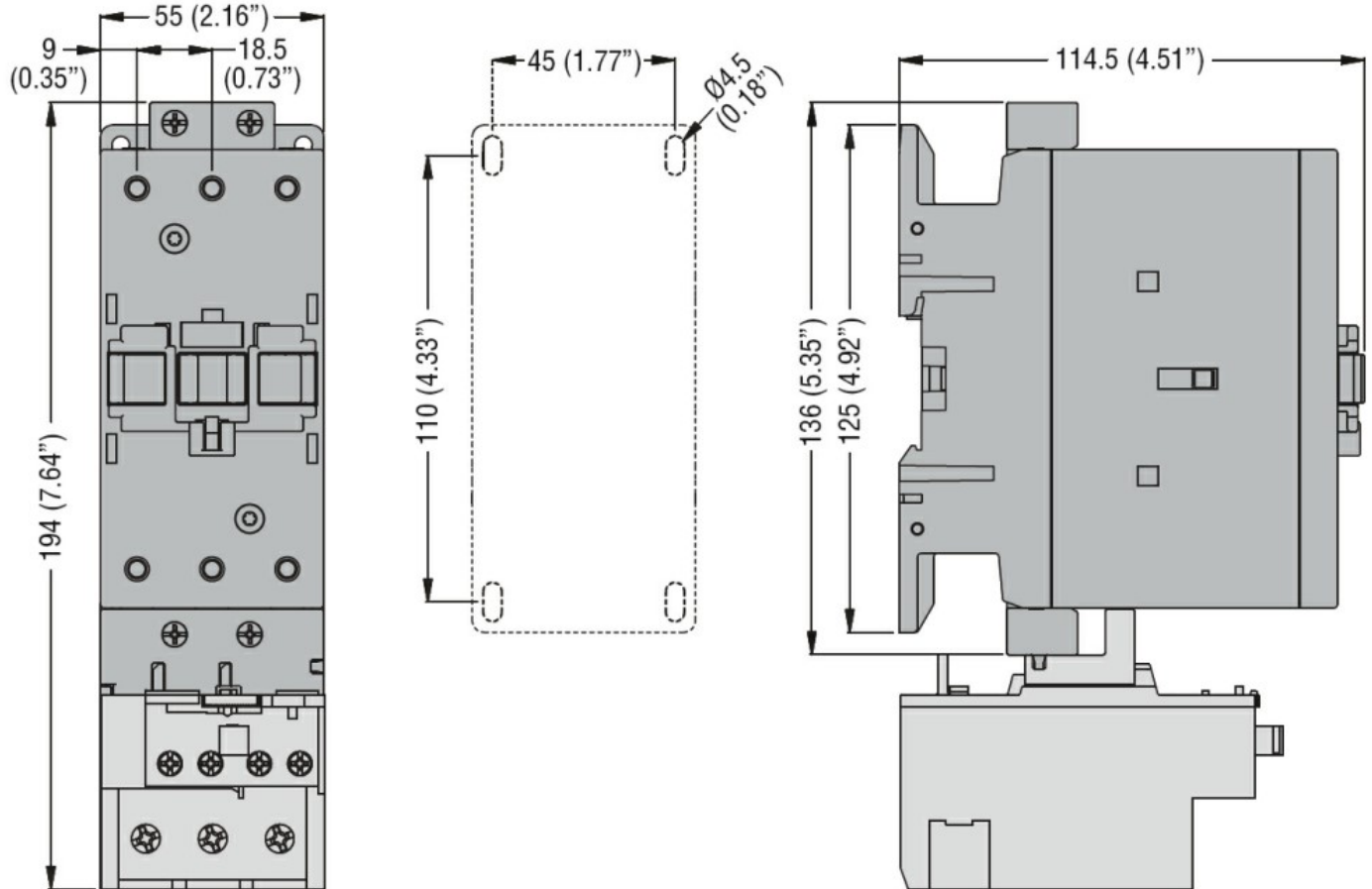
m 3000

**Resistance & Protection**

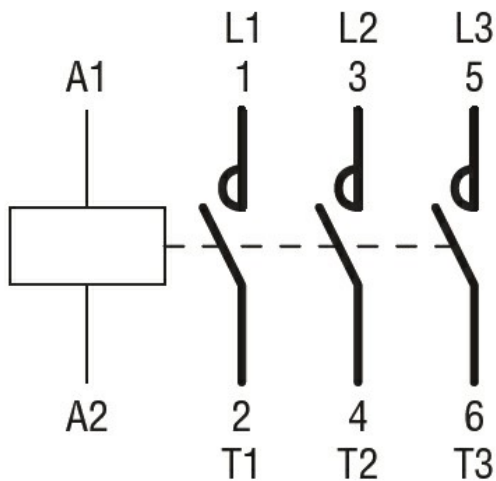
Pollution degree

3

**Dimensions**



**Wiring diagrams**



**Certifications and compliance**

Compliance

CSA C22.2 n° 60947-1

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CSA C22.2 n° 60947-4-1

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IEC/EN 60335-2-89

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IEC/EN/BS 60947-1

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IEC/EN/BS 60947-4-1

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UL 60947-1

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UL 60947-4-1

Certificates

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CCC

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CSA C22.2 n. 60335-2-40:22 LZGH A2L

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CSA C22.2 No. 60335-2-89:21 LZGH A2L

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UL 60335-2-40 LZGH A2L

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UL 60335-2-89 LZGH A2L

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching