



### 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	90
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 90
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 75
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 65
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A 50
	AC-4 (400V)	A 28
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW 11
	400V	kW 22
	415V	kW 22
	440V	kW 22
	500V	kW 22
	690V	kW 30
	1000V	kW 30
Rated operational current AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	A 50
	400V	A 50
	415V	A 50
	440V	A 50
	500V	A 44
	690V	A 39
	1000V	A 23
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 34
	400V	kW 59
	500V	kW 74
	690V	kW 102
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 45
	48V	A 40
	75V	A 40
	110V	A 8
	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 60
	48V	A 60
	75V	A 60

	110V	A	50
	220V	A	7
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	60
	48V	A	60
	75V	A	60
	110V	A	55
	220V	A	75
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	60
	48V	A	60
	75V	A	60
	110V	A	60
	220V	A	90
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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	30
	48V	A	25
	75V	A	22
	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	35
	48V	A	35
	75V	A	30
	110V	A	25
	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	50
	48V	A	50
	75V	A	45
	110V	A	30
	220V	A	40
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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	55
	48V	A	55
	75V	A	55
	110V	A	45
	220V	A	50
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Short-time allowable current for 10s (IEC/EN60947-1)		A	400
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Protection fuse			
	gG (IEC)	A	100
	aM (IEC)	A	50
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Making capacity (RMS value)		A	500
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Breaking capacity at voltage			
	440V	A	400
	500V	A	352
	690V	A	312
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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	6.5
	AC-3	W	2
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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
<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
<b>Operations</b>				
Mechanical life				cycles 15000000
Electrical life				cycles 1400000
<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
<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz				V 230
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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

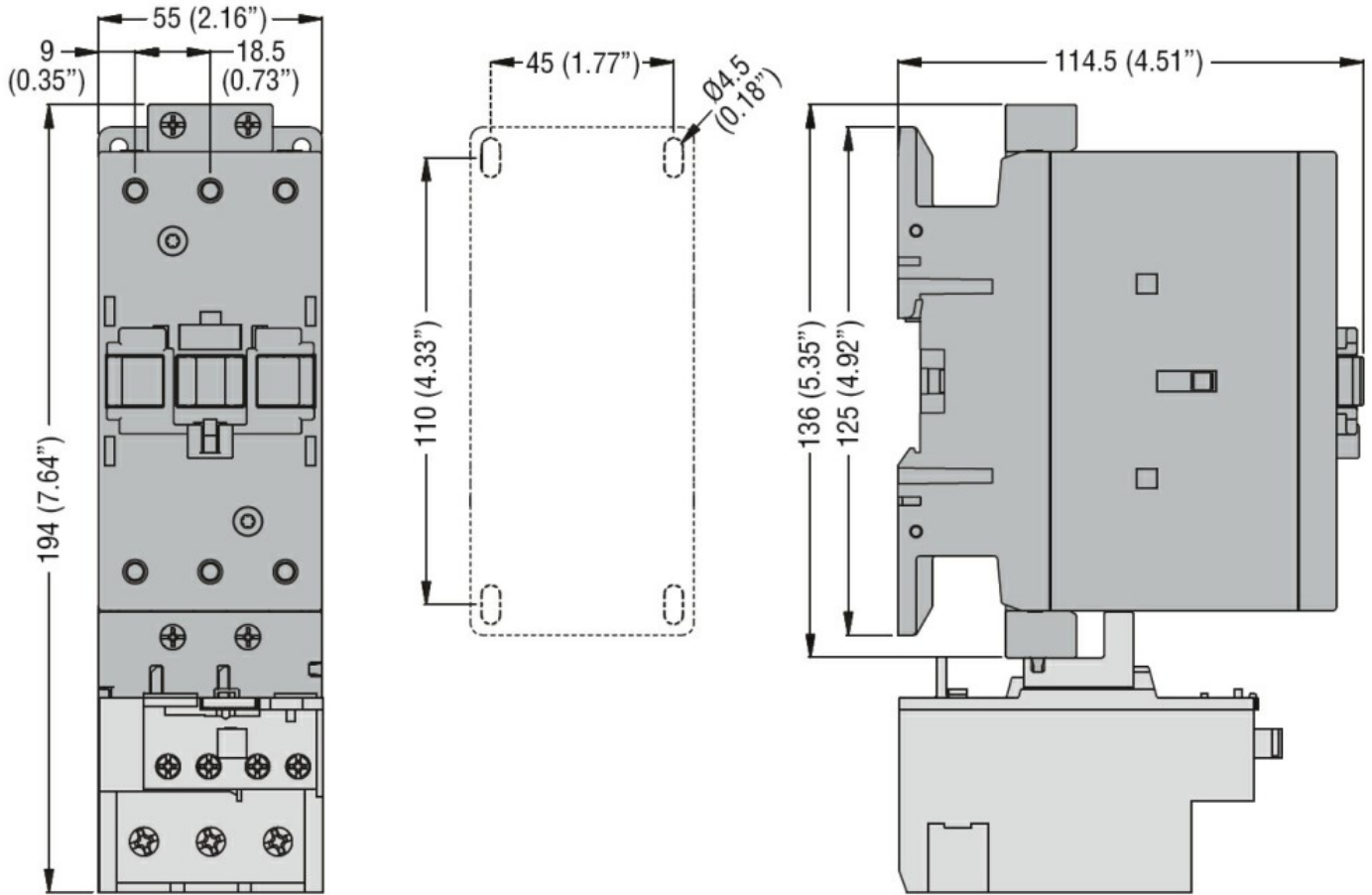
	holding	VA	15
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz			
	in-rush	VA	210
	holding	VA	15
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	5
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	3600
<b>Operating times</b>			
Average time for Us control in AC			
	Closing NO		
		min	ms 12
		max	ms 28
	Opening NO		
		min	ms 8
		max	ms 22
<b>UL technical data</b>			
Rated operational voltage AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	52
	at 600V	A	41
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	5
	230V	HP	10
for three-phase AC motor			
	200/208V	HP	15
	220/240V	HP	20
	460/480V	HP	40
	575/600V	HP	40
General USE			
Contactor		AC current	A 90
Short-circuit protection fuse, 600V			
High fault		Short circuit current	kA 100
		Fuse rating	A 150
		Fuse class	J
Standard fault		Short circuit current	kA 5
		Fuse rating	A 150
		Fuse class	RK5
<b>Ambient conditions</b>			
Temperature			
Operating temperature			
		min	$^{\circ}\text{C}$ -50
		max	$^{\circ}\text{C}$ 70
Storage temperature			
		min	$^{\circ}\text{C}$ -60
		max	$^{\circ}\text{C}$ 80
Max altitude		m	3000

Resistance & Protection

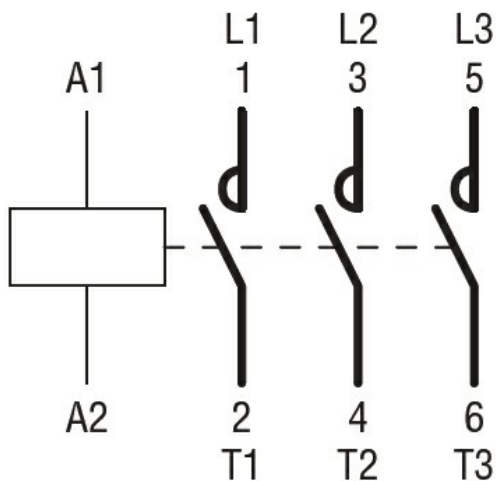
Pollution degree

3

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

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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