



### Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U <sub>i</sub> IEC/EN	V	690
Rated impulse withstand voltage U <sub>imp</sub>	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I <sub>th</sub> ≤ 40°C	A	32
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 32
	AC-1 (≤55°C)	A 26
	AC-1 (≤70°C)	A 23
	AC-3 (≤440V ≤55°C)	A 18
	AC-4 (400V)	A 8.5
Rated operational power AC-3 (T≤55°C)	230V	kW 4
	400V	kW 7.5
	415V	kW 9
	440V	kW 9
	500V	kW 10
	690V	kW 10
Rated operational power AC-1 (T≤40°C)	230V	kW 12
	400V	kW 21
	500V	kW 26
	690V	kW 36
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 17
	48V	A 15
	75V	A 15
	110V	A 6
	220V	A –
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 20
	48V	A 20
	75V	A 20
	110V	A 13
	220V	A 1
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 22
	48V	A 22
	75V	A 20
	110V	A 16
	220V	A 11
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series		

	≤24V	A	22
	48V	A	22
	75V	A	20
	110V	A	18
	220V	A	13
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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	12
	48V	A	11
	75V	A	11
	110V	A	2
	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	15
	48V	A	13
	75V	A	13
	110V	A	8
	220V	A	2
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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	18
	48V	A	18
	75V	A	16
	110V	A	12
	220V	A	6
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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	18
	48V	A	18
	75V	A	16
	110V	A	13
	220V	A	8
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Short-time allowable current for 10s (IEC/EN60947-1)		A	200
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Protection fuse	gG (IEC)	A	32
	aM (IEC)	A	20
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Making capacity (RMS value)		A	180
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Breaking capacity at voltage	440V	A	144
	500V	A	120
	690V	A	94
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Resistance per pole (average value)		mΩ	2.5
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Power dissipation per pole (average value)	I <sub>th</sub>	W	2.6
	AC-3	W	0.8
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Tightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	I <sub>bin</sub>	1.1
	max	I <sub>bin</sub>	1.5
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	0.8
	max	I <sub>bin</sub>	0.74
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Max number of wires simultaneously connectable		Nr.	2

Conductor section

AWG/Kcmil			max	10
Flexible w/o lug conductor section	min	mm <sup>2</sup>	1	
	max	mm <sup>2</sup>	6	
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1	
	max	mm <sup>2</sup>	4	
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1	
	max	mm <sup>2</sup>	4	

Power terminal protection according to IEC/EN 60529

IP20 when properly wired

Cable stripping length

main circuit	mm	10
command circuit	mm	8

Mechanical features

Operating position

normal allowable	Vertical plan ±30°
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Fixing

Screw / DIN rail 35mm

Weight

g 364

Auxiliary contact characteristics

Thermal current I<sub>th</sub>

A 10

IEC/EN 60947-5-1 designation

A600 - P600

Operating current AC15

230V	A	3
400V	A	1.9
500V	A	1.4

Operating current DC12

110V	A	5.7
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Operating current DC13

24V	A	5.7
48V	A	2.9
60V	A	2.3
110V	A	1.25
125V	A	1.1
220V	A	0.55
600V	A	0.2

Operations

Mechanical life

cycles 20000000

Electrical life

cycles 1600000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1600000
mechanical load	cycles	20000000

EMC compatibility

yes

AC coil operating

Rated AC voltage at 50/60Hz

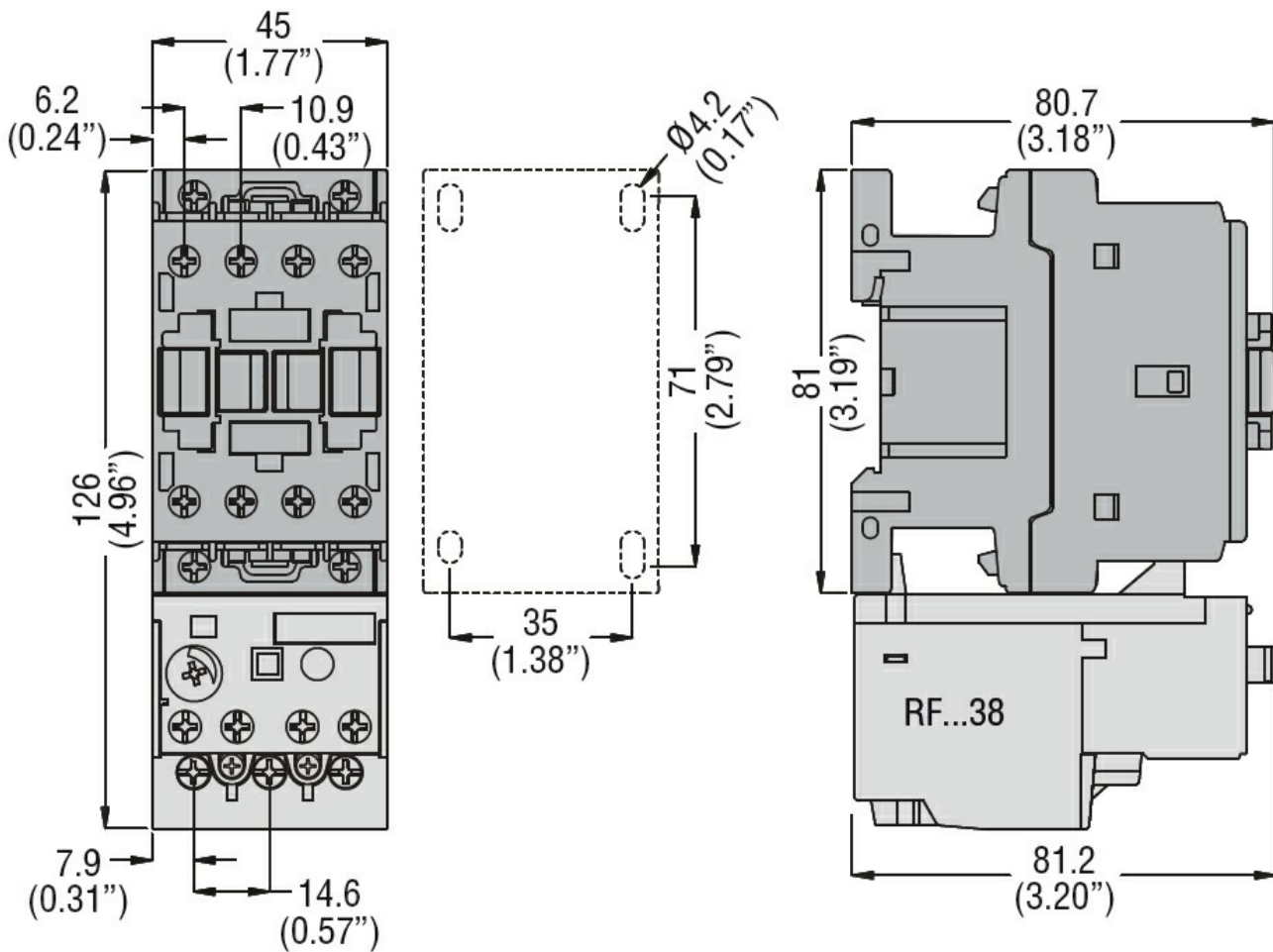
V 24

AC operating voltage

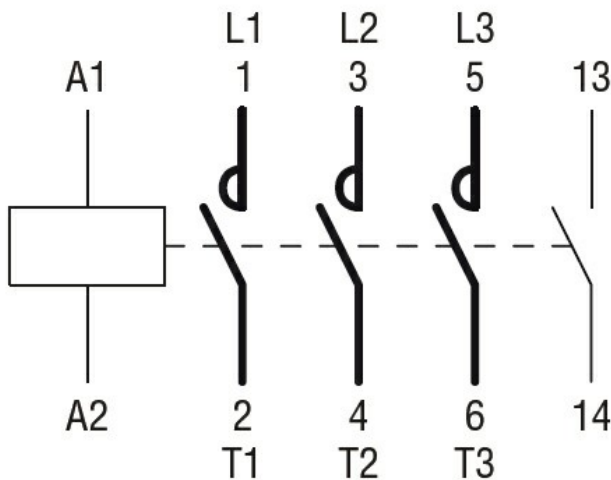
of 50/60Hz coil powered at 50Hz

	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	20
		max	%Us	55
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AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
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	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
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	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
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Dissipation at holding ≤20°C 50Hz			W	2.5
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<b>Max cycles frequency</b>				
Mechanical operation			cycles/h	3600
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<b>Operating times</b>				
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Average time for U <sub>s</sub> control				
	in AC			
	Closing NO	min	ms	8
		max	ms	24
	Opening NO	min	ms	10
		max	ms	20
	Closing NC	min	ms	14
		max	ms	28
	Opening NC	min	ms	7
		max	ms	18
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<b>UL technical data</b>				
Rated operational voltage AC (UL)			V	600
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Full-load current (FLA) for three-phase AC motor				
		at 480V	A	14
		at 600V	A	17
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Yielded mechanical performance				
	for single-phase AC motor			
		110/120V	HP	1
		230V	HP	3
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	for three-phase AC motor			
		200/208V	HP	5
		220/240V	HP	5
		460/480V	HP	10

		575/600V	HP	15
<b>General USE</b>				
	Contactor	AC current	A	32
	Auxiliary contacts	AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
		DC current	A	1
<b>Short-circuit protection fuse, 600V</b>				
	High fault	Short circuit current	kA	100
		Fuse rating	A	60
		Fuse class		J
	Standard fault	Short circuit current	kA	5
		Fuse rating	A	80
Contact rating of auxiliary contacts according to UL				A600 - P600
<b>Ambient conditions</b>				
<b>Temperature</b>				
	Operating temperature	min	°C	-50
		max	°C	70
	Storage temperature	min	°C	-60
		max	°C	80
Max altitude				m 3000
<b>Resistance &amp; Protection</b>				
Pollution degree				3
<b>Dimensions</b>				



### 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

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ,  
24VAC, 1NO AUXILIARY CONTACT

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