



### Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage $U_i$ IEC/EN	V	690
Rated impulse withstand voltage $U_{imp}$	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	28
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 28
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 23
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 20
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A 12
	AC-4 (400V)	A 7.9
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW 3.2
	400V	kW 5.7
	415V	kW 6.2
	440V	kW 6.2
	500V	kW 7.5
	690V	kW 10
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 10
	400V	kW 18
	500V	kW 23
	690V	kW 32
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 17
	48V	A 15
	75V	A 13
	110V	A 6
	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 20
	48V	A 20
	75V	A 18
	110V	A 13
	220V	A 1
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 22
	48V	A 22
	75V	A 20
	110V	A 16
	220V	A 11
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series		

	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	16
	220V	A	12
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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	10
	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	12
	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	15
	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	15
	48V	A	15
	75V	A	15
	110V	A	16
	220V	A	7
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Short-time allowable current for 10s (IEC/EN60947-1)		A	150
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Protection fuse	gG (IEC)	A	32
	aM (IEC)	A	12
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Making capacity (RMS value)		A	120
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Breaking capacity at voltage	440V	A	96
	500V	A	96
	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
	AC-3	W	0.4
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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> 6
Power terminal protection according to IEC/EN 60529			IP20 when properly wired
Cable stripping length			
	main circuit	mm	10
	command circuit	mm	8
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight			g 500
<b>Auxiliary contact characteristics</b>			
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
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
<b>Operations</b>			
Mechanical life			cycles 20000000
Electrical life			cycles 2000000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	2000000
	mechanical load	cycles	20000000
EMC compatibility			yes
<b>DC coil operating</b>			
DC rated control voltage			V 125
DC operating voltage			
	pick-up		

		min	%Us	70
		max	%Us	125
drop-out				
		min	%Us	10
		max	%Us	40
Average coil consumption ≤20°C				
		in-rush	W	5.4
		holding	W	5.4
<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	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
in DC				
	Closing NO	min	ms	54
		max	ms	66
	Opening NO	min	ms	14
		max	ms	17
<b>UL technical data</b>				
Rated operational voltage AC (UL)				V 600
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	11
		at 600V	A	11
Yielded mechanical performance				
for single-phase AC motor				
		110/120V	HP	1
		230V	HP	2
for three-phase AC motor				
		200/208V	HP	5
		220/240V	HP	5
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
Contactor				
		AC current	A	28
Auxiliary contacts				
		AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
		DC current	A	1

Short-circuit protection fuse, 600V  
High fault

Short circuit current	kA	100
Fuse rating	A	30
Fuse class		J

Standard fault

Short circuit current	kA	5
Fuse rating	A	70

Contact rating of auxiliary contacts according to UL

A600 - P600

**Ambient conditions**

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

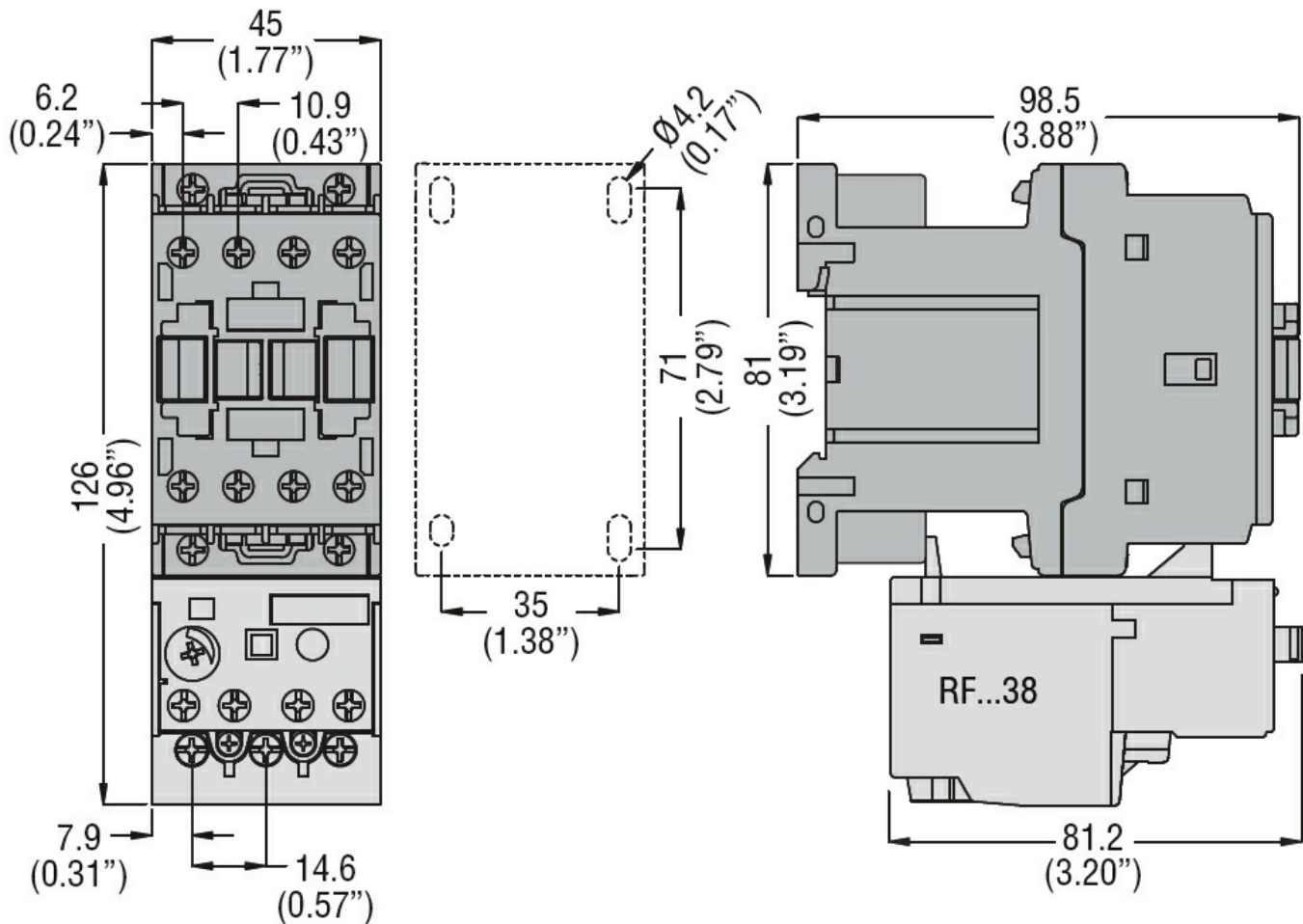
m 3000

**Resistance & Protection**

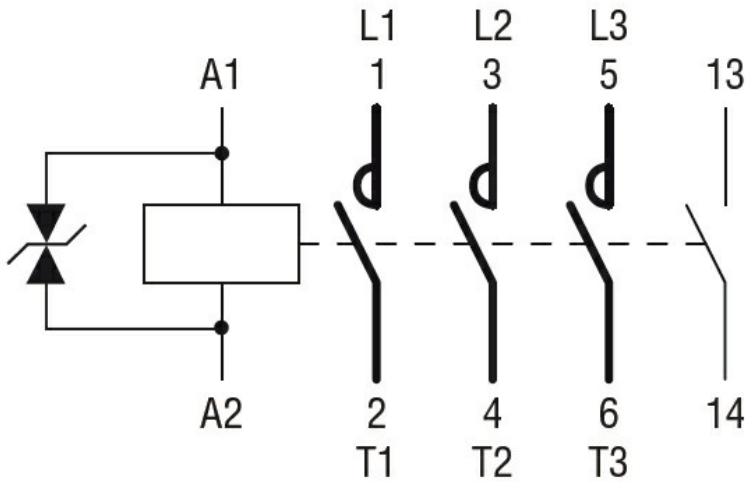
Pollution degree

3

**Dimensions**



**Wiring diagrams**



### Certifications and compliance

#### Compliance

CSA C22.2 n° 60947-1

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