



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 $I_{th} \leq 40^\circ C$	A	28
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 28
	AC-1 ($\leq 55^\circ C$)	A 23
	AC-1 ($\leq 70^\circ C$)	A 20
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 12
	AC-4 (400V)	A 7.9
Rated operational power AC-3 ($T \leq 55^\circ C$)	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 ($T \leq 40^\circ C$)	230V	kW 10
	400V	kW 18
	500V	kW 23
	690V	kW 32
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A 17
	48V	A 15
	75V	A 13
	110V	A 6
	220V	A -
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A 20
	48V	A 20
	75V	A 18
	110V	A 13
	220V	A 1
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A 22
	48V	A 22
	75V	A 20
	110V	A 16
	220V	A 11
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series		

	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	16
	220V	A	12
<hr/>			
IEC max current I _e 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	–
<hr/>			
IEC max current I _e 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
<hr/>			
IEC max current I _e 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
<hr/>			
IEC max current I _e 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
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	150
<hr/>			
Protection fuse	gG (IEC)	A	32
	aM (IEC)	A	12
<hr/>			
Making capacity (RMS value)		A	120
<hr/>			
Breaking capacity at voltage	440V	A	96
	500V	A	96
	690V	A	94
<hr/>			
Resistance per pole (average value)		mΩ	2.5
<hr/>			
Power dissipation per pole (average value)	I _{th}	W	2
	AC-3	W	0.4
<hr/>			
Tightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	I _{bin}	1.1
	max	I _{bin}	1.5
<hr/>			
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.8
	max	I _{bin}	0.74
<hr/>			
Max number of wires simultaneously connectable		Nr.	2

Conductor section

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

Fixing

Screw / DIN rail
35mm

Weight

g 487

Auxiliary contact characteristics

Thermal current I_{th}

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

Operations

Mechanical life

cycles 20000000

Electrical life

cycles 2000000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	2000000
mechanical load	cycles	20000000

EMC compatibility

yes

DC coil operating

DC rated control voltage

V 24

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
Max cycles frequency				
Mechanical operation				cycles/h 3600
Operating times				
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
UL technical data				
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

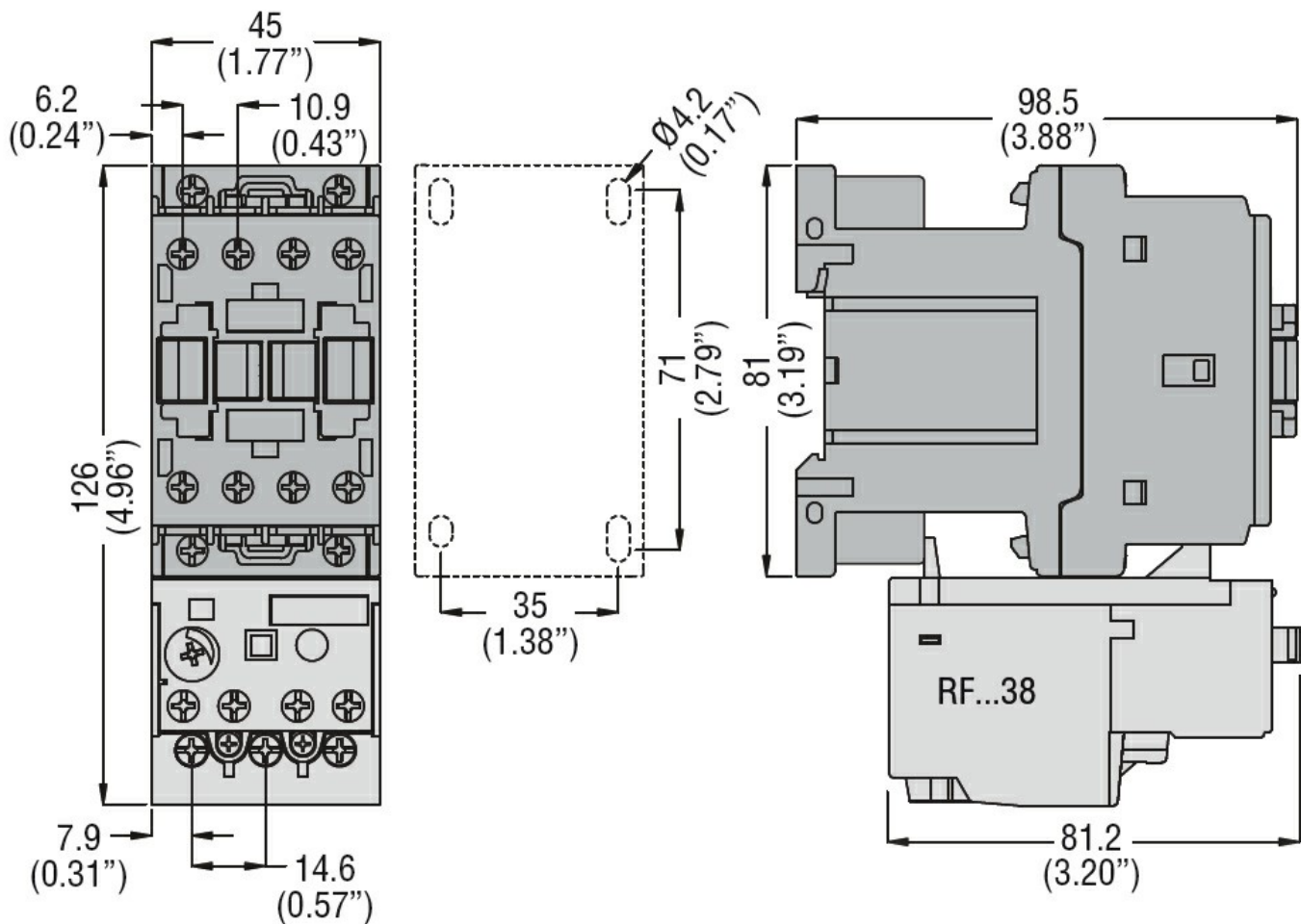
m 3000

Resistance & Protection

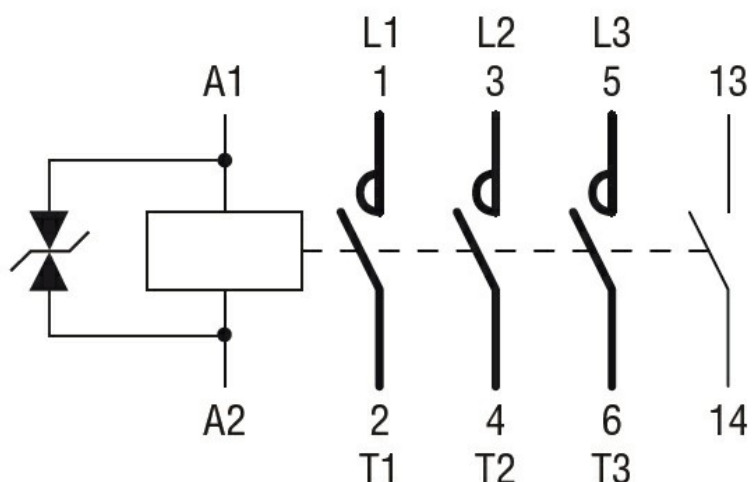
Pollution degree

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