



Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage Ui IEC/EN	V	690
Rated impulse withstand voltage Uimp	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current Ith ≤ 40°C	A	25
Operational current Ie	AC-1 (≤40°C)	A 25
	AC-1 (≤55°C)	A 20
	AC-1 (≤70°C)	A 18
	AC-3 (≤440V ≤55°C)	A 9
	AC-4 (400V)	A 4.9
Rated operational power AC-3 (T≤55°C)	230V	kW 2.2
	400V	kW 4.2
	415V	kW 4.5
	440V	kW 4.8
	500V	kW 5.5
	690V	kW 7.5
Rated operational power AC-1 (T≤40°C)	230V	kW 9.5
	400V	kW 16
	500V	kW 21
	690V	kW 27
IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 15
	48V	A 13
	75V	A 12
	110V	A 6
	220V	A –
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 18
	48V	A 18
	75V	A 17
	110V	A 12
	220V	A 1
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 20
	48V	A 20
	75V	A 20
	110V	A 15
	220V	A 10
IEC max current Ie in DC1 with L/R ≤ 1ms 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 Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	10
	48V	A	9
	75V	A	8
	110V	A	2
	220V	A	–
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	13
	48V	A	11
	75V	A	10
	110V	A	7
	220V	A	2
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	15
	48V	A	15
	75V	A	13
	110V	A	11
	220V	A	6
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	15
	48V	A	15
	75V	A	15
	110V	A	12
	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	25
	aM (IEC)	A	10
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Making capacity (RMS value)		A	90
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Breaking capacity at voltage	440V	A	72
	500V	A	72
	690V	A	71
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Resistance per pole (average value)		mΩ	2.5
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Power dissipation per pole (average value)	Ith	W	1.6
	AC-3	W	0.2
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Tightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
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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

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	6	

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 352

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
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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 2000000

Electrical life cycles 200000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	2000000
mechanical load	cycles	20000000

EMC compatibility

yes

AC coil operating

Rated AC voltage at 60Hz V 460

AC operating voltage

of 60Hz coil powered at 60Hz

pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55

AC average coil consumption at 20°C
of 60Hz coil powered at 60Hz

in-rush	VA	75
holding	VA	9

Dissipation at holding ≤20°C 50Hz

W	2.5
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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

UL technical data

Rated operational voltage AC (UL) V 600

Full-load current (FLA) for three-phase AC motor

at 480V	A	7.6
at 600V	A	9

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	0.75
230V	HP	2

for three-phase AC motor

200/208V	HP	3
220/240V	HP	3
460/480V	HP	5
575/600V	HP	7.5

General USE

Contactor

AC current	A	25
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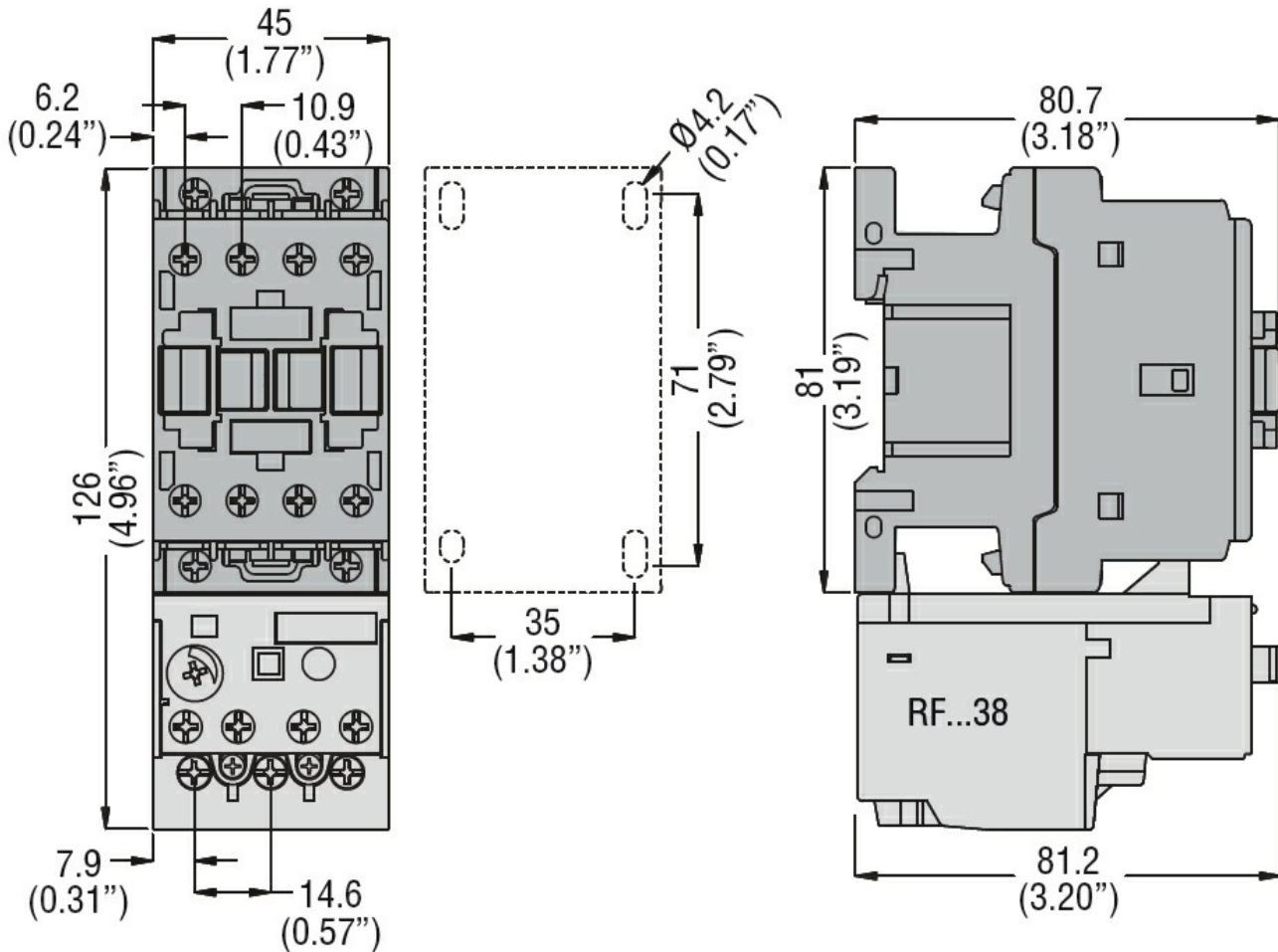
Auxiliary contacts

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 60
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