



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	25	
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A	25
	AC-1 ($\leq 40^\circ C$) with 16mm ² wire and fork end lug	A	0
	AC-1 ($\leq 55^\circ C$)	A	20
	AC-1 ($\leq 55^\circ C$) with 16mm ² wire and fork end lug	A	0
	AC-1 ($\leq 70^\circ C$)	A	18
	AC-1 ($\leq 70^\circ C$) with 16mm ² wire and fork end lug	A	0
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	9
Rated operational power AC-3 ($T \leq 55^\circ C$)	AC-4 (400V)	A	4.9
	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 ($T \leq 40^\circ C$)	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
	IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A
48V		A	13
75V		A	12
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
	48V	A	18
	75V	A	17
	110V	A	12
	220V	A	1
	IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A
48V		A	20
75V		A	20

	110V	A	15
	220V	A	10
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IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	A	20
	48V	A	20
	75V	A	20
	110V	A	16
	220V	A	12
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IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	10
	48V	A	9
	75V	A	8
	110V	A	2
	220V	A	–
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IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	13
	48V	A	11
	75V	A	10
	110V	A	7
	220V	A	2
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IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	15
	48V	A	15
	75V	A	13
	110V	A	11
	220V	A	6
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IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	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)		m Ω	2.5
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Power dissipation per pole (average value)			
	I_{th}	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	lbin	1.1
	max	lbin	1.5
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1

	min	I _{bin}	0.8
	max	I _{bin}	0.74
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	0
	command circuit	mm	0
	auxiliary circuit	mm	0
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	356
Auxiliary contact characteristics			
Thermal current I _{th}		A	10
IEC/EN 60947-5-1 designation			A600 - Q600
Operating current AC15	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC13	110V	A	0.55
	125V	A	0.55
	220V	A	0.27
	600V	A	0.1
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
Mirror contacts according to IEC/EN 60947-4-1 annex F			Yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	230
AC operating voltage	of 50/60Hz coil powered at 50Hz		

	min	ms	0
	max	ms	0
Opening NO			
	min	ms	0
	max	ms	0
Closing NC			
	min	ms	0
	max	ms	0
Opening NC			
	min	ms	0
	max	ms	0

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

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 - Q600

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

Impact resistance

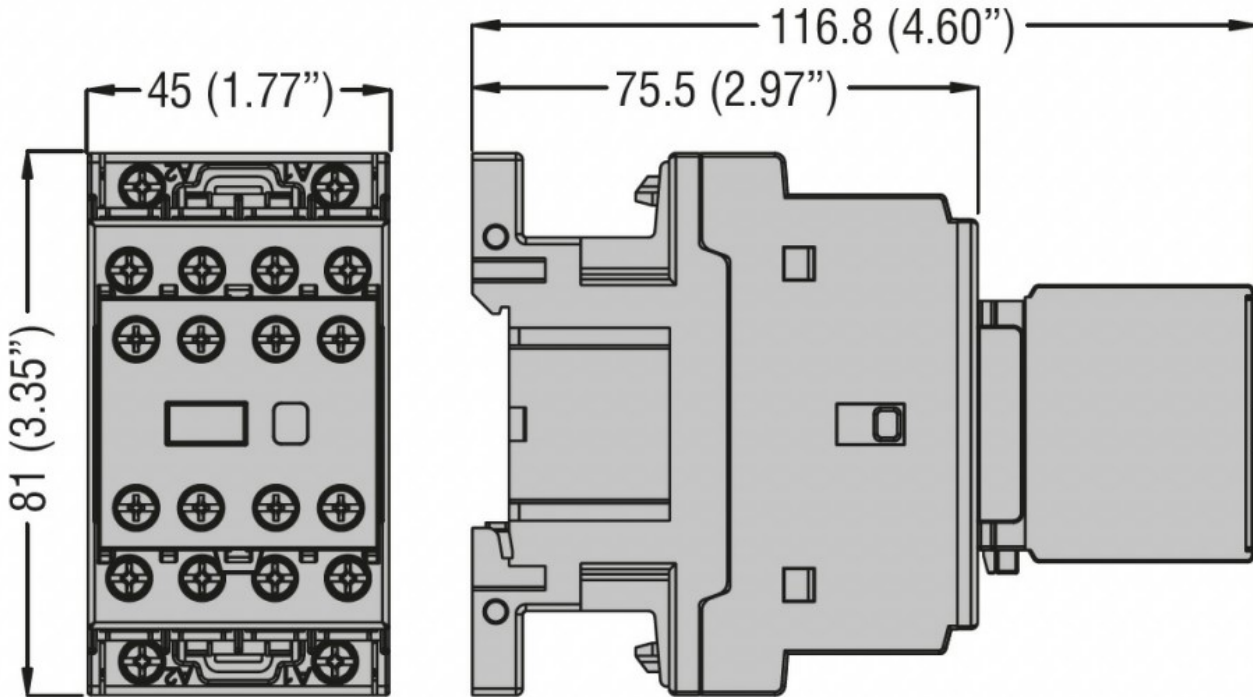
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Vibration resistance

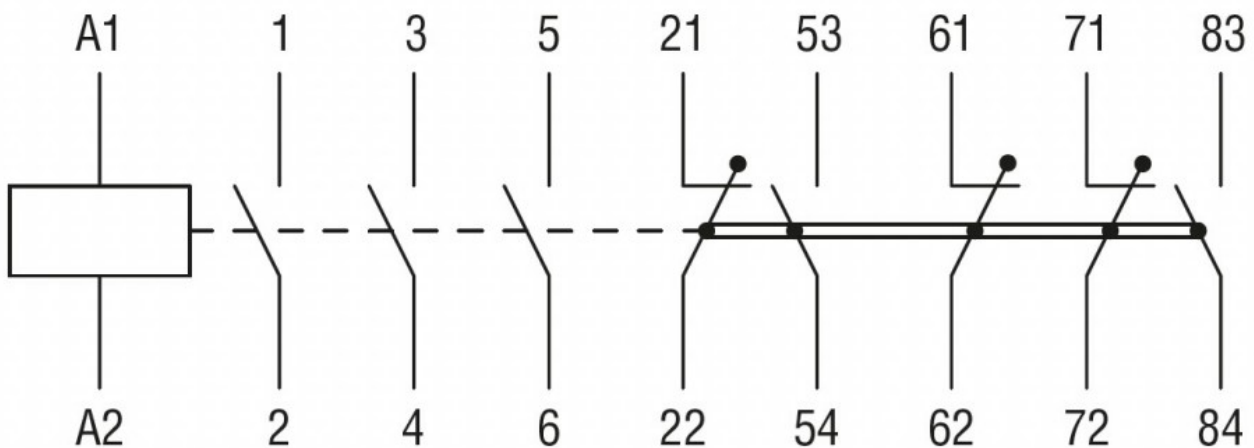
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Special thermic treatments	0
Pollution degree	3
Resistance to flame (GWT)	0
Flame retardant according to UL94	0

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

IEC/EN/BS 60947-5-1

UL 60947-1

UL 60947-4-1

Certificates

cULus

UL listed for USA and Canada

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching