



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	20
Operational current I_e	AC-1 ($\leq 40^\circ C$)	A 20
	AC-1 ($\leq 55^\circ C$)	A 18
	AC-1 ($\leq 70^\circ C$)	A 15
	AC-3 ($\leq 440V \leq 55^\circ C$)	A 9
	AC-4 (400V)	A 4
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW 2.2
	400V	kW 4
	415V	kW 4.3
	440V	kW 4.5
	500V	kW 5
	690V	kW 5
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW 8
	400V	kW 14
	500V	kW 16
	690V	kW 22
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series	$\leq 24V$	A 12
	48V	A 10
	75V	A 4
	110V	A 3
	220V	A —
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series	$\leq 24V$	A 15
	48V	A 14
	75V	A 9
	110V	A 8
	220V	A —
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series	$\leq 24V$	A 16
	48V	A 16
	75V	A 10
	110V	A 10
	220V	A 2
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series		

	≤24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	7
	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
Protection fuse			
	gG (IEC)	A	20
	aM (IEC)	A	10
Making capacity (RMS value)		A	92
Breaking capacity at voltage			
	440V	A	72
	500V	A	72
	690V	A	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC-3	W	0.81
Conductor section			
	AWG/Kcmil		
	max		12
Mechanical features			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	180
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 DC12	110V	A	2.9
Operating current DC13	24V	A	2.9
	48V	A	1.4
	60V	A	1.1
	125V	A	0.3
	220V	A	0.1
	600V	A	0.6

Operations

Mechanical life	cycles	20000000
Electrical life	cycles	500000

Safety related data

Performance level B10d according to EN/ISO 13489-1

	rated load	cycles	500000
	mechanical load	cycles	20000000
EMC compatibility			yes

AC coil operating

Rated AC voltage at 60Hz	V	48
AC operating voltage		
of 60Hz coil powered at 60Hz		
pick-up	min	%Us 75
	max	%Us 115
drop-out	min	%Us 20
	max	%Us 55

AC average coil consumption at 20°C

 of 50/60Hz coil powered at 50Hz

in-rush	VA	30
holding	VA	4

 of 50/60Hz coil powered at 60Hz

in-rush	VA	25
holding	VA	3

 of 60Hz coil powered at 60Hz

in-rush	VA	30
holding	VA	4

Dissipation at holding ≤20°C 50Hz	W	0.95
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Max cycles frequency

Mechanical operation	cycles/h	3600
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Operating times

Average time for U_s control

 in AC

 Closing NO

min ms 12

max ms 21

 Opening NO

in DC	Closing NC	min	ms	9
		max	ms	18
	Opening NC	min	ms	17
		max	ms	26
		min	ms	7
		max	ms	17
	Closing NO	min	ms	18
		max	ms	25
	Opening NO	min	ms	2
		max	ms	3
	Closing NC	min	ms	3
		max	ms	5
	Opening NC	min	ms	11
		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 7.6
	at 600V	A 6.1
Yielded mechanical performance		
for single-phase AC motor	110/120V	HP 0.5
	230V	HP 1.5
for three-phase AC motor	200/208V	HP 2
	220/240V	HP 3
	460/480V	HP 5
	575/600V	HP 5

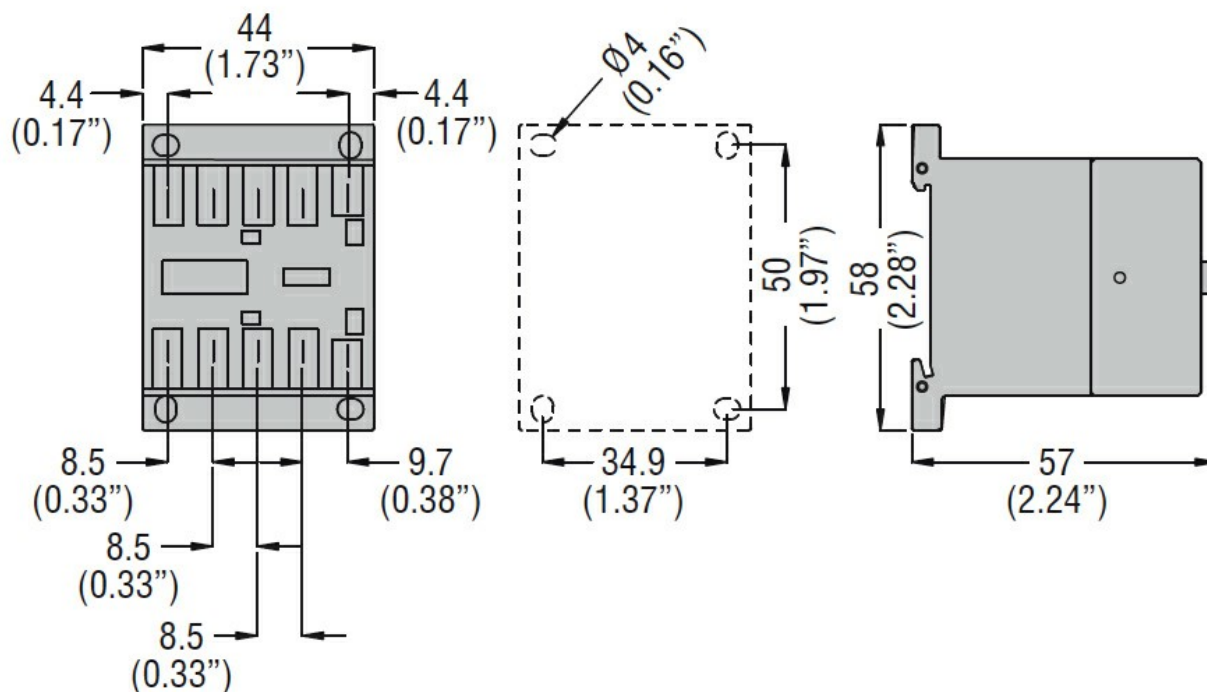
General USE

Contactor	AC current	A	20
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	30
Contact rating of auxiliary contacts according to UL			A600 - Q600

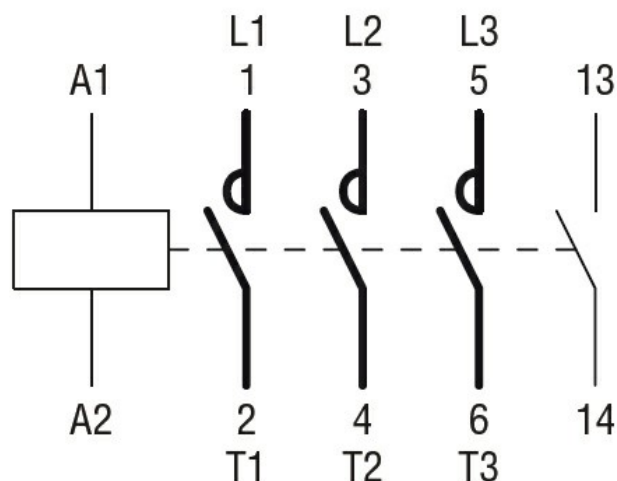
Ambient conditions

Temperature			
Operating temperature	min	°C	-50
	max	°C	+70
Storage temperature	min	°C	-60

	max	°C	+80
Max altitude		m	3000
Resistance & Protection			
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 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching