



Auxiliary
contactor
BG09

Product designation

Product type designation

Contact characteristics

Number of poles	Nr.	4
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}	A	20
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 20
	AC-1 ($\leq 55^\circ\text{C}$)	A 18
	AC-1 ($\leq 70^\circ\text{C}$)	A 15
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 9
	AC-4 (400V)	A 4
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 8
	400V	kW 14
	500V	kW 16
	690V	kW 22
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)	m Ω	10
Power dissipation per pole (average value)	I_{th}	W 4
	AC3	W 0.8
Tightening torque for terminals	min	Nm 0.8
	max	Nm 1
	min	lbin 0.6
	max	lbin 0.7
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	lbin 0.59
	max	lbin 0.74

Max number of wires simultaneously connectable	Nr.	2	
Conductor section	AWG/Kcmil		
	max	12	
Flexible w/o lug conductor section	min	mm ²	0.8
	max	mm ²	2.5
Flexible c/w lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Flexible with insulated spade lug conductor section	min	mm ²	1.5
	max	mm ²	2.5
Power terminal protection according to IEC/EN 60529	IP20		
Mechanical features			
Operating position	normal allowable	Vertical plan ±30°	
Fixing	Screw / DIN rail 35mm		
Weight	g	200	
Conductor section	AWG/kcmil conductor section		
	max	12	
Auxiliary contact characteristics			
Thermal current I _{th}	A	10	
IEC/EN 60947-5-1 designation	Q600		
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	2000000	
Electrical life	cycles	500000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	500000
		cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1	YES		
EMC compatibility	YES		
DC coil operating			
DC rated control voltage	V	24	
DC operating voltage	pick-up		
	min	%U _s	75
	max	%U _s	115
	drop-out		
	min	%U _s	10

Average coil consumption $\leq 20^{\circ}\text{C}$	max	%Us	25
	in-rush	W	3.2
	holding	W	3.2

Max cycles frequency

Mechanical operation	cycles/h	3600
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Operating times

Average time for Us control

in AC

Closing NO	min	ms	12
	max	ms	21
Opening NO	min	ms	9
	max	ms	18
Closing NC	min	ms	17
	max	ms	26
Opening NC	min	ms	7
	max	ms	17

in DC

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

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
220/230V	HP	3
460/480V	HP	5
575/600V	HP	5

General USE

Contactor

AC current	A	20
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Ambient conditions

Temperature

Operating temperature

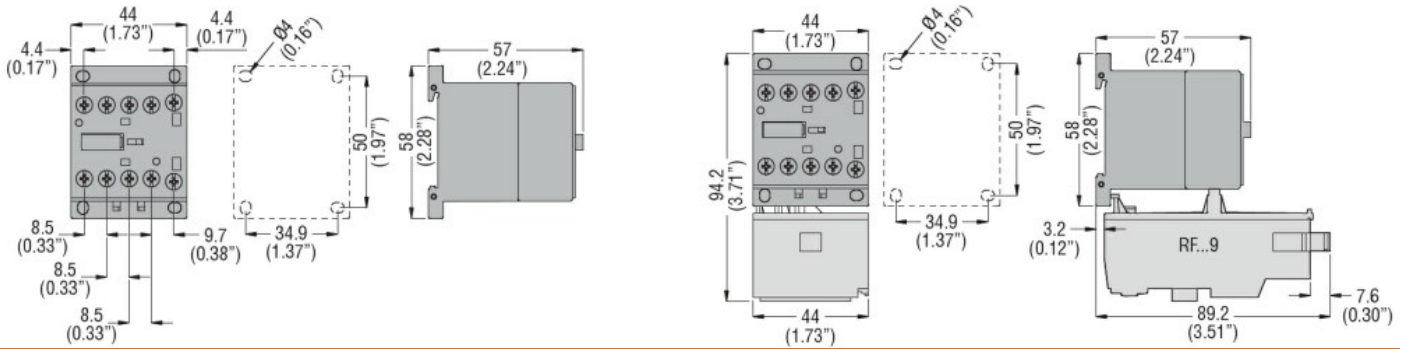
min	$^{\circ}\text{C}$	-50
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Storage temperature	max	°C	+70
	min	°C	-60
Max altitude	max	°C	+80
		m	3000

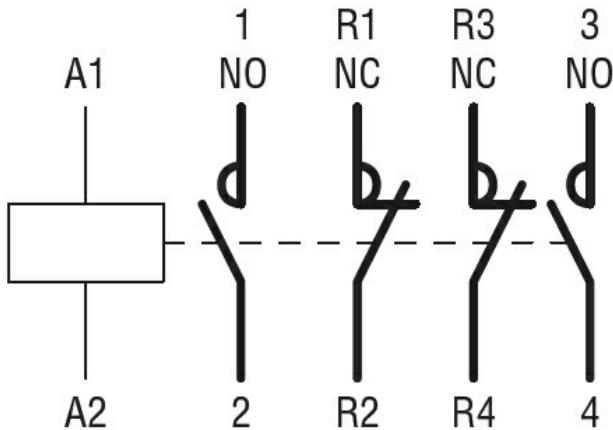
Resistance & Protection

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
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