



Product designation				Auxiliary contactor
Product type designation				BG09
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	
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	
	AC-3	W	0.8	
Tightening torque for terminals	min	Nm	0.8	
	max	Nm	1	
	min	lbin	9	
	max	lbin	9	
Tightening torque for coil terminal	min	Nm	0.8	
	max	Nm	1	
	min	lbin	9	
	max	lbin	9	
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
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
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	%Us 75
		max	%Us 115
drop-out			
		min	%Us 10
		max	%Us 25
Average coil consumption ≤20°C			
		in-rush	W 3.2
		holding	W 3.2
Max cycles frequency			
Mechanical operation			cycles/h 3600
Operating times			
Average time for U _s 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
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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

Contactors

AC current	A	20
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Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

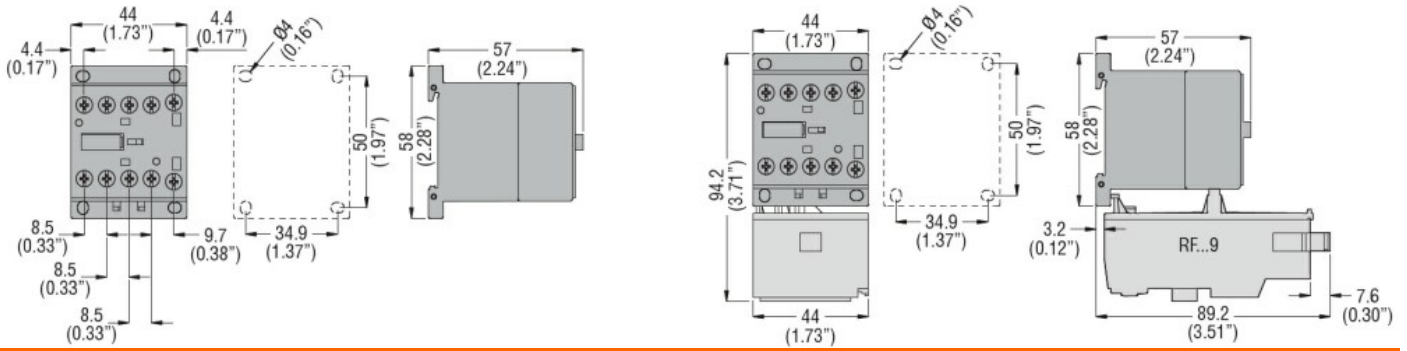
m	3000
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Resistance & Protection

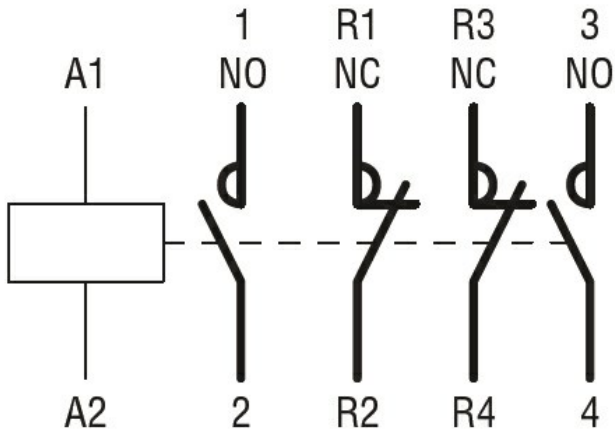
Pollution degree

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