



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 max	Hz Hz 25 400
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ ) AC-1 ( $\leq 55^\circ\text{C}$ ) AC-1 ( $\leq 70^\circ\text{C}$ ) AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ ) AC-4 (400V)	A A A A A 20 18 15 9 4
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V 400V 500V 690V	kW kW kW kW 8 14 16 22
Short-time allowable current for 10s (IEC/EN60947-1)	A	96
Protection fuse	gG (IEC) aM (IEC)	A A 20 10
Making capacity (RMS value)	A	92
Breaking capacity at voltage	440V 500V 690V	A A A 72 72 72
Resistance per pole (average value)	m $\Omega$	10
Power dissipation per pole (average value)	$I_{th}$ AC-3	W W 4 0.8
Tightening torque for terminals	min max min max	Nm Nm lbin lbin 0.8 1 9 9
Tightening torque for coil terminal	min max min max	Nm Nm lbin lbin 0.8 1 9 9
Max number of wires simultaneously connectable	Nr.	2

Conductor section				
AWG/Kcmil				
		max	12	
Flexible w/o lug conductor section				
		min	mm <sup>2</sup>	0.8
		max	mm <sup>2</sup>	2.5
Flexible c/w lug conductor section				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	2.5
Flexible with insulated spade lug conductor section				
		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	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
Auxiliary contact characteristics				
Thermal current I <sub>th</sub>			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
EMC compatibility		YES		
DC coil operating				
DC rated control voltage			V	24
DC operating voltage				
pick-up		min	%U <sub>s</sub>	75
		max	%U <sub>s</sub>	115
drop-out		min	%U <sub>s</sub>	10
		max	%U <sub>s</sub>	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 <sub>s</sub> control in AC				
Closing NO		min	ms	12
		max	ms	21
Opening NO		min	ms	9
		max	ms	18

in DC	Closing NC	min	ms	17
		max	ms	26
	Opening NC	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
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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

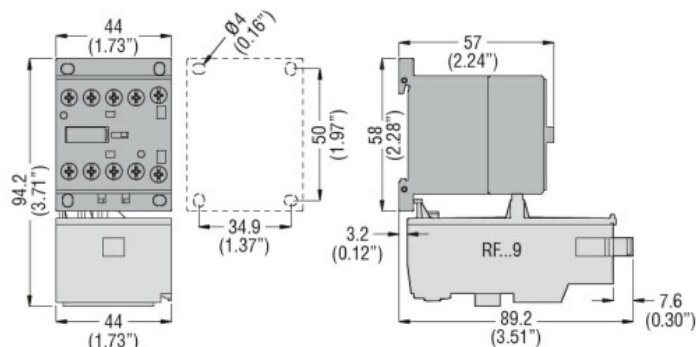
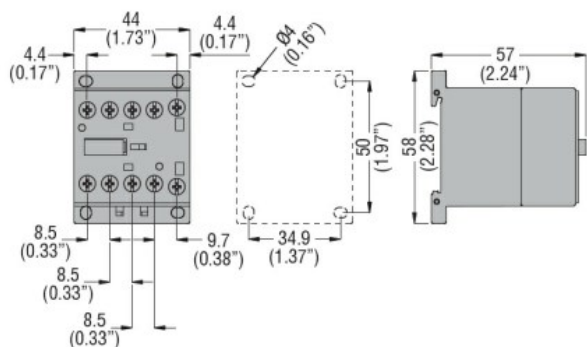
#### Ambient conditions

Temperature	Operating temperature	min	°C	-50
		max	°C	+70
Storage temperature		min	°C	-60
		max	°C	+80
Max altitude		m		3000

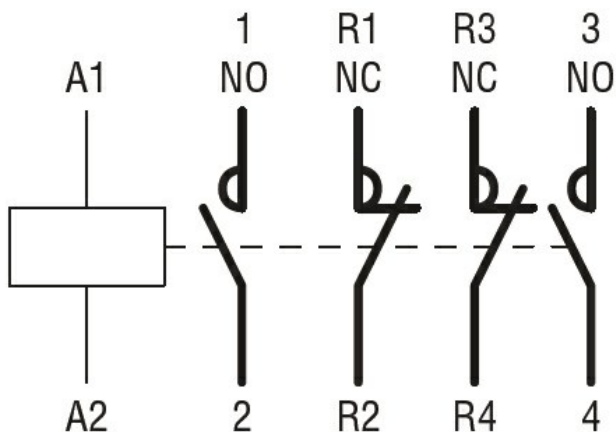
#### Resistance & Protection

Pollution degree	3
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#### 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