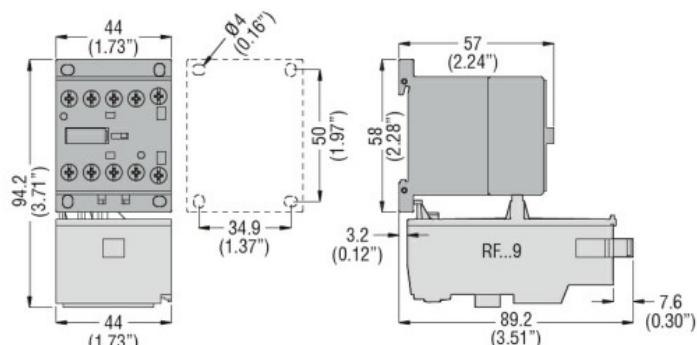
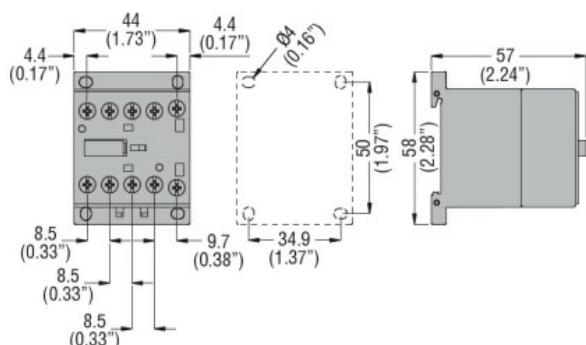




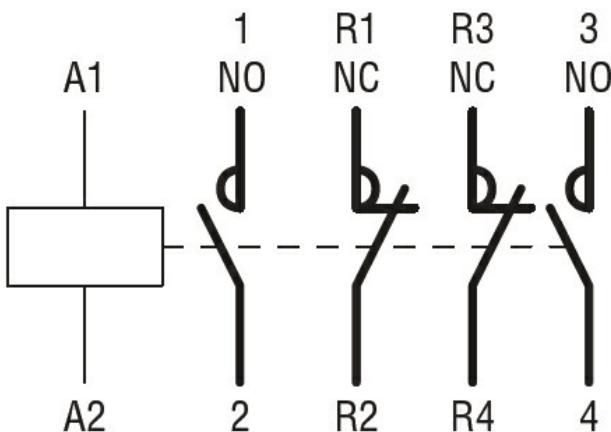
Product designation	Power contactor		
Product type designation	BG09		
<b>Contact characteristics</b>			
Number of poles	Nr.	4	
Rated insulation voltage $U_i$ IEC/EN	V	690	
Rated impulse withstand voltage $U_{imp}$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
Operational current $I_e$			
AC-1 ( $\leq 40^\circ C$ )	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-1 ( $T \leq 40^\circ C$ )	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)		$m\Omega$	10
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	4
	AC-3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	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> 0.75
	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 when properly wired
<b>Mechanical features</b>		
Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	220
<b>Auxiliary contact characteristics</b>		
Thermal current I <sub>th</sub>	A	10
<b>Operations</b>		
Mechanical life	cycles	20000000
Electrical life	cycles	500000
<b>Safety related data</b>		
Performance level B10d according to EN/ISO 13489-1		
	rated load	cycles 500000
	mechanical load	cycles 20000000
EMC compatibility		yes
<b>DC coil operating</b>		
DC rated control voltage	V	220
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
<b>Max cycles frequency</b>		
Mechanical operation		cycles/h 3600
<b>Operating times</b>		
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
<b>UL technical data</b>				
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	
<b>Yielded mechanical performance</b>				
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	
<b>General USE</b>				
Contactor				
	AC current	A	20	
<b>Ambient conditions</b>				
Temperature				
Operating temperature				
	min	°C	-50	
	max	°C	+70	
Storage temperature				
	min	°C	-60	
	max	°C	+80	
Max altitude			m	3000
<b>Resistance &amp; Protection</b>				
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