



Product designation				Power 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)	Ith	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 ²	0.75	
	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 when properly wired

Mechanical features

Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight		g 181
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

AC coil operating

Rated AC voltage at 60Hz V 24

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 $\leq 20^{\circ}\text{C}$ 50Hz	W	0.95
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
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

Ambient conditions

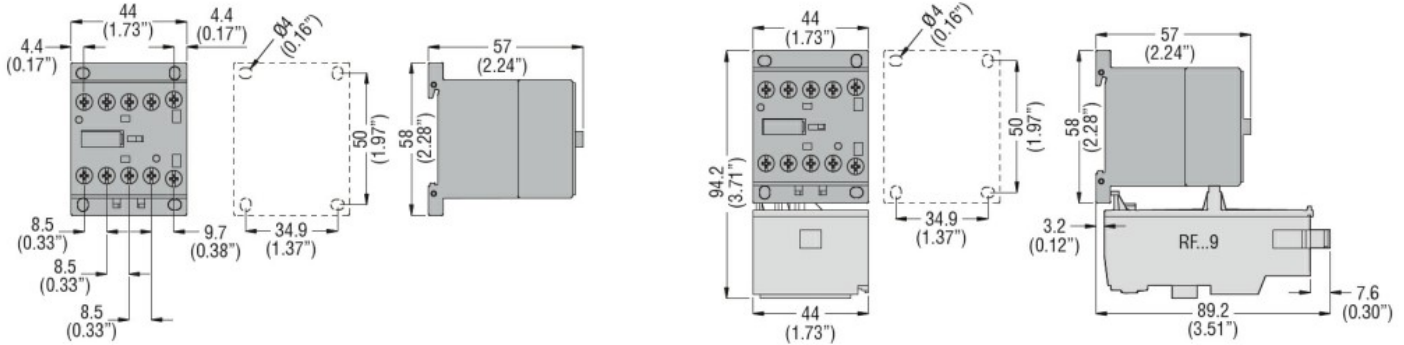
Temperature			
Operating temperature			
	min	$^{\circ}\text{C}$	-50
	max	$^{\circ}\text{C}$	+70
Storage temperature			
	min	$^{\circ}\text{C}$	-60

Max altitude	max	°C	+80
		m	3000

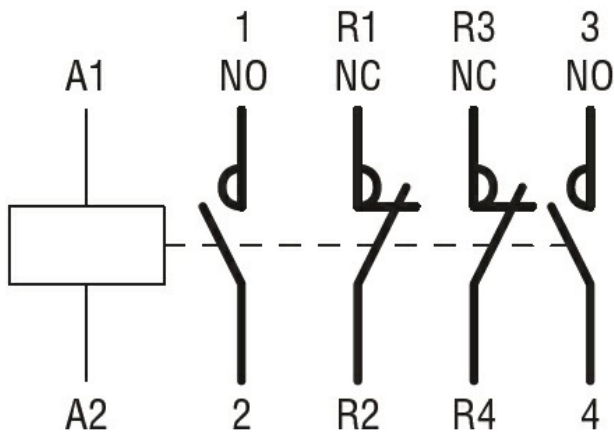
Resistance & Protection

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
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