



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	
IEC Conventional free air thermal current I_{th}	A			20
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	20	
	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	0.81	
Tightening torque for terminals	min	Nm	0.8	
	max	Nm	1	
	min	lbin	0.59	
	max	lbin	0.74	
Tightening torque for coil terminal	min	Nm	0.8	
	max	Nm	1	
	min	lbft	0.8	
	max	lbft	0.74	
Max number of wires simultaneously connectable	nr.			2
Conductor section	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 wired
Mechanical features			
Operating position			
	normal allowable		vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	181
Auxiliary contact characteristics			
Type of contact			1 NA
Thermal current I _{th}		A	10
IEC/EN 60947-5-1 designation			A600
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 50/60Hz, 60Hz			
	min	V	12
	max	V	575
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	75
	max	%Us	115
drop-out	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	115
drop-out	min	%Us	20
	max	%Us	55
AC operating voltage 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

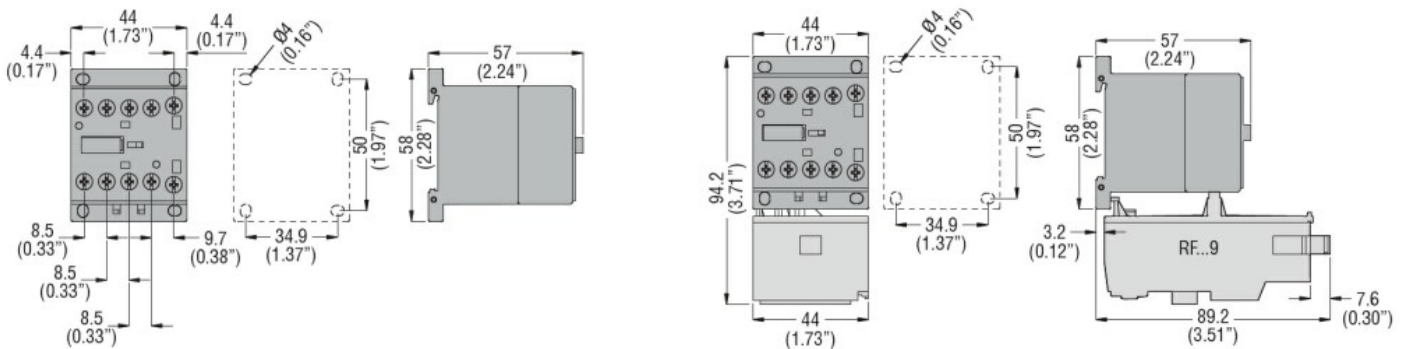
	holding	VA	3
of 60Hz coil powered at 60Hz			
	in-rush	VA	30
	holding	VA	4
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	0.95
DC coil operating			
DC rated control voltage			
	min	V	6
	max	V	480
Average coil consumption $\leq 20^{\circ}\text{C}$			
	in-rush	W	3.2
	holding	W	3.2
Max cycles frequency			
Mechanical operations		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

General USE	575/600V	hp	5
Contactor	AC current	A	20
Ambient conditions			
Temperature	Operating temperature	min	°C -40
		max	°C 60
	Storage temperature	min	°C -55
		max	°C 70
Max altitude		m	3000

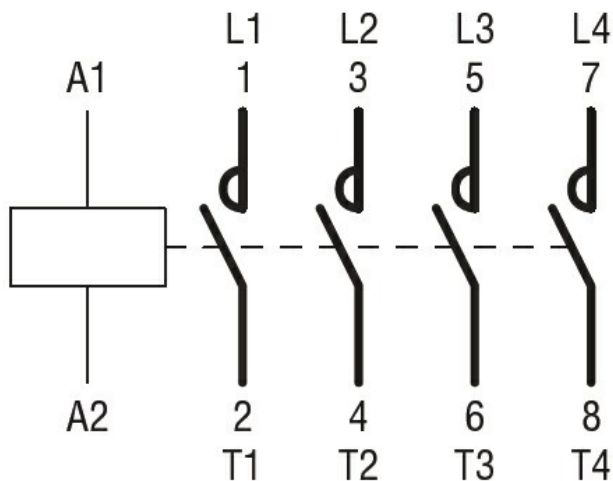
Resistance & Protection

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 6 classification

EC000066 - Power contactor, AC switching