



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
IEC Conventional free air thermal current $I_{th}$	A			20
Operational current $I_e$	AC-1 (=40°C)	A		20
	AC-1 (=55°C)	A		18
	AC-1 (=70°C)	A		15
	AC-3 (=440V =55°C)	A		9
	AC-4 (400V)	A		4
Rated operational power AC-1 (T=40°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)	$I_{th}$	W		4
	AC3	W		0.81
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 <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 wired
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight			g 180
Conductor section			
AWG/kcmil conductor section		max	12
<b>Auxiliary contact characteristics</b>			
Thermal current I <sub>th</sub>		A	10
IEC/EN 60947-5-1 designation			A600
Operating current DC12			
	110V	A	2.9
Operating current DC13			
	24V	A	2.9
	48V	A	1.4
	60V	A	1.1
	125V	A	0.3
	220V	A	0.1
	600V	A	0.6
<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
Mirror contacts according to IEC/EN 60947-4-1			YES
EMC compatibility			yes
<b>AC coil operating</b>			
Rated AC voltage at 60Hz		V	120
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up			
	min	%Us	75
	max	%Us	115
drop-out			
	min	%Us	20

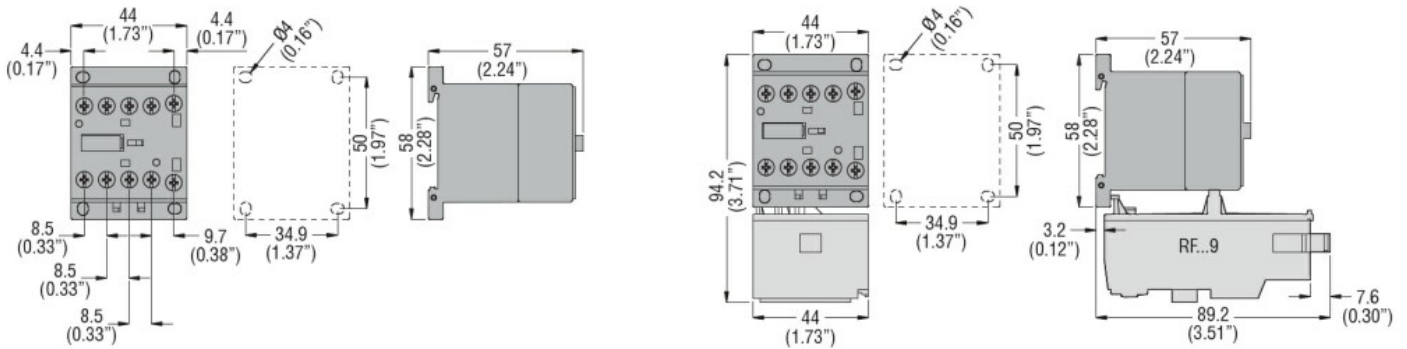
	max	%Us	55
<b>AC average coil consumption at 20°C</b>			
of 50/60Hz coil powered at 50Hz	in-rush	VA	30
	holding	VA	4
<b>of 50/60Hz coil powered at 60Hz</b>			
	in-rush	VA	25
	holding	VA	3
<b>of 60Hz coil powered at 60Hz</b>			
	in-rush	VA	30
	holding	VA	4
Dissipation at holding =20°C 50Hz		W	0.95
<b>Max 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>			
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
General USE	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

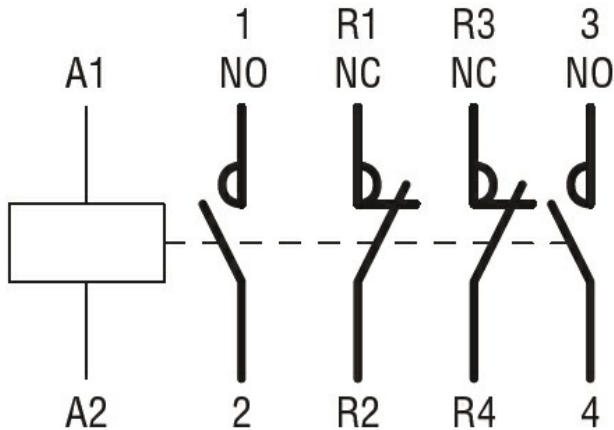
**Resistance & Protection**

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

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching