



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-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)	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 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 180
Conductor section	AWG/kcmil conductor section		
	max	12	
Auxiliary contact characteristics			
Thermal current I _{th}	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
Operations			
Mechanical life	cycles		20000000
Electrical life	cycles		500000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	500000
		cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1	YES		
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 60Hz	V		48
AC operating voltage	of 60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	75
	max	%Us	115
	drop-out		
	min	%Us	20

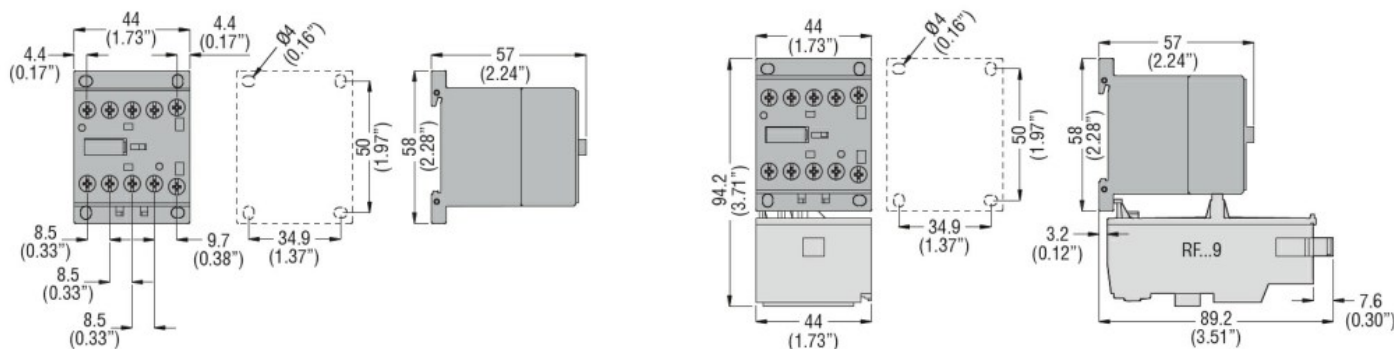
		max	%Us	55
AC average coil consumption at 20°C				
of 50/60Hz coil powered at 50Hz				
	in-rush	VA		30
	holding	VA		4
of 50/60Hz coil powered at 60Hz				
	in-rush	VA		25
	holding	VA		3
of 60Hz coil powered at 60Hz				
	in-rush	VA		30
	holding	VA		4
Dissipation at holding ≤20°C 50Hz			W	0.95
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
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
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	°C	-50
		max	°C	+70
Storage temperature		min	°C	-60
		max	°C	+80
Max altitude			m	3000

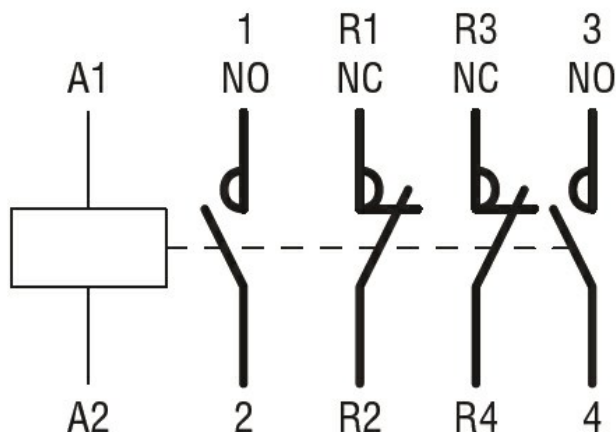
Resistance & Protection

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