



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)	I_{th}	W		4
	AC-3	W		0.81
Tightening torque for terminals	min	Nm		0.8
	max	Nm		1
	min	I_{bin}		9
	max	I_{bin}		9
Tightening torque for coil terminal	min	Nm		0.8
	max	Nm		1
	min	I_{bin}		9
	max	I_{bin}		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 222
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

DC coil operating

DC rated control voltage V 125

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

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
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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

Contactors

AC current	A	20
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Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

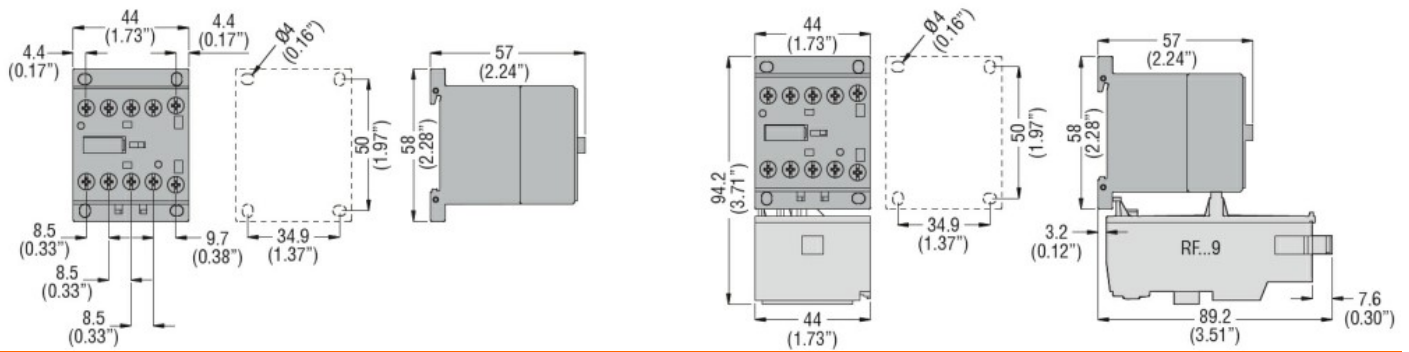
m	3000
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Resistance & Protection

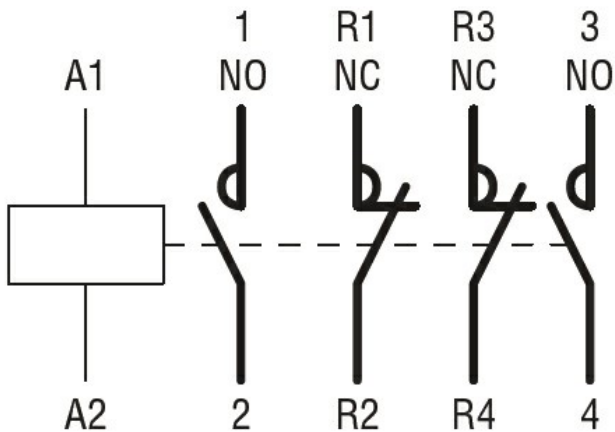
Pollution degree

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