



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?	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	Vertical plan
allowable	±30°

Fixing

 Screw / DIN rail
 35mm

Weight

g 220

Conductor section

AWG/kcmil conductor section	max	12
Auxiliary contact characteristics		
Thermal current Ith	A	10
IEC/EN 60947-5-1 designation		Q600
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	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	220
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DC operating voltage

pick-up	min	%Us	75
	max	%Us	115
drop-out	min	%Us	10
	max	%Us	25

Average coil consumption $\leq 20^{\circ}\text{C}$

in-rush	W	3.2
holding	W	3.2

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
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Ambient conditions

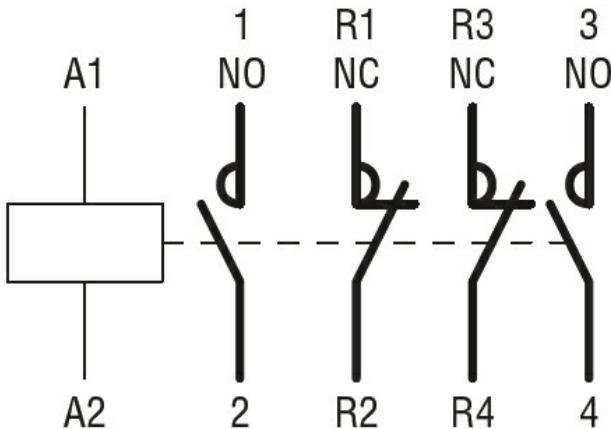
Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature		min °C	-60
		max °C	+80
		m	3000
Max altitude			
Resistance & Protection			
Pollution degree			
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