





Product designation Product type designation			Power contactor BG09
Contact characteristics			2000
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	20
Operational current le			
	AC-1 (≤40°C)	Α	20
	AC-1 (≤55°C)	Α	18
	AC-1 (≤70°C)	Α	15
	AC-3 (≤440V ≤55°C)	Α	9
	AC-4 (400V)	Α	4
Rated operational power AC-3 (T≤55°C)			
	230V	kW	2.2
	400V	kW	4
	415V	kW	4.3
	440V	kW	4.5
	500V	kW	5
	690V	kW	5
Rated operational power AC-1 (T≤40°C)			
	230V	kW	8
	400V	kW	14
	500V	kW	16
	690V	kW	22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	12
	48V	Α	10
	75V	Α	4
	110V	Α	3
	220V	Α	-
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	15
	48V	Α	14
	75V	Α	9
	110V	Α	8
	220V	A	-
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	16
	48V	Α	16
	75V	Α	10
	110V	Α	10





	220V	Α	2
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	16
	48V	Α	16
	75V	Α	10
	110V	A	10
	220V	A	2
IFO	2201	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	_
	≤24V	Α	7
	48V	Α	6
	75V	Α	2
	110V	Α	1
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	10
	48V	Α	10
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		- , ,	0,0
The max current to in 500-500 with E/N = 10m3 with 4 poles in series	≤24V	Α	10
	48V		10
		A	
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	10
Making capacity (RMS value)	()	A	92
Breaking capacity at voltage			<del>-</del>
broaking outputity at voltage	4401/	۸	72
	440V	A	72
	500V	A	72
	690V	Α	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC-3	W	0.81
Tightening torque for terminals			
9 · · · · · · · · · · · · · · · · · · ·	min	Nm	0.8
	max	Nm	
			1
	min	lbin	9
	max	Ibin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9





		max	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section	AMO #4			
	AWG/Kcmil			40
	Flavible w/e lue conductor continu	max		12
	Flexible w/o lug conductor section	min	mama <sup>2</sup>	0.75
		min	mm² mm²	0.75 2.5
	Flexible c/w lug conductor section	max	111111	2.0
	Tiexible C/W lug colludciol section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section		111111	2.0
	Trexible with insulated space rag solidation section	min	mm²	1.5
		max	mm²	2.5
				IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	180
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	acteristics			
Thermal current Ith			A	10
IEC/EN 60947-5-1 de	•			A600 - Q600
Operating current AC	15			
		230V	A	3
			Α	1.9
		400V		
0	40	500V	Α	1.4
Operating current DC	12	500V	Α	1.4
Operating current DC Operating current DC		500V 110V	A A	2.9
		500V 110V 24V	A A	1.4 2.9 2.9
		500V 110V 24V 48V	A A A	1.4 2.9 2.9 1.4
		500V 110V 24V 48V 60V	A A A A	1.4 2.9 2.9 1.4 1.2
		500V 110V 24V 48V 60V 110V	A A A A A	1.4 2.9 2.9 1.4 1.2 0.6
		500V 110V 24V 48V 60V 110V 125V	A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55
		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC		500V 110V 24V 48V 60V 110V 125V	A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55
		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC  Operations  Mechanical life  Electrical life		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC  Operations  Mechanical life  Electrical life  Safety related data	13	500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC  Operations  Mechanical life  Electrical life  Safety related data		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC  Operations  Mechanical life  Electrical life  Safety related data	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000
Operating current DC  Operations  Mechanical life  Electrical life  Safety related data  Performance level B1	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 20000000
Operating current DC  Operations  Mechanical life  Electrical life  Safety related data  Performance level B1	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000





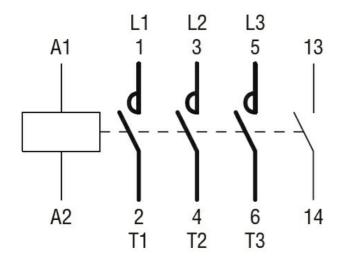
Rated AC voltage at				V	110
C operating voltage		=0.1			
	of 50/60Hz coil po				
		pick-up	min	%Us	75
			max	%Us	75 115
		drop-out	max	7000	110
		20.2p	min	%Us	20
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz			
		pick-up			
			min	%Us	80
		_	max	%Us	115
		drop-out		0/11	
			min	%Us	20 55
C average soil con	aumntion at 20°C		max	%Us	55
C average coil con	of 50/60Hz coil po	owered at 50Hz			
	οι σολοσι τε σοπ ρο	JWOIGU AL JUI IZ	in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil po	owered at 60Hz	9		
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil power	ered at 60Hz			
			in-rush	VA	30
			holding	VA	4
Dissipation at holdin				W	0.95
Max cycles frequenc					0000
Mechanical operatio	n			cycles/h	3600
Operating times					
worden time for Lie	control				
Average time for Us					
verage time for Us	control in AC	Closing NO			
verage time for Us		Closing NO	min	ms	12
verage time for Us		Closing NO	min max	ms ms	12 21
verage time for Us		Closing NO Opening NO	min max	ms ms	12 21
verage time for Us					
verage time for Us		Opening NO	max	ms	21
verage time for Us			max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li></ul>
verage time for Us		Opening NO	max min max min	ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li></ul>
Average time for Us		Opening NO Closing NC	max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li></ul>
Average time for Us		Opening NO	max min max min max	ms ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li></ul>
verage time for Us		Opening NO Closing NC	max min max min max min	ms ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li><li>7</li></ul>
verage time for Us	in AC	Opening NO Closing NC	max min max min max	ms ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li></ul>
Average time for Us		Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li><li>7</li></ul>
Average time for Us	in AC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max min max min max	ms	21 9 18 17 26 7 17
Average time for Us	in AC	Opening NO  Closing NC  Opening NC  Closing NO  Opening NO	max min max min max min max min max min max	ms	21 9 18 17 26 7 17



### Opening NC

	Opening i	NC .			
		min	ms	11	
		max	ms	17	
		IIIdX	1113	17	
UL technical data					
Full-load current (FLA	A) for three-phase AC motor				
		at 480V	Α	7.6	
		at 600V	Α	6.1	
Yielded mechanical p	erformance				
	for single-phase AC motor				
	rer emigre prieser re meter	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					
Johnson UUL	Ocatostan				
	Contactor				
		AC current	Α	20	
Short-circuit protectio	n fuse. 600V				
S Should protootio					
	High fault	<b></b>			
		Short circuit current	kA	100	
		Fuse rating	Α	30	
		Fuse class		J	
	0(11(1)	1 430 61433			
	Standard fault				
		Short circuit current	kA	5	
		Fuse rating	Α	30	
		Fuse class	, ,	RK5	
		Fuse class			
	liary contacts according to UL			A600 - Q	600
Ambient conditions					
Temperature					
remperature					
	Operating temperature				
		min	°C	-50	
		max	°C	+70	
	Storage temperature			-	
	Giorage temperature		۰.	00	
		min	°C	-60	
		max	°C	+80	
Max altitude			m	3000	•
	ion			2300	
Resistance & Protect	IIOII				
Pollution degree				3	
Dimensions					
4.4 (0.17") (0.17") (0.17") (0.17") (0.33") (0.38")	(2.24") (2.24") (3.24") (3.24")	44 (1.73") (1.73") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37")	(2.88)	RF9	
		44 - 5		89.2	-7.6 (0.30")
8.5 (0.33")		(1.73")	-	89.2 (3.51")	(0.30)
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