





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)	A	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
D. I. J. a. a. i'. a. J. a. a. a. A. O. A. (T. (1000))	690V	kW	5
Rated operational power AC-1 (T≤40°C)	0001/	1-107	0
	230V	kW	8
	400V	kW	14
	500V 690V	kW kW	16 22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	090 V	KVV	
TEC THAX CUITETICIE III DC I WILLI L/R > THIS WILL I POLES III SELLES	≤24V	Α	12
	48V	A	10
	75V	A	4
	110V	A	3
	220V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	2201		
120 max can six to in 201 mai 2/( = 1me mai 2 polec in conce	≤24V	Α	15
	48V	A	14
	75V	Α	9
	110V	Α	8
	220V	Α	_
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				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section		2	
		min	mm²	0.75
	Ele Theoret Later and Co	max	mm²	2.5
	Flexible c/w lug conductor section			4.5
		min	mm²	1.5
	Elevible with insulated anade lug conductor section	max	mm²	2.5
	Flexible with insulated spade lug conductor section	min	mm²	1.5
		min	mm²	2.5
		max	111111	IP20 when
Power terminal prote	ction according to IEC/EN 60529			properly wired
Mechanical features				property wired
Operating position				
- F 2. 2 19 P 20111011		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Weight			g	180
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	acteristics	max		12
·	acteristics	max	A	10
Thermal current Ith		max	А	
Thermal current Ith IEC/EN 60947-5-1 de	esignation	max	A	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation			10 A600 - Q600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - Q600
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V 400V	A A	10 A600 - Q600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V 400V	A A	10 A600 - Q600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V	A A A	10 A600 - Q600 3 1.9 1.4 2.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V 400V 500V 110V 24V 48V	A A A A	10 A600 - Q600 3 1.9 1.4 2.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC  Operating current DC  Operating current DC  Electrical life	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15 12 13	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data	esignation 15 12 13 10d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	esignation 15 112 113 10d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000
	esignation 15 12 13 10d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 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 συνουί 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

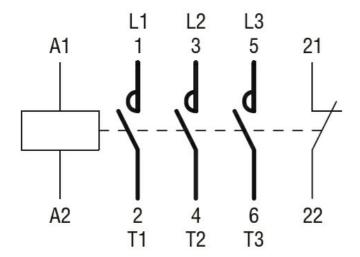


### Opening NC

	Opening in	•			
		min	ms	11	
		max	ms	17	
UL technical data		max	1110		
	\ f== th==== = A O === t==				
Full-load current (FLA	) for three-phase AC motor				
		at 480V	Α	7.6	
		at 600V	Α	6.1	
Yielded mechanical pe	erformance				_
,	for single-phase AC motor				
	ioi siligie-pliase AC filotoi	440/400\/	LID	0.5	
		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	Α	20	
Short-circuit protection	n fuse. 600V				
3 3 5 protocilor	High fault				
	riigiriadit	Short circuit current	LΛ	100	
			kA		
		Fuse rating	Α	30	
		Fuse class		J	
	Standard fault				
		Short circuit current	kA	5	
		Fuse rating	Α	30	
		Fuse class		RK5	
Contact rating of auxili	iary contacts according to UL	1 400 01400		A600 - C	2600
	lary contacts according to OL			A000 - C	2000
Ambient conditions					
Temperature					
	Operating temperature				
		min	°C	-50	
		max	°C	+70	
	Storage temperature				
	Storago tomporatoro	min	°C	-60	
			°C		
		max		+80	
Max altitude			m	3000	
Resistance & Protection	on				
Pollution degree				3	
Dimensions					
4.4 (0.17") (0.17")	57 (2.24")	(1.73")	(2.	57 ————————————————————————————————————	
(0.17) <del>0</del> 0 0	(2.24)	<b>⊕ ⊕ ⊕ ⊕</b>	37		
	50 (1.97") (2.28")	050	(2.28")		
<b>⊕ ⊕ ⊕ ⊕</b>	(1.97) (2.28)		9		
0 H H Q		(3.71) (3.74) (3.74) (3.74)			^
(0.33") 9.7 (0.38")	- 34.9 -	3.2 (1.37") 3.2 (0.12)		RF9	
8.5	(1.37")	(0.12	'  \		
(0.33")			-	90.2	7.6 (0.30")
8.5 (0.33")		(1.73")	-	89.2 (3.51")	(0.30")
Wiring diagrams					

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT



#### 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