





Product designation			Power contactor BG09
Product type designation  Contact characteristics			БСОЭ
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		IX V	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	Пах	A	20
Operational current le			
operational current to	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)	7.6 1 (1001)		
Traise sporalisma power 718 8 (1-55 8)	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)			
1 1 - ( /)	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	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	A	10
	110V	A	10
	220V	A	2
IFO	220 V	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	Α	8
	75V	A	5
	110V	A	4
150	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			,
	≤24V	Α	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	Α	0,8
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	10
Making capacity (RMS value)		Α	92
Breaking capacity at voltage			
	440V	Α	72
	500V	A	72
	690V	A	72
Posietaneo por polo (avorago valuo)	090 v		
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			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	Ibin	9
Tightening torque for coil terminal	11107		<del>-</del>
Tighterning torque for conficilitial	min	Nm	0.8
	min		
	max	Nm	1
	min	lbin	9





		max	lbin	9
	simultaneously connectable		Nr.	2
Conductor section	A1110 // C			
	AWG/Kcmil			4.0
	Florible w/s live soundwater costing	max		12
	Flexible w/o lug conductor section	min	mana <sup>2</sup>	0.75
		min	mm² mm²	0.75 2.5
	Flexible c/w lug conductor section	max	111111	2.0
	Trexible C/W rug conductor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section			2.0
	Tionible Will illediated opade rag confidence coolien	min	mm²	1.5
		max	mm²	2.5
				IP20 when
Power terminal protec	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	182
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	•		A	10 A600 - Q600
	•	0001		A600 - Q600
IEC/EN 60947-5-1 de	•	230V	A	A600 - Q600 3
IEC/EN 60947-5-1 de	•	400V	A A	A600 - Q600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	15		A	A600 - Q600 3
IEC/EN 60947-5-1 de	15	400V 500V	A A A	A600 - Q600 3 1.9 1.4
Operating current DC	12	400V	A A	A600 - Q600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	12	400V 500V 110V	A A A	A600 - Q600 3 1.9 1.4 2.9
Operating current DC	12	400V 500V 110V 24V	A A A	A600 - Q600 3 1.9 1.4 2.9
Operating current DC	12	400V 500V 110V 24V 48V	A A A A	A600 - Q600 3 1.9 1.4 2.9 2.9
Operating current AC	12	400V 500V 110V 24V 48V 60V	A A A A A	A600 - Q600  3 1.9 1.4 2.9 2.9 1.4 1.2
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.2 0.6
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - Q600  3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.2 0.6
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	A600 - Q600  3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC Operating current DC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	A600 - Q600  3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	A600 - Q600  3 1.9 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	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	A600 - Q600  3 1.9 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	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	A600 - Q600  3 1.9 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	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	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
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	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
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	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  500000





Rated AC voltage at				V	230
AC operating voltage					
	of 50/60Hz coil po				
		pick-up	min	%Us	75
			max	%Us	75 115
		drop-out	Пах	7000	110
			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 car			max	%Us	55
C average coil con	of 50/60Hz coil po	owered at 50Hz			
	οι συλουί τε σοιί μο	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 frequent				. "	0000
Mechanical operatio	n			cycles/h	3600
Operating times  Average time for Us	control				
werage unie ioi os	in AC				
	111710	Closing NO			
		Closing IVC	min	ms	12
		Clossing IVC	min max	ms ms	12 21
		Opening NO			
		-			9
		Opening NO	max	ms	21
		-	max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li></ul>
		Opening NO	max min max min	ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li></ul>
		Opening NO Closing NC	max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li></ul>
		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>
		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>
	in DC	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>
	in DC	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>
	in DC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
	in DC	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>
	in DC	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
	in DC	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
	in DC	Opening NO  Closing NC  Opening NC  Closing NO  Opening NO	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
	in DC	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 18 25 2 3
	in DC	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

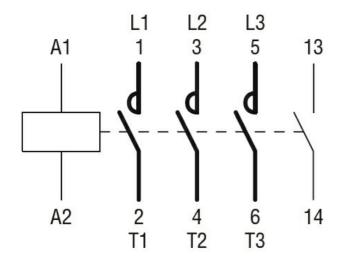


### Opening NC

	Opening	NC		
		min	ms	11
		max	ms	17
		IIIdX	1115	17
UL technical data				
Full-load current (FLA	) for three-phase AC motor			
(	,, p	at 480V	۸	7.6
			Α	7.6
		at 600V	Α	6.1
Yielded mechanical p	erformance			
	for single-phase AC motor			
		110/120V	HP	0.5
		230V	HP	1.5
	for three-phase AC motor			
	for three-phase AC motor			_
		200/208V	HP	2
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	5
General USE				
	Contactor			
	Contactor	<b>A.O.</b>	Α.	00
		AC current	Α	20
Short-circuit protection	n fuse, 600V			
·	High fault			
	riigiriadit	01 - 4 - 2 - 2 - 2 - 2 - 2 - 2		400
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Otan dand famili	1 400 01400		
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	30
Contact rating of auxil	iary contacts according to UL			A600 - Q600
	lary contacts according to OL			A600 - Q600
Ambient conditions				
Temperature				
, , , , , , , , , , , , , , , , , , , ,	Operating temperature			
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
	Otorage temperature		۰.	00
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
	ion		111	3000
Resistance & Protecti	ion			
Pollution degree				3
Dimensions				
(1.73") 4.4 (0.17")	6.5	(1.73") O <sup>N</sup> .6		E7 -
(0.17")	57 (2.24")		(2.	57 ————————————————————————————————————
(0.17")	(2.24")		3	
	U)			
	(1.97") 58 (2.28")	026	(2.28")	
	(1.97 (2.28		0	
<b>***</b>	G G		6	
о в в ф (ф				
(0.33")	34.9 (1.37")	3.2- (1.37") 3.2- (0.12"	) -	RF9
	(1.57)	(0.12	,	
(0.33")		·	L	7.6
8.5		44	_	89.2 (3.51") -7.6 (0.30")
(0.33")		(1.73")		(0.01)
Wiring diagrams				

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 230VAC, 1NO 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