





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 CUITETIC TE HT DC T WITH L/R > THIS WITH T POIES HT SETIES	≤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	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	220 V		
TEO MAX current le in 200-200 with E/K = 15ms with 1 poles in series	≤24V	Α	7
	≤24 V 48 V		
		A	6
	75V	A	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	Α	5
	110V	Α	4
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	10
	48V	A	10
	75V		
		A	6
	110V	A	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	Α	10
	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)	uii (i20)	A	92
Breaking capacity at voltage			JZ
Dicaking capacity at voltage	44017	۸	70
	440V	A	72
	500V	A	72
	690V	Α	72
Desistance menuals (evenese valva)		mΩ	10
	lth	W	4
Power dissipation per pole (average value)	Ith AC-3	W W	4 0.81
Power dissipation per pole (average value)			
Power dissipation per pole (average value)			
Power dissipation per pole (average value)	AC-3	W Nm	0.81
Power dissipation per pole (average value)	AC-3 min max	W Nm Nm	0.81 0.8 1
Power dissipation per pole (average value)	AC-3 min max min	W Nm Nm Ibin	0.81 0.8 1 9
Power dissipation per pole (average value) Tightening torque for terminals	AC-3 min max	W Nm Nm	0.81 0.8 1
Power dissipation per pole (average value) Tightening torque for terminals	Min max min max	Nm Nm Ibin Ibin	0.81 0.8 1 9
Power dissipation per pole (average value) Tightening torque for terminals	AC-3 min max min max	W Nm Nm Ibin Ibin	0.81 0.8 1 9 9
Resistance per pole (average value) Power dissipation per pole (average value) Tightening torque for terminals Tightening torque for coil terminal	Min max min max	Nm Nm Ibin Ibin	0.81 0.8 1 9





		max	lbin	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 inculated anode lug conductor coction	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	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	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	24
C operating voltage		= 0.1			
	of 50/60Hz coil po				
		pick-up	min	%Us	75
			max	%Us	75 115
		drop-out	max	7003	110
		arop cut	min	%Us	20
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz			
	·	pick-up			
			min	%Us	80
			max	%Us	115
		drop-out			
			min	%Us	20
			max	%Us	55
C average coil con					
	of 50/60Hz coil po	owered at 50Hz		,	
			in-rush	VA	30
	. (50/001 !		holding	VA	4
	of 50/60Hz coil po	owered at 60Hz		\/A	25
			in-rush	VA VA	25 3
	of 60Hz goil now	arad at 60U-7	holding	VA	<u>ა</u>
	of 60Hz coil powe	ered at 60H2	in-rush	VA	30
			holding	VA	4
Dissipation at holding			Holding	W	0.95
Max cycles frequenc				VV	0.00
Mechanical operation				cycles/h	3600
Operating times				, , , , , , , , , , , , , , , , , , , ,	
verage time for Us	control				
-					
	in AC				
		Closing NO			
		Closing NO	min	ms	12
			min max	ms ms	12 21
		Closing NO Opening NO	max	ms	21
			max min	ms ms	9
		Opening NO	max	ms	21
			max min max	ms ms ms	21918
		Opening NO	max min max min	ms ms ms	2191817
		Opening NO Closing NC	max min max	ms ms ms	21918
		Opening NO	max min max min max	ms ms ms ms	219181726
		Opening NO Closing NC	max min max min max min	ms ms ms ms	2191817267
	in AC	Opening NO Closing NC	max min max min max	ms ms ms ms	219181726
		Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms	2191817267
	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
	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
	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
	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
	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 ms ms ms	21 9 18 17 26 7 17
	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 18 25
	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 18 25

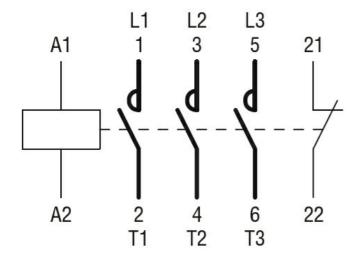


Opening NC

	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 sirodit protootio					
	High fault				
		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") (4.61) (5.24")	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					

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 24VAC, 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