

Product designation			Power contactor
Product type designation			BG09
Contact characteristics			
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	A	20	
Operational current Ie	AC-1 (≤40°C)	A	20
	AC-3 (≤440V ≤55°C)	A	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
	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 Ie in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A	12
	48V	A	10
	75V	A	4
	110V	A	3
	220V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	–
IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	7
	48V	A	6

	75V	A	2
	110V	A	1
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
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)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	Prodotti finiti
	max	Ibin	Prodotti finiti
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
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	mm²	1.5
	max	mm²	2.5
Power terminal protection according to IEC/EN 60529			IP20 when wired
Mechanical features			
Operating position		normal allowable	Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	179
Auxiliary contact characteristics			
Type of contact			1 NO
Thermal current Ith		A	10
IEC/EN 60947-5-1 designation			A600 - Q600
Operating current AC15		230V 400V 500V	A A A 3 1.9 1.4
Operating current DC12		110V	A 2.9
Operating current DC13		24V 48V 60V 110V 125V 220V 600V	A A A A A A A 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	500000
Safety related data			
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles cycles 500000 20000000
Mirror contats according to IEC/EN 609474-4-1			Yes
EMC compatibility			Yes
Rated AC voltage at 60Hz		V	24
AC coil operating			
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up		min max	%Us %Us 75 115
drop-out		min max	%Us %Us 20 55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz		in-rush holding	VA VA 30 4
of 50/60Hz coil powered at 60Hz		in-rush	VA 25

		holding	VA	3
of 60Hz coil powered at 60Hz				
		in-rush	VA	30
		holding	VA	4
Dissipation at holding ≤20°C 50Hz			W	0.95
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
Short-circuit protection fuse, 600V				
High fault				
		Short circuit current	kA	100

		Fuse rating	A	30
		Fuse class		J
Standard fault				
		Short circuit current	kA	5
		Fuse rating	A	30
Contact rating of auxiliary contacts according to UL				A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
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