



Product designation			Power contacto
Product type designation			BG12
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		Α	20
Operational current le			-
	AC-1 (≤40°C)	А	20
	AC-1 (≤55°C)	A	18
	AC-1 (≤70°C)	A	15
	AC-3 (≤440V ≤55°C)	A	12
	AC-4 (400V)	A	4.8
Rated operational power AC-3 (T≤55°C)			
	230V	kW	3.2
	400V	kW	5.7
	415V	kW	6.2
	440V	kW	5.5
	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
EC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
· ·	≤24V	А	12
	48V	А	10
	75V	А	4
	110V	А	3
	220V	А	_
EC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
'	≤24V	А	15
	48V	A	14
	75V	А	9
	110V	А	8
	220V	А	_
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	16
	48V	A	16
	75V	Α	10



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	220V	А	2
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	_
	48V	А	_
	75V	А	-
	110V	А	-
	220V	Α	_
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series			
	≤24V	А	7
	48V	А	6
	75V	А	2
	110V	А	1
	220V	А	-
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	≤24V	А	8
	48V	Α	8
	75V	А	5
	110V	Α	4
	220V	А	-
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series			
	≤24V	А	10
	48V	А	10
	75V	А	6
	110V	А	5
	220V	Α	0,8
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series			
	≤24V	Α	-
	48V	А	-
	75V	Α	-
	110V	А	_
	220V	А	-
Short-time allowable current for 10s (IEC/EN60947-1)		А	96
Protection fuse			
	gG (IEC)	А	20
	aM (IEC)	А	16
Making capacity (RMS value)		А	120
Breaking capacity at voltage			
	440V	А	96
	500V	А	72
	690V	А	72

	690 V	A	12
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC-3	W	1.44
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9



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		max	lbin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil	mov		12
	Elevible w/e lug conductor postion	max		12
	Flexible w/o lug conductor section	min	mm²	0.75
		max	mm²	2.5
	Flexible c/w lug conductor section	IIIdx		2.0
		min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section	IIIdx		2.0
	The side with insulated space has conductor section	min	mm²	1.5
		max	mm²	2.5
		max		IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				Propony milou
Operating position				
oporating pooliton		normal		Vertical plan
		allowable		±30°
				Screw / DIN rai
Fixing				35mm
Weight			g	175
Conductor section			0	
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	acteristics			
Thermal current Ith			А	10
IEC/EN 60947-5-1 de	esignation			A600 - Q600
Operating current AC				
		230V	А	3
		400V	А	1.9
			^	
		500V	A	1.4
Operating current DC	12	500V	A	1.4
Operating current DC	12	500V 110V	A	2.9
Operating current DC Operating current DC				
		110V	A	2.9
		110V 24V	A	2.9 2.9
		110V 24V 48V	A A A	2.9 2.9 1.4 1.2
		110V 24V 48V 60V	A A A A	2.9 2.9 1.4 1.2 0.6
		110V 24V 48V 60V 110V	A A A A A	2.9 2.9 1.4 1.2
		110V 24V 48V 60V 110V 125V	A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55
Operating current DC		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC Operations Mechanical life		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC Operations Mechanical life Electrical life		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data	13	110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data		110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	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	13 I0d according to EN/ISO 13489-1	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000
Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	13 10d according to EN/ISO 13489-1 med	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000 500000 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	13 I0d according to EN/ISO 13489-1	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

Rated AC voltage at 5	0/60Hz			V	48
AC operating voltage					
	of 50/60Hz coil p	powered at 50Hz			
		pick-up			
			min	%Us	75
			max	%Us	115
		drop-out			
			min	%Us	20
	(= 0 / 0 0		max	%Us	55
	of 50/60Hz coll p	powered at 60Hz			
		pick-up		0/11-	0.0
			min	%Us	80
		drop out	max	%Us	115
		drop-out	min	%Us	20
			max	%Us	55
AC average coil consi	imption at 20°C		Шах	/003	55
		powered at 50Hz			
			in-rush	VA	30
			holding	VA VA	4
	of 50/60Hz coil r	powered at 60Hz	noiding	V/ \	
	0.00/00/12 00/1		in-rush	VA	25
			holding	VA	3
	of 60Hz coil pow	vered at 60Hz			-
	0. 00. <u>-</u> 00. po.		in-rush	VA	30
			holding	VA	4
Dissipation at holding	≤20°C 50Hz			W	0.95
Max cycles frequency					
				cycles/h	3600
Mechanical operation				cycles/h	3600
Mechanical operation Operating times				cycles/h	3600
Mechanical operation Operating times				cycles/h	3600
Mechanical operation Operating times	ontrol	Closing NO		cycles/h	
Mechanical operation Dperating times	ontrol	Closing NO	min	cycles/h ms	12
Mechanical operation Operating times	ontrol		min max		
Mechanical operation Operating times	ontrol	Closing NO Opening NO	max	ms ms	12 21
Mechanical operation Operating times	ontrol		max	ms ms ms	12 21 9
Mechanical operation Operating times	ontrol	Opening NO	max	ms ms	12 21
Mechanical operation Operating times	ontrol		max min max	ms ms ms ms	12 21 9 18
Mechanical operation Operating times	ontrol	Opening NO	max min max min	ms ms ms ms ms	12 21 9 18 17
Mechanical operation Operating times	ontrol	Opening NO Closing NC	max min max	ms ms ms ms	12 21 9 18
Mechanical operation Operating times	ontrol	Opening NO	max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26
Mechanical operation Operating times	ontrol	Opening NO Closing NC	max min max min max min	ms ms ms ms ms ms ms	12 21 9 18 17 26 7
Mechanical operation Operating times	ontrol in AC	Opening NO Closing NC	max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26
Mechanical operation Operating times	ontrol	Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms ms	12 21 9 18 17 26 7
Mechanical operation Operating times	ontrol in AC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Mechanical operation Operating times	ontrol in AC	Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 18
Mechanical operation Operating times	ontrol in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Mechanical operation Operating times	ontrol 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	12 21 9 18 17 26 7 17 18 25
Mechanical operation Operating times	ontrol 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 ms	12 21 9 18 17 26 7 17 17 18 25 2
Mechanical operation Operating times	ontrol in AC	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	12 21 9 18 17 26 7 17 18 25
Mechanical operation Operating times	ontrol 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 ms ms	12 21 9 18 17 26 7 17 18 25 2 3
Mechanical operation Operating times Average time for Us c	ontrol in AC	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 ms	12 21 9 18 17 26 7 17 17 18 25 2

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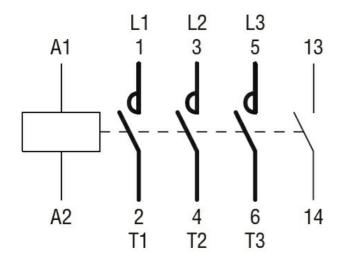


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Opening NC

	Opening N	IC		
		min	ms	11
		max	ms	17
UL technical data		IIIdx	1113	17
Full-load current (FLA) for three-phase AC motor			
		at 480V	Α	11
		at 600V	А	11
Yielded mechanical pe	erformance			
	for single-phase AC motor			
		110/120V	HP	0.5
		230V	HP	1.5
	for three-phase AC motor			
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
	Contactor			
		AC current	А	20
Short-circuit protection	$p_{\rm fuse} = 600V$			20
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
	Olandara ladit	Short circuit current	kA	5
		Fuse rating	А	30
		Fuse class		RK5
	iary contacts according to UL			A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
	eponamig temperature	min	°C	-50
			°C	
		max	U	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree				3
				5
Dimensions				
$\begin{array}{c} 44 \\ 4.4 \\ (0.17") \\ (0.17") \\ (0.17") \\ (0.33") \\ 8.5 \\ (0.33") \\ 8.5 \\ (0.33") \\ 8.5 \\ (0.33") \\ 8.5 \\ (0.33") \\ 8.5 \\ (0.33") \\ (0.38") $	57 (2.24") (2.		(2.28") 5	RF9 -7.6 -7.6 (0.30")
8.5 (0.33")		44 — 44 (1.73")		
Wiring diagrams				





Certifications and compliance

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