



## THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT



Product designation		Power contactor
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
Conventional free air thermal current Ith IEC/EN	Α	20
Operational current le		
AC-1 (≤40°C)	Α	20
AC-3 (≤440V ≤55°C)	Α	12
AC-4 (400V)	Α	4.8
Rated operational power AC-1 (T≤40°C)		
230V	kW	8
400V	kW	14
500V	kW	16
690V	kW	22
Rated operational power AC-3 (T≤55°C)		
230V	kW	3.2
400V	kW	57
415V	kW	6.2
440V	kW	5.5
500V	kW	5
690V	kW	5
Short-time allowable current for 10s (IEC/EN60947-1)	Α	96
Protection fuse		
gG (IEC)	Α	20
aM (IEC)	Α	16
Making capacity (RMS value)	Α	120
Breaking capacity at voltage		
440V	Α	96
500V	Α	72
690V	Α	72
Resistance per pole (average value)	mΩ	10
Power dissipation per pole (average value)		
Power dissipation pole (average value) Ith	W	4
AC3	W	1.44
Tightening torque for terminals		
min	Nm	0.8
max	Nm	1
min	lbft	0.59
max	lbft	0.74
Tightening torque for coil terminal	IDIL	0.74





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		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
Maria de la confesiona	See Heave of the control to	max	lbft	0.74
	simultaneously connectable		nr.	2
Conductor section	AVA/O			
	AWG			4.0
		min		18
	Clavible w/s lug conductor costion	max		12
	Flexible w/o lug conductor section	min	mm²	0.75
		max	mm²	2.5
	Flexible c/w lug conductor section	IIIdA	111111	2.5
	r lexible c/w lug corludctor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug con-		111111	2.5
	Trexible with insulated space lug con-	min	mm²	1.5
		max	mm²	2.5
Power terminal protec	tion according to IEC/EN 60529	Пах		IP20 when wired
Auxiliary contact chara				II 20 WICH WICC
Type of contact				1 NO
Thermal current Ith			Α	10
IEC/EN 60947-5-1 des	signation			A600 - Q600
Operational current le			Α	20
Operating current AC1				
Operating current AO	3	230V	Α	3
		400V	A	1.9
		500V	A	1.4
Operating current DC1	2	2001		
operating carrent be	-	110V	Α	2.9
Operating current DC1	3			
3		24V	Α	2.9
		48V	Α	1.4
		60V	Α	1.1
		110V	Α	Screw / DIN rail
		40514	Λ	35mm
		125V 220V	A	0.3
		600V	A A	0.1 0.6
Ambient conditions		000 V	A	0.0
Temperature				
romporaturo	Operating temperature			
	Sporating temperature	min	°C	-40
		max	°C	60
	Storage temperature	ax		
	Ciorago temporaturo	min	°C	-55
		max	°C	70
Max altitude			m	3000
Operational position				<u> </u>
1		Operating position normal		Vertical plan
		Operating position allowable		±30°
NA C.		, 5, 11 11 11 11 11 11 11 11 11 11 11 11 11		Screw / DIN rail
Mounting				35mm
Weight			g	0.177
<del>_</del>				





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Operation					
Electrical life	Operations			Oveler	0000000
Performance level B10d according to EN/ISO 13489-1   rated load mechanical					
Performance level B10d according to EN/ISO 13489-1   rated load   Cicil   500000   mechanical load   Cicil   500000   cicil   20000000   mechanical load   Cicil   20000000   cicil   200000000   cicil   20000000   cicil   20000000   cicil   20000000   cicil   20000000   cicil   20000000   cicil   20000000   cicil   200000000   cicil   200000000   cicil   200000000   cicil   200000000   cicil   200000000   cicil   200000000   cicil   20000000000   cicil   2000000000   cicil   2000000000   cicil   200000000000   cicil   200000000000000   cicil   200000000000000000000000000000000000				Cycles	500000
Prizet load   Cicil   500000		Od according to EN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1	i enomiance level bit	od according to Environ 19409-1	rated load	Cicli	500000
Mirror contats according to IEC/EN 609474-4-1 yes  EMC compatibility yes  AC coil operating  AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  min %Us 0.75  max %Us 1.15  drop-out  min %Us 0.2  max %Us 0.55  of 50/60Hz coil powered at 60Hz  pick-up  min %Us 0.8  max %Us 1.15  drop-out  min %Us 0.8  max %Us 1.15  drop-out  min %Us 0.75  max %Us 0.55  of 60Hz coil powered at 60Hz  pick-up  min %Us 0.2  max %Us 0.55  of 60Hz coil powered at 60Hz  pick-up  min %Us 0.75  max %Us 0.55  of 60Hz coil powered at 60Hz  pick-up  min %Us 0.75  max %Us 0.55  AC operating voltage  of 50/60Hz coil powered at 50Hz  in-rush VA 30  holding VA 4  of 50/60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  of 60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  of 60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  of 60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  of 60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  of 60Hz coil powered at 60Hz  in-rush VA 30  holding VA 4  Dissipation at holding ≤20°C 50Hz  DC coil operating  DC rated control voltage  Average coil consuption ≤20°C  in-rush W 3.2  holding W 3.2  Max cycles frequency  Max cycles frequency  Max cycles frequency  Max cycles frequency  Operating times					
EMC corpatibility AC coil operating AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  min %US 0.75 max %US 1.15  drop-out min %US 0.55  of 50/60Hz coil powered at 60Hz pick-up min %US 0.2 max %US 0.55  of 60Hz coil powered at 60Hz pick-up min %US 0.75 max %US 0.55  of 60Hz coil powered at 60Hz pick-up min %US 0.75 max %US 0.115  drop-out min %US 0.75 max %US 0.55  AC operating voltage  of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 4  of 50/60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 50/60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4  Dissipation at holding ≤20°C 50Hz DC coil operating voltage  DC rated control voltage DC rated control voltage DC rated control voltage DC rated control voltage DC operating voltage Average coil consuption ≤20°C in-rush W 3.2 holding W 3.2 holding W 3.2 Ax cycles frequency Mechanical operations Cycles/h 3600 Operating times	Mirror contats according	ng to IFC/FN 609474-4-1	mediamear load	Ololi	
AC operating voltage  of 50/60Hz coil powered at 50Hz pick-up  min %US 0.75 max %US 1.15  drop-out min %US 0.2 max %US 0.55  of 50/60Hz coil powered at 60Hz pick-up min %US 0.8 max %US 1.15  drop-out min %US 0.8 max %US 0.115  drop-out min %US 0.55  of 60Hz coil powered at 60Hz pick-up min %US 0.55  of 60Hz coil powered at 60Hz pick-up min %US 0.75 max %US 1.15  drop-out min %US 0.75 max %US 0.75 max %US 0.75 max %US 0.55  AC operating voltage  of 50/60Hz coil powered at 50Hz in-rush VA 30 holding VA 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 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4  DC coil operating DC rated control voltage  DC operating voltage  Average coil consuption ≤20°C 50Hz DC coil operating DC rated control voltage  DC operating voltage  Average coil consuption ≤20°C in-rush W 3.2 holding W 3.2 Max cycles frequency Mechanical operations Cycles/h 3600 Operating times		19 10 12 07 21 1 0 0 0 11 1 1 1			
AC operating voltage  of 50/60Hz coil powered at 50Hz  pick-up  min %Us 0.75 max %Us 0.55  of 50/60Hz coil powered at 60Hz pick-up  min %Us 0.55  of 50/60Hz coil powered at 60Hz pick-up  min %Us 0.8 max %Us 0.55  of 60Hz coil powered at 60Hz pick-up  min %Us 0.55  of 60Hz coil powered at 60Hz pick-up  min %Us 0.55  of 60Hz coil powered at 60Hz pick-up  min %Us 0.75 max %Us 1.15  drop-out  min %Us 0.75 max %Us 0.55  AC operating voltage  of 50/60Hz coil powered at 50Hz  of 50/60Hz coil powered at 60Hz  in-rush VA 30 holding VA 4  of 50/60Hz coil powered at 60Hz in-rush VA 30 holding VA 3  of 60Hz coil powered at 60Hz in-rush VA 30 holding VA 4  Dissipation at holding ≤20°C 50Hz  DC coil operating  DC rated control voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding VA 3.2					,
of 50/60Hz coil powered at 50Hz pick-up  min wus one of 50/60Hz coil powered at 60Hz pick-up  min wus one of 50/60Hz coil powered at 60Hz pick-up  min wus one of 50/60Hz coil powered at 60Hz pick-up  min wus one one of 50/60Hz coil powered at 60Hz pick-up  min wus one one of 50/60Hz coil powered at 60Hz pick-up  min wus one one of 50/60Hz coil powered at 60Hz pick-up  min wus one one of 50/60Hz coil powered at 60Hz pick-up  min wus one one of 50/50Hz  min wus one one one of 50/50Hz  min wus one one of 50/50Hz  min wus one one one of 50/50Hz  min wus one one of 50/50Hz  min wus one one of 50/50Hz  in-rush va 30 holding va 4  of 50/60Hz coil powered at 60Hz  in-rush va 30 holding va 4  Dissipation at holding ≤20°C 50Hz  wus one one of 50/50Hz  Do coil operating  DC coil operating voltage  Average coil consuption ≤20°C  in-rush wus 3.2 holding wus 4.4 holding w					
Pick-up		of 50/60Hz coil powered at 50Hz			
Max   Mus		•			
drop-out   min   wus   0.2   0.55		·	min	%Us	0.75
Mark   Work			max	%Us	1.15
Max   Mus   0.55		drop-out			
of 50/60Hz coil powered at 60Hz pick-up    min			min	%Us	0.2
Pick-up   min   %Us   0.8   max   %Us   1.15   Max   Mus   0.8   max   %Us   0.15   Max   Mus   0.2   max   %Us   0.55   Max   Mus   0.55   Max   Mus   0.55   Max   Mus   0.55   Max   Mus   0.75   Max   Mus   0.55   Mus   Mus   0.55   Mus   Mus   Mus   0.55   Mus			max	%Us	0.55
Minimax   Min		of 50/60Hz coil powered at 60Hz			
Max   Mus   1.15   Min   Mus   0.2   Mus   0.5   Mus   0.5   Mus   0.5   Mus   0.5   Mus   Mus   0.5   Mus   Mus   0.5   Mus   Mus   0.5   Mus   Mus   0.75   Mus   Mus   0.75   Mus   Mus   0.75   Mus   Mus   0.15   Mus   Mus   0.2   Mus   Mus   0.5   Mus   Mus   Mus   0.5   Mus   Mus   Mus   Mus   0.5   Mus		pick-up			
Acrop-out   min min max   MUs   0.2 max   MUs   0.55					
Min    Mus    0.2			max	%Us	1.15
Max   Mus   0.55		drop-out		0/11	
of 60Hz coil powered at 60Hz pick-up  min					
Pick-up		-f COLL:	max	%US	0.55
Min   Mus   0.75   max   Mus   1.15   Mus   Mus   0.75   max   Mus   0.2   max   Mus   0.55   Mus   Mus   0.55   Mus   Mus   0.55   Mus   Mus   0.55   Mus   Mus   Mus   0.55   Mus   M		•			
Max   Mus   1.15   Min   Mus   0.2   Min   Mus   0.55		ріск-ир	min	0/ I Io	0.75
AC operating voltage					
Min   WUs   0.2   max   WUs   0.55		dron-out	IIIax	/005	1.15
AC operating voltage  of 50/60Hz coil powered at 50Hz  in-rush VA 30 holding VA 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 3  of 60Hz coil powered at 60Hz  in-rush VA 30 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  DC coil operating  DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times		drop out	min	%Us	0.2
AC operating voltage  of 50/60Hz coil powered at 50Hz  in-rush VA 30 holding VA 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  DC coil operating  DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times					
of 50/60Hz coil powered at 50Hz    in-rush   vA   30   holding   vA   4	AC operating voltage				
in-rush   VA   30   holding   VA   4	3 3 3 3	of 50/60Hz coil powered at 50Hz			
holding		o. co. co. co. p o c. co. c. c. c.	in-rush	VA	30
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  DC coil operating  DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times					
in-rush   VA   25   holding   VA   3		of 50/60Hz coil powered at 60Hz			
of 60Hz coil powered at 60Hz  in-rush VA 30 holding VA 4  Dissipation at holding ≤20°C 50Hz W 0.95  DC coil operating  DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times		·	in-rush	VA	25
in-rush   VA   30   holding   VA   4			holding	VA	3
bolding         VA         4           Dissipation at holding ≤20°C 50Hz         W         0.95           DC coil operating         DC rated control voltage           DC operating voltage         Average coil consuption ≤20°C           in-rush w 3.2 holding w 3.2           holding w 3.2           Max cycles frequency           Mechanical operations         Cycles/h 3600           Operating times		of 60Hz coil powered at 60Hz			
Dissipation at holding ≤20°C 50Hz W 0.95  DC coil operating  DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times					
DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times			holding		
DC rated control voltage  max V 480  DC operating voltage  Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations Cycles/h 3600  Operating times		≤20°C 50Hz		W	0.95
max V 480  DC operating voltage Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times					
DC operating voltage Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times	DC rated control voltage	ge			
Average coil consuption ≤20°C  in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations Cycles/h 3600  Operating times			max	V	480
in-rush W 3.2 holding W 3.2  Max cycles frequency  Mechanical operations Cycles/h 3600  Operating times		v0000			
holding W 3.2  Max cycles frequency  Mechanical operations  Cycles/h 3600  Operating times	Average coil consuption	on ≤20°C	<u>-</u>		
Max cycles frequency Mechanical operations Cycles/h 3600 Operating times					
Mechanical operations Cycles/h 3600 Operating times	Management		holding	VV	3.2
Operating times				Ovele: "	2000
· · · · · · · · ·				Cycles/h	3600
	-	ontrol			



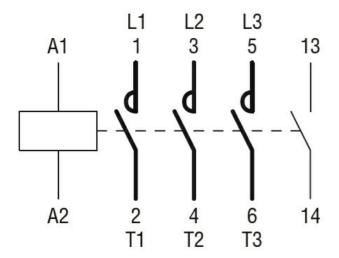


THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT

in AC			
IIIAO	Closing NO		
	min	ms	12
	max	ms	21
	Opening NO		
	min	ms	9
	max	ms	18
	Closing NC		4.7
	min	ms	17
	Onening NC	ms	26
	Opening NC	mc	7
	min max	ms ms	, 17
UL technical data	IIIdX	1115	17
Full-load current (FLA) for three-phase AC motor	or		
	at 480V	Α	11
	at 600V	Α	11
Yielded mechanical performance for			
for single-phase AC mo	otor		
• •	Yielded mechanical performance at 110/120V	hp	0.5
	Yielded mechanical performance at 230V	hp	1.5
for three-phase AC mo	tor		
	Yielded mechanical performance at 200/208V	hp	3
	Yielded mechanical performance at 220/230V	•	3
	Yielded mechanical performance at 460/480V	•	7.5
	Yielded mechanical performance at 575/600V	hp	10
Contact rating of auxiliary contacts according to	UL		A600 - Q600
General USE			
Contactor	10		0.0
	AC current	Α	20
Other features			2
Pollution degree			3
Dimensions			
4.4 (1.73") (0.17") (0.17") (0.38") (1.37") (0.38") (1.37")	44 (1.73") (1.73") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37")		RF9 -7.6 (0.30")
Wiring diagrams			

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT



## Certifications and compliance

Certifications

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

Compliance

CCC

cULus

**EAC** 

## ETIM 6 classification

EC000066 - Power contactor, AC switching