



Product designation Power contactor Product type designation **BG12** Contact characteristics Nr. 3 Number of poles Rated insulation voltage Ui IEC/EN ٧ 690 k۷ Rated impulse withstand voltage Uimp 6 Operational frequency Нъ 25 min Hz 400 max IEC Conventional free air thermal current Ith 20 Α 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 12 AC-4 (400V) 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 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 3 Α 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 10



	220V	Α	2
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	_
	48V	A	_
	75V	A	
	110V	A	_
			_
	220V	Α	
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			
The max sarront to in 8 co 8 co wait 2/12 Tome wait 2 poles in cones	≤24V	Α	8
	48V	A	
			8
	75V	A	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	Α	10
	75V	Α	6
	110V	Α	5
	220V	A	0,8
IEC may current to in DC2 DC5 with L/D < 15mg with 4 poles in series	220 V		0,0
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	<b>2041</b> /	^	
	≤24V	A	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
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)	aw (ILO)	A	120
			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)			
, , , ,	lth	W	4
	AC-3	W	1.44
Tightening torque for terminals	7.0 0	V V	
rightoning torque for terminals	:-	Nima	Λ 0
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
			-



		max	lbin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section			
		min	mm²	0.75
	=	max	mm²	2.5
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section		2	
		min	mm²	1.5
		max	mm²	2.5
Power terminal prote	ction according to IEC/EN 60529			IP20 when
	<u> </u>			properly wired
Mechanical features				
Operating position		normal		Vertical plan
		normal allowable		Vertical plan ±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight				181
Conductor section			g	101
Conductor Section	AWG/kcmil conductor section			
	AVVG/kcmii conductor section	may		12
Auxiliary contact char	actoristics	max		12
Auxiliary Cortiact Criar	aciensiles			
Thermal current Ith			Δ	10
Thermal current Ith	esignation		A	10 A600 - O600
IEC/EN 60947-5-1 de	<del>-</del>		A	10 A600 - Q600
	<del>-</del>	230\/		A600 - Q600
IEC/EN 60947-5-1 de	<del>-</del>	230V	A	A600 - Q600 3
IEC/EN 60947-5-1 de	<del>-</del>	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 AC	15	400V	A A	A600 - Q600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	15	400V 500V 110V	A A A	A600 - Q600 3 1.9 1.4 2.9
Operating current AC	15	400V 500V 110V 24V	A A A	A600 - Q600 3 1.9 1.4 2.9
Operating current DC	15	400V 500V 110V 24V 48V	A A A A	A600 - Q600  3 1.9 1.4  2.9  2.9 1.4
Operating current AC	15	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 AC	15	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 AC	15	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 AC	15	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
Operating current DC Operating current DC Operating current DC	15	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	15	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 Operations Mechanical life	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	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	15	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 Operations Mechanical life Electrical life Safety related data	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	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	15	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 Operations Mechanical life Electrical life Safety related data	10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A 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 B	115 112 113 10d 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  500000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level BC Mirror contats accord	10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A 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 500000  500000 yes
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	115 112 113 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A 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  500000





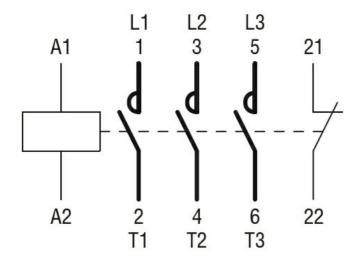
Rated AC voltage at 60	Hz			V	24
AC operating voltage					
	of 60Hz coil powere				
		pick-up	min	0/116	75
			min max	%Us %Us	75 115
		drop-out	IIIax	/003	113
		diop out	min	%Us	20
			max	%Us	55
AC average coil consur	nption at 20°C	-			
-	of 50/60Hz coil pow	ered at 50Hz			
			in-rush	VA	30
	-		holding	VA	4
	of 50/60Hz coil pow	ered at 60Hz			
			in-rush	VA	25
	. ( 0011	1 - ( 0011	holding	VA	3
	of 60Hz coil powere	eu at buhz	in-rush	VA	30
			in-rush holding	VA VA	4
Dissipation at holding ≤	20°C 50Hz		Holding	W	0.95
Max cycles frequency	20 0 001 12			V V	
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us cor	ntrol				
	in AC				
		Closing NO			
			min	ms	12
			max	ms	21
		Opening NO			•
			min	ms	9
		Closing NC	max	ms	18
		Closing NC	min	ms	17
			max	ms	26
		Opening NC			
		- 1 - 3 -	min	ms	7
		3	min max	ms ms	7 17
	in DC				
	in DC	Closing NO	max		17
	in DC		max	ms ms	18
	in DC	Closing NO	max	ms	17
	in DC		max min max	ms ms ms	17 18 25
	in DC	Closing NO	max min max min	ms ms ms	18 25 2
	in DC	Closing NO Opening NO	max min max	ms ms ms	17 18 25
	in DC	Closing NO	max min max min max	ms ms ms ms	18 25 2 3
	in DC	Closing NO Opening NO	min max min max	ms ms ms ms ms	18 25 2 3
	in DC	Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms	18 25 2 3
	in DC	Closing NO Opening NO	min max min max	ms ms ms ms ms	18 25 2 3
	in DC	Closing NO Opening NO Closing NC	min max min max	ms ms ms ms ms	18 25 2 3 3 5
JL technical data	in DC	Closing NO Opening NO Closing NC	min max min max min max min max	ms ms ms ms ms ms ms	18 25 2 3 3 5
		Closing NO Opening NO Closing NC Opening NC	min max min max min max min max	ms ms ms ms ms ms ms ms	17 18 25 2 3 3 5
JL technical data Full-load current (FLA) t		Closing NO Opening NO Closing NC Opening NC	min max min max min max min max	ms ms ms ms ms ms ms	17 18 25 2 3 3 5



Yielded mechanica	l performance				
	for single-phase AC motor				
	0 1	110/120V	HP	0.5	
		230V	HP	1.5	
	for three-phase AC motor	2001		1.0	
	for tiffee-priase AC filotor	200/2001	LID	2	
		200/208V	HP	3	
		220/230V	HP	3	
		460/480V	HP	7.5	
		575/600V	HP	10	
General USE					
	Contactor				
		AC current	Α	20	
Short-circuit protec	tion fuse 600V				
Short chedit protec	High fault				
	High fault	Ob ant airea it arrows at	1. 4	400	
		Short circuit current	kA	100	
		Fuse rating	Α	30	
		Fuse class		J	
	Standard fault				
		Short circuit current	kA	5	
		Fuse rating	Α	30	
		Fuse class		RK5	
Contact rating of au	ixiliary contacts according to UL			A600 - Q60	10
Ambient conditions				71000 000	,0
Temperature					
	Operating temperature				
		min	°C	-50	
		max	°C	+70	
	Storage temperature				
		min	°C	-60	
		max	°C	+80	
Max altitude		· · · · · · · · · · · · · · · · · · ·	 m	3000	
	action		1111	3000	
Resistance & Prote	ection			•	
Pollution degree				3	
Dimensions					
(1.73") 44	4	44 6 6			
4.4 (1.73") (0.1	(4) (7") (8°,6°) (57,5°)	(1.73") (0.5°)	- 12	.57 24")	
(0.17")	(2.24")	0 0 0	97	24 )	
	(b)				
	(1.97") - 50 (1.97") (2.28")	1 2 3 3	(2.28")		
***********	[2]	~ <u></u> ••••••			
0 H H Q		4. CO R P O CO CO			
0.5	7 - 34.9 -	34.9 (0.12		DE 0	п
(0.33") (0.3	7 8") (1.37")	(1.37) (0.12	")	RF9	
8.5 (0.33")		F	1		<del>-</del> 7.6
8.5 (0.33")		(1.73")	_	89.2 (3.51")	7.6 (0.30
		(1./3 )		(0.01)	
Wiring diagrams					

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 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