





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 for a wait 2 polos in conce	≤24V	Α	8
	48V	A	
			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	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	2041 /	^	
	≤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	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section	AMO #4			
	AWG/Kcmil			40
	Flavible w/e lue conductor continu	max		12
	Flexible w/o lug conductor section	min	mama ²	0.75
		min	mm² mm²	0.75 2.5
	Flexible c/w lug conductor section	max	111111	2.0
	r lexible of windy conductor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section		111111	2.0
	Trexible with insulated space rag solidation section	min	mm²	1.5
		max	mm²	2.5
				IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	180
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	acteristics			
Thermal current Ith			A	10
IEC/EN 60947-5-1 de	•			A600 - Q600
Operating current AC	15			
		230V	A	3
			Α	1.9
		400V		
0	40	500V	Α	1.4
Operating current DC	12	500V	Α	1.4
Operating current DC Operating current DC		500V 110V	A A	2.9
		500V 110V 24V	A A	1.4 2.9 2.9
		500V 110V 24V 48V	A A A	1.4 2.9 2.9 1.4
		500V 110V 24V 48V 60V	A A A A	1.4 2.9 2.9 1.4 1.2
		500V 110V 24V 48V 60V 110V	A A A A A	1.4 2.9 2.9 1.4 1.2 0.6
		500V 110V 24V 48V 60V 110V 125V	A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55
		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC		500V 110V 24V 48V 60V 110V 125V	A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55
		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	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		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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	13	500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	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		500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles cycles	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	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A Cycles cycles	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 Performance level B1	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	10d according to EN/ISO 13489-1	500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A Cycles cycles	1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000





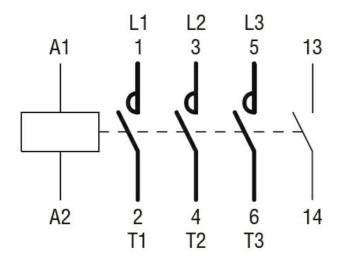
Rated AC voltage at 60	0Hz			V	120
AC operating voltage					
	of 60Hz coil powe				
		pick-up		0/11-	7.5
			min	%Us %Us	75 115
		drop-out	max	%US	115
		drop-out	min	%Us	20
			max	%Us	55
AC average coil consu	ımption at 20°C		THOX:	7000	
J	of 50/60Hz coil po	owered at 50Hz			
	,		in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil po	owered at 60Hz			
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil power	ered at 60Hz			
			in-rush	VA	30
			holding	VA	4
Dissipation at holding :	≤20°C 50Hz			W	0.95
Max cycles frequency				1 - //	2000
Mechanical operation				cycles/h	3600
Operating times Average time for Us co	ontrol				
Average time for US CC	in AC				
	III AC	Closing NO			
		Closing 140	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
	in DO		max	ms	17
	in DC	Clasing NO			
		Closing NO	min	me	18
				ms ms	25
			111.10	1115	20
		Opening NO	max	1110	
		Opening NO			2
		Opening NO	min	ms	2 3
		Opening NO Closing NC			2
			min	ms	
			min max	ms ms	3
			min max min	ms ms	3
		Closing NC	min max min	ms ms	3511
		Closing NC	min max min max	ms ms ms	3 3 5
		Closing NC Opening NC	min max min max min	ms ms ms ms	3511
JL technical data Full-load current (FLA)	o for three-phase AC	Closing NC Opening NC	min max min max min max	ms ms ms ms	3 5 11 17
	o for three-phase AC	Closing NC Opening NC	min max min max min	ms ms ms ms	3511



Yielded mechanica	l performance			
	for single-phase AC motor			
	<u> </u>	110/120V	HP	0.5
		230V	HP	1.5
	for three-phase AC motor	2001		1.0
	ioi tillee-pilase AC Illotoi	200/2081/	UD	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			
Jiloit-circuit protec				
	High fault	Object of the Maria	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 a	uxiliary contacts according to UL	1 400 01400		A600 - Q600
Ambient conditions				7000 Q000
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
	5 1	min	°C	-60
		max	°C	+80
Max altitude		Пах		3000
	ation.		m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				
(1.73") (0.	4	11 00 00		
4.4 (1.73") (0.	17")	(1.73") O ^N .16		57 .24")
(0.17")	(2.24")	0 0 5	8 (2	.24)
*****	[¹ / ₂			
	50 (1.97") 58 (2.28")	1 2 2 2 2 2	(2.28")	
***	(2) (1) (2)	2(3	
		45. O H H O O C		
0.5	7 - 349		-	
(0.33")	7 - 34.9 - 8") (1.37")	(1.37") 3.2 (0.12") 3.2	")	RF9
8.5 (0.33")			L	
8.5 (0.33")		(1.73")	_	89.2 (3.51")
		(1.73")		(3.51")
Wiring diagrams				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 60HZ, 120VAC, 1NO 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