





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
IEC Conventional free air thermal current Ith	THOX	A	20
Operational current le		- , ,	
Operational current to	AC-1 (≤40°C)	Α	20
	AC-1 (≤55°C)	A	18
	AC-1 (≤33°C) AC-1 (≤70°C)		15
	` ,	A	
	AC-3 (≤440V ≤55°C)	A	12
D. I. J.	AC-4 (400V)	Α	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	Α	3
	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	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		, ,	
	≤24V	Α	16
	48V	A	16
	46 V 75 V	A	10
	110V	A	
	1100	A	10





	220V	Α	2
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201		
120 max canoncio in 200 200 mai 2/10 = 10mb mai i poloci in conco	≤24V	Α	7
	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V	^	
TEC max current le in DC3-DC3 with L/R \(\) 13ms with 2 poles in series	~24) /	۸	0
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	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	Α	0,8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	_
	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)	, ,	Α	120
Breaking capacity at voltage			-
	440V	Α	96
	500V	A	72
	690V	Α	72
Resistance per pole (average value)	0001	mΩ	10
Power dissipation per pole (average value)		11122	10
i owei dissipation per pole (average value)	Ith	W	4
Tightoning targue for terminals	AC-3	W	1.44
Tightening torque for terminals		N 1 .	0.0
	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	lbin	9





		max	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section	A)A(O///:1			
	AWG/Kcmil	200 0		10
	Florible w/o lug conductor continu	max		12
	Flexible w/o lug conductor section	min	mana ²	0.75
		min	mm² mm²	0.75 2.5
	Flovible o/w lug conductor coation	max	ШШ	2.5
	Flexible c/w lug conductor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section		111111	2.0
	r lexible with insulated space lug conductor section	min	mm²	1.5
		max	mm²	2.5
		max		IP20 when
Power terminal prote	ction according to IEC/EN 60529			properly wired
Mechanical features				proponty initial
Operating position				
. 51		normal		Vertical plan
		allowable		±30°
Einde en				Screw / DIN rail
Fixing				35mm
Weight			g	180
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	racteristics			
Thermal current Ith			۸	4.0
mennar cunent III			Α	10
IEC/EN 60947-5-1 de	·		A	A600 - Q600
IEC/EN 60947-5-1 de	·		A	
IEC/EN 60947-5-1 de	·	230V	A	
IEC/EN 60947-5-1 de	·	230V 400V		A600 - Q600
IEC/EN 60947-5-1 de	·		A	A600 - Q600 3
IEC/EN 60947-5-1 de Operating current AC	15	400V 500V	A A	A600 - Q600 3 1.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V	A A	A600 - Q600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	212	400V 500V	A A A	A600 - Q600 3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V	A A A	A600 - Q600 3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC	212	400V 500V 110V 24V 48V	A A A	A600 - Q600 3 1.9 1.4 2.9 2.9 1.4
IEC/EN 60947-5-1 de Operating current AC	212	400V 500V 110V 24V 48V 60V	A A A	A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2
IEC/EN 60947-5-1 de Operating current AC	212	400V 500V 110V 24V 48V 60V 110V	A A A A	A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A	A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	212	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 Operating current DC Operating current DC Operating current DC	212	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	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	212	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	212	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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 20000000 500000
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	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
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	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
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	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





Rated AC voltage at				V	24
C operating voltage		= 0.1			
	of 50/60Hz coil po				
		pick-up	min	%Us	75
			max	%Us	75 115
		drop-out	max	7003	110
		arop cut	min	%Us	20
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz			
	·	pick-up			
			min	%Us	80
			max	%Us	115
		drop-out			
			min	%Us	20
			max	%Us	55
C average coil con					
	of 50/60Hz coil po	owered at 50Hz		,	
			in-rush	VA	30
	. (50/001 !		holding	VA	4
	of 50/60Hz coil po	owered at 60Hz	:	\/A	25
			in-rush	VA VA	25 3
	of 60Hz goil now	arad at 60U-7	holding	VA	<u>ა</u>
	of 60Hz coil powe	ered at 60H2	in-rush	VA	30
			holding	VA	4
Dissipation at holding			Holding	W	0.95
Max cycles frequenc				VV	0.00
Mechanical operation				cycles/h	3600
Operating times				, , , , , , , , , , , , , , , , , , , ,	
verage time for Us	control				
-					
	in AC				
		Closing NO			
		Closing NO	min	ms	12
			min max	ms ms	12 21
		Closing NO Opening NO	max	ms	21
			max min	ms ms	9
		Opening NO	max	ms	21
			max min max	ms ms ms	21918
		Opening NO	max min max min	ms ms ms	2191817
		Opening NO Closing NC	max min max	ms ms ms	21918
		Opening NO	max min max min max	ms ms ms ms	219181726
		Opening NO Closing NC	max min max min max min	ms ms ms ms	2191817267
	in AC	Opening NO Closing NC	max min max min max	ms ms ms ms	219181726
		Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms	2191817267
	in AC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
	in AC	Opening NO Closing NC Opening NC	max min max min max min max min min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
	in AC	Opening NO Closing NC Opening NC	max min max min max min max min min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
	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	21 9 18 17 26 7 17
	in AC	Opening NO Closing NC Opening NC Closing NO	max min max min max min max min max min max	ms	21 9 18 17 26 7 17 18 25
	in AC	Opening NO Closing NC Opening NC Closing NO Opening NO	max min max min max min max min max min max	ms	21 9 18 17 26 7 17 18 25

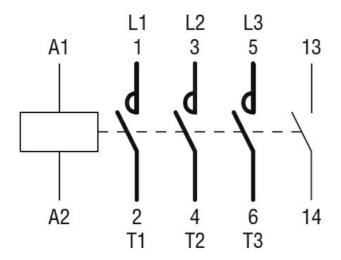


Opening NC

	Sporming r			
		min	ms	11
		max	ms	17
UL technical data				
	A) for three-phase AC motor			
Tali load carrent (1 L	A) for timee phase Ao motor	-+ 400\/	^	44
		at 480V	Α	11
		at 600V	Α	11
Yielded mechanical	performance			
	for single-phase AC motor			
	rer emigre pridee / re meter	110/120V	HP	0.5
		230V		
		230 V	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
0		313/0001		10
General USE				
	Contactor			
		AC current	Α	20
Short-circuit protection	on fuse, 600V			
	High fault			
	riigiriadit	Chart sinet	IaA	100
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	A	30
			А	
		Fuse class		RK5
Contact rating of aux	iliary contacts according to UL			A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
	Operating temperature		°C	F0
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude		Hax		3000
	dia		m	3000
Resistance & Protect	ction			
Pollution degree				3
Dimensions				
44 44		11 A 2 C		
(1.73") 4.4	57	(1.73") (9.6°)	-	57
(0.17")	57 (2.24")	0 0 0	(2	2.24")
●●●●	· •			
0 0	(, 88)	50(1.977)	(2.28")	
	50 (1.97") (2.28")	2-7 	(2)	
⊕⊕⊕⊕			. 6	
0 H H O	4	34.9		7
8.5 (0.33") 9.7 (0.38"	-34.9 - (1.37")	34.9	-	RF9
8.5 (0.33") 9.7 (0.38")	34.9 (1.37")	3.2 (1.37") 3.2 (0.12"	-	
8.5 (0.33") 8.5 (0.33") (0.38")	34.9 (1.37")	34.9 3.2 (1.37") 3.2 (0.12"	-	76
8.5 (0.33") 9.7 (0.38")	(1.37")	34.9	-	RF9 -7.6 (0.30") (3.51")
8.5 (0.33") 8.5 (0.33") (0.38")	(1.37")	3.2 (1.37") 3.2 (0.12"	-	76

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 24VAC, 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