



Product type designation	Product designation			Auxiliary contactor
Number of poles	,, <u> </u>			BG12
Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 imax Hz 400 Hz 400 IEC Conventional free air thermal current Ith A 20 20 Operational current le AC-1 (≤40°C) A 18 AC-1 (55°C) A 18 AC-1 (570°C) A 15 AC-1 (570°C) A 15 AC-3 (5440V ≤5°C) A 12 AC-4 (400V) A 4.8 AC-4 (400V) KW 5.5 500V kW 5.5 500V kW 5.5 500V kW 5.5 500V kW 5.6 690V kW 1.4 40V 4.0 4.0 4.0 4.0 <td></td> <td></td> <td></td> <td></td>				
Rated impulse withstand voltage Uimp	-			
Department Frequency Min Hz 25 max Hz 400 EC Conventional free air thermal current lth				
Process			kV	6
EC Conventional free air thermal current Ith	Operational frequency			
EC Conventional free air thermal current Ith		min	Hz	25
Operational current le AC-1 (≤40°C) A 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 5.5 500V kW 5 Rated operational power AC-1 (T≤40°C) 230V kW 8 400V kW 14 500V		max		400
AC-1 (≤40°C)	IEC Conventional free air thermal current Ith		Α	20
AC-1 (≤55°C)	Operational current le			
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 4440V kW 5.5 500V kW 5.5 500V kW 5.6 690V kW 5.6 690V kW 5.7 Rated operational power AC-1 (T≤40°C) 230V kW 8 400V kW 14 500V kW 14 500V kW 14 500V kW 16 699V kW 22 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 12 48V A 10 75V A 4 1110V A 3 220V A 7 IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 15 48V A 16 75V A 9 1110V A 8 220V A 7 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤40°C)	Α	20
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 14 500V kW 16 690V kW 22 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			Α	18
AC-4 (400V)			Α	
Rated operational power AC-3 (T≤55°C) 230V kW 3.2 400V kW 5.7 415V kW 6.2 4440V kW 5.5 500V kW 5 690V kW 5 690V kW 5 Rated operational power AC-1 (T≤40°C) Rated operational power AC-1 (T≤40°C) 230V kW 8 400V kW 14 500V kW 14 500V kW 16 690V kW 22 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 12 48V A 10 75V A 4 110V A 3 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 15 48V A 15 48V A 15 48V A 15 48V A 14 75V A 9 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-3 (≤440V ≤55°C)	Α	12
230V kW 3.2 400V kW 5.7 415V kW 6.2 440V kW 5.5 500V kW 5.5 500V kW 5 500V kW 14 500V kW 14 500V kW 16 690V kW 22 500V kW 22 500V		AC-4 (400V)	Α	4.8
400V	Rated operational power AC-3 (T≤55°C)			
A15V		230V	kW	3.2
A440V kW 5.5 500V kW 5 690V kW 14 600V kW 14 600V kW 22 600V 600V		400V	kW	5.7
Soov kW 5		415V	kW	6.2
Rated operational power AC-1 (T≤40°C) 230V kW 8 400V kW 14 500V kW 16 690V kW 22		440V	kW	5.5
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 A 12 48V A 10 75V A 4 110V A 3 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 15 48V A 14 75V A 9 110V A 8 220V A -		500V	kW	5
		690V	kW	5
A00V kW 14 500V kW 16 690V kW 22	Rated operational power AC-1 (T≤40°C)			_
Soov kW 16 690V kW 22		230V	kW	8
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V		400V	kW	14
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V		500V	kW	16
		690V	kW	22
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V		≤24V	Α	12
110V A 3 220V A -		48V	Α	10
EC max current le in DC1 with L/R \leq 1ms with 2 poles in series \leq 24V A 15 48V A 14 75V A 9 110V A 8 220V A -		75V	Α	4
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V		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
EC max current le in DC1 with L/R \leq 1ms with 3 poles in series \leq 24V		75V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 16 48V A 16 75V A 10		110V	Α	8
≤24V A 16 48V A 16 75V A 10		220V	Α	
48V A 16 75V A 10	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
75V A 10		≤24V	Α	16
		48V	Α	16
110V A 10		75V	Α	10
		110V	Α	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 200 200 with 210 = 10mb with 2 polos in conto	≤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	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)			
, , , , , , , , , , , , , , , , , , , ,	Ith	W	4
	AC-3	W	1.4
Tightening torque for terminals	,,,,,	• • •	•••
rightoning torque for terminals	:-	Nima	0.0
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
			-



		max	Ibin	9
Max number of wires simu	ultaneously connectable		Nr.	2
Conductor section				_
A	WG/Kcmil			
		max		12
FI	lexible w/o lug conductor section			
		min	mm²	0.8
		max	mm²	2.5
FI	lexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
FI	lexible with insulated spade lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
Power terminal protection	according to IEC/EN 60529			IP20
Mechanical features				
Operating position				
· ·		normal		Vertical plan
		allowable		±30°
Finis a				Screw / DIN rail
Fixing				35mm
Weight			g	200
Conductor section				
A	WG/kcmil conductor section			
		max		12
Auxiliary contact character	ristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 design	nation			A600
Operating current AC15				
- p		230V	Α	3
		400V	A	1.9
		500V	Α	1.4
Operating current DC12				
operating current 2012		110V	Α	2.9
Operating current DC13		1101		2.0
Operating current DO 13		24V	Α	2.9
		48V	A	1.4
		60V	A	1.2
		110V	A	0.6
		110V 125V	A	0.55
		220V	A	0.3
		600V	A	0.1
Operations		300 V	/\	
Mechanical life			cycles	20000000
Electrical life			cycles	500000
Safety related data			Cycles	
· · · · · · · · · · · · · · · · · · ·	according to EN/ISO 13489-1			
i enomiance level D100 à	3000 ming to E14/100 10409-1	rated load	cycles	500000
		chanical load	cycles	2000000
Mirror contate according - 4		crianicai 10a0	cycles	
Mirror contats according t	U IEU/EN 0094/4-4-1			YES
EMC compatibility				YES
AC coil operating			V	48
Rated AC voltage at 60Hz				



AC operating voltage					
To operating voltage	of 60Hz coil power	ered at 60Hz			
	·	pick-up			
			min	%Us	75
			max	%Us	115
		drop-out			
			min	%Us	20
			max	%Us	55
AC average coil consu	•				
	of 50/60Hz coil po	owered at 50Hz	in rugh	VA	20
			in-rush holding	VA VA	30 4
	of 50/60Hz coil po	owered at 60Hz	Holding	VA	4
	01 30/00112 COII po	owered at 60112	in-rush	VA	25
			holding	VA	3
	of 60Hz coil power	ered at 60Hz	Holding	*/ \	
	3. 00. 12 0011 powe		in-rush	VA	30
			holding	VA	4
Dissipation at holding ≤	≤20°C 50Hz		<u></u>	W	0.9
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co	ontrol				
	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	IIIax	1113	20
		Opening No	min	ms	7
			max	ms	, 17
	in DC		THOA.		-
	-	Closing NO			
		Ŭ	min	ms	18
			max	ms	25
		Opening NO			
		Opening NO	min	ms	2
				ms ms	2 3
		Opening NO Closing NC	min max	ms	3
			min max min	ms ms	3
		Closing NC	min max	ms	3
			min max min max	ms ms ms	3 3 5
		Closing NC	min max min max min	ms ms ms	3 5 11
		Closing NC	min max min max	ms ms ms	3 3 5
	for three where A	Closing NC Opening NC	min max min max min	ms ms ms	3 5 11
	for three-phase AC	Closing NC Opening NC	min max min max min max	ms ms ms ms	3 5 11 17
UL technical data Full-load current (FLA)	for three-phase AC	Closing NC Opening NC	min max min max min	ms ms ms	3 5 11

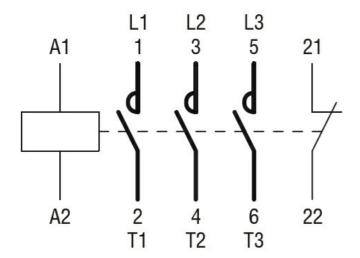




	for single-phase AC motor			
	5 1	110/120V	HP	0.5
		230V	HP	1.5
	for three-phase AC motor			_
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
	Contactor			
		AC current	Α	20
Short-circuit protection	n fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	30
		Fuse class		RK5
	iary contacts according to UL			A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree				3
Dimensions				
44 (0.17") (0.17") (0.33") (0.33") Wiring diagrams				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 60HZ, 48VAC, 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