



Product designation Product type designation			Power contactor BG12
Contact characteristics			BG 12
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		100	
Operational nequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	20
Operational current le			
oporational carroni lo	AC-1 (≤40°C)	Α	20
	AC-3 (≤440V ≤55°C)	Α	12
	AC-4 (400V)	Α	4.8
Rated operational power AC-3 (T≤55°C)	1.2 . ()	- •	
· · · · · · · · · · · · · · · · · · ·	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	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	Α	10
IFC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	220V	Α	2

IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series



S24V A -					
T55V		≤24V	Α	_	
110V			Α	_	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				_	
EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				_	
S24V		220V	Α	_	
A8V A 6 75V A 2 110V A 1 120V A 5 15ms with 2 poles in series S24V A 8 48V A 5 110V A 4 120V A 5 110V A 4 120V A 5 110V A 4 120V A 6 110V A 6 110V	IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				
75V					
110V					
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series S24V A 8					
Section Sec				1	
\$244	IFO many assemble in DO2 DO5 with L/D < 45 may with 0 males in against	220V	Α	_	
48V	IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	<04)/	۸	0	
75					
110V					
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series S24V					
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series					
\$\frac{\geq 24V}{48V}	IEC may current le in DC3 DC5 with L/D < 15ms with 3 poles in series	220 V		_	—
48V	TEC Max current le in DC3-DC3 with DR 2 15ms with 5 poles in series	<24\/	۸	10	
75V					
110V					
EC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series S24V					
EC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series					
S24V A -	IFC may current le in DC3-DC5 with L/R < 15ms with 4 noles in series	220 V		0,0	—
A 8V	120 max current te in 200-200 with 27 2 10ms with 4 poics in series	<24\/	Δ	_	
T5V				_	
110V				_	
Short-time allowable current for 10s (IEC/EN60947-1)				_	
Short-time allowable current for 10s (IEC/EN60947-1)				_	
Protection fuse gG (IEC)	Short-time allowable current for 10s (IEC/EN60947-1)		Α	96	_
Making capacity (RMS value)					
Making capacity (RMS value)		gG (IEC)	Α	20	
Breaking capacity at voltage			Α	16	
440V A 96 500V A 72 690V A 72 690V A 72 72 72 72 72 73 74 74 75 74 75 74 75 75	Making capacity (RMS value)		Α	120	_
SooV A 72 690V A 72	Breaking capacity at voltage				_
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		440V	Α	96	
Resistance per pole (average value) Power dissipation per pole (average value) Ith W 4 AC3 W 1.44 Tightening torque for terminals 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		500V	Α	72	
Power dissipation per pole (average value) Ith W 4 AC3 W 1.44		690V	Α	72	
Ith W 4 AC3 W 1.44	Resistance per pole (average value)		mΩ	10	
AC3 W 1.44	Power dissipation per pole (average value)				
Tightening torque for terminals 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 lbin 9 max lbin 9		Ith	W	4	
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 lbin 9 max lbin 9 max Nm 1 min lbin 9 max lbin 9		AC3	W	1.44	
max Nm 1	Tightening torque for terminals				
min min max lbin max 9 Tightening torque for coil terminal min Nm 0.8 max Nm 1 min lbin 9 max		min		0.8	
Tightening torque for coil terminal min Nm 0.8 max Nm 1 min lbin 9 max lbin 9 max lbin 9					
Tightening torque for coil terminal min Nm 0.8 max Nm 1 min lbin 9 max lbin 9					
min Nm 0.8 max Nm 1 min Ibin 9 max Ibin 9		max	lbin	9	_
max Nm 1 min Ibin 9 max Ibin 9	Tightening torque for coil terminal				
min Ibin 9 max Ibin 9		min			
max Ibin 9					
Max number of wires simultaneously connectable Nr. 2		max			_
	Max number of wires simultaneously connectable		Nr.	2	

Conductor section	ANA(O, #/			
	AWG/Kcmil	may		10
	Flexible w/o lug conductor section	max		12
	r lexible w/o lug coriductor section	min	mm²	0.75
		max	mm²	2.5
	Flexible c/w lug conductor section	max		2.0
		min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
	ction according to IEC/EN 60529			IP20 when wired
Mechanical features				
Operating position				Mantiagli
		normal		Vertical plan
		allowable		±30° Screw / DIN rail
Fixing				35mm
Weight			g	180
Conductor section			<u> </u>	
	AWG/kcmil conductor section			
		max		12
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	esignation			A600 - Q600
Operating current AC	15			
		230V	Α	3
		400V	Α	1.9
0 " 100	40	500V	Α	1.4
Operating current DC	12	4401/	Δ.	0.0
On a ratio a august DC	40	110V	Α	2.9
Operating current DC	13	24V	٨	2.0
		48V	A A	2.9 1.4
		60V	A	1.2
		110V	A	0.6
		110V 125V	A	0.55
		220V	A	0.3
		600V	Α	0.1
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	500000
Safety related data	0-l lin - t- FN/ICO 40400 4			
Safety related data Performance level B1	_			
•		rated load	cycles	500000
Performance level B1	mecha	rated load anical load	cycles cycles	20000000
Performance level B1 Mirror contats accord			-	20000000 yes
Performance level B1 Mirror contats accordi EMC compatibility	mecha		-	20000000
Performance level B1 Mirror contats accordi EMC compatibility AC coil operating	mecha ing to IEC/EN 609474-4-1		cycles	20000000 yes yes
Performance level B1 Mirror contats accordi EMC compatibility	mecha ing to IEC/EN 609474-4-1		-	20000000 yes

of 50/60Hz coil powered at 50Hz

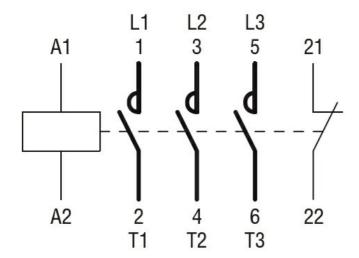


	pick-up		0/11	7-
		min	%Us	75 445
	drop out	max	%Us	115
	drop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	ПСХ	7000	
	pick-up			
	·	min	%Us	80
		max	%Us	115
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	30
	(F0/0011 "	holding	VA	4
	of 50/60Hz coil powered at 60Hz		1/4	25
		in-rush	VA	25
	of GOLLT and newared at COLLT	holding	VA	3
	of 60Hz coil powered at 60Hz	in-rush	VA	30
		holding	VA VA	4
Dissipation at holding	<20°C 50Hz	Holding	W	0.95
Max cycles frequency	320 C 30112		VV	0.93
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us of	ontrol			
Average time for Us co	ontrol in AC			
Average time for Us of				
Average time for Us of	in AC	min	ms	12
Average time for Us of	in AC Closing NO	min max	ms ms	12 21
Average time for Us or	in AC	max	ms	21
Average time for Us of	in AC Closing NO	max min	ms ms	9
Average time for Us or	in AC Closing NO Opening NO	max	ms	21
Average time for Us of	in AC Closing NO	max min max	ms ms ms	21 9 18
Average time for Us of	in AC Closing NO Opening NO	max min max min	ms ms ms	2191817
Average time for Us of	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	21 9 18
Average time for Us of	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	21 9 18 17 26
Average time for Us of	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms	21 9 18 17 26
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max	ms ms ms ms	21 9 18 17 26
Average time for Us of	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms	21 9 18 17 26
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms	21 9 18 17 26
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO	min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17 18 25
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max min max min max min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO	min max min max min max min max min max min max	ms	21 9 18 17 26 7 17 18 25 2 3
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO Closing NO Closing NO	min max min max min max min max min max min max	ms	21 9 18 17 26 7 17 18 25 2 3
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3 3 5
Average time for Us of	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO Closing NO Closing NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3

UL technical data				
	A) for three-phase AC motor			
		at 480V	Α	11
		at 600V	Α	11
Yielded mechanical p	performance			
	for single-phase AC motor			
		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				
	High fault	0.		4.00
		Short circuit current	kA	100
		Fuse rating	Α	30
	0, 1, 1, 1,	Fuse class		J
	Standard fault	Ol and alter the country		-
		Short circuit current	kΑ	5 30
Contact rating of auxi	ilian, contacta according to I II	Fuse rating	Α	
Ambient conditions	iliary contacts according to UL			A600 - Q600
Temperature				
remperature	Operating temperature			
	Operating temperature	min	°C	-50
		max	°C	+70
	Storage temperature	Шах		170
	Glorage temperature	min	°C	-60
		max	°C	+80
Max altitude		· · · · · · · · · · · · · · · · · · ·	m	3000
Resistance & Protect	tion			
Pollution degree				3
Dimensions				
		113.00		
44 (1.73") (0.17") (0.17") (0.17") (0.33") (0.38")	(2.24") (2.24") (2.24")	44 (1.73") (1.73") (1.85") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37")	(2.28") 5	577.24")
(0.33") 8.5 (0.33") 8.5 (0.33")	(1.37")	(1.37) (0.12' 44 (1.73")	")	89.2 (3.51") -7.6
Wiring diagrams		* * * * * * * * * * * * * * * * * * * *		

ENERGY AND AUTOMATION

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 110VAC, 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