electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 6A, DC COIL, 48VDC, 1NO AUXILIARY CONTACT

**ENERGY AND AUTOMATION** 



Contact characteristics         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         A 16           Operational current Ie         AC-1 (≤40°C) A 16 AC-1 (≤55°C) A 14 AC-1 (≤70°C) A 12 AC-3 (≤440°C) A 3.3           Rated operational power AC-3 (T≤55°C)         A 6 AC-4 (400V) A 3.3           Rated operational power AC-3 (T≤55°C)         230V kW 1.5 400V kW 2.2 415V kW 2.4 440V kW 2.5 500V kW 3.690V kW 13.690V	Product designation Product type designation			Power contactor BG06
Rated insulation voltage Ui IEC/EN         V         690           Rated impulse withstand voltage Uimp         kV         6           Operational frequency         min         Hz         25           IEC Conventional free air thermal current Ith         A         16           Operational current Ie         AC-1 (≤40°C)         A         16           AC-1 (≤55°C)         A         14         AC-1 (≤55°C)         A         14           AC-3 (≤440V ≤55°C)         A         6         AC-4 (400V)         A         3.3           Rated operational power AC-3 (T≤55°C)         230V         kW         1.5         400V         kW         2.2           440V         kW         2.2         415V         kW         2.4         440V         kW         2.2         415V         kW         2.4         440V         kW         2.2         415V         kW         2.4         440V         kW         2.2         415V         400V         kW         3.3         690V         kW         3.3         690V         kW         3.3         690V         kW         1.5         400V         kW         4.0         400V         kW         4.0         400V         kW         1.0         400V <td>Contact characteristics</td> <td></td> <td></td> <td></td>	Contact characteristics			
Rated impulse withstand voltage Uimp	Number of poles		Nr.	3
Operational frequency         min max         Hz by 400           IEC Conventional free air thermal current lth         A         16           Operational current le         AC-1 (\$40°C)         A         16           AC-1 (\$55°C)         A         14           AC-1 (\$70°C)         A         12           AC-3 (\$4400 \$55°C)         A         6           AC-4 (4000)         A         3.3           Rated operational power AC-3 (T\$55°C)           230V         kW         1.5           400V         kW         2.2           415V         kW         2.4           440V         kW         2.5           500V         kW         3           690V         kW         3           Rated operational power AC-1 (T\$40°C)           230V         kW         6           400V         kW         10           500V         kW         10           500V         kW         10           500V         kW         13           699V         kW         18           IEC max current le in DC1 with L/R \$\leq\$ 1ms with 2 poles in series      <	Rated insulation voltage Ui IEC/EN		V	690
Min	Rated impulse withstand voltage Uimp		kV	6
EC Conventional free air thermal current Ith	Operational frequency			_
EC Conventional free air thermal current lth		min	Hz	25
Operational current le         AC-1 (≤45°C)       A       16         AC-1 (≤55°C)       A       14         AC-1 (≤70°C)       A       12         AC-3 (≤440V ≤5°C)       A       6         AC-4 (400V)       A       3.3         Rated operational power AC-3 (T≤55°C)       230V       kW       1.5         400V       kW       2.2       415V       kW       2.4         440V       kW       2.5       500V       kW       3       690V       kW       3         Rated operational power AC-1 (T≤40°C)       230V       kW       6       40V       kW       10       500V       kW       13       690V       kW       13       690V       kW       13       690V       kW       18       18       18       18       10		max	Hz	400
AC-1 (≤40°C)	IEC Conventional free air thermal current Ith		Α	16
AC-1 (≤55°C)   A   14     AC-1 (≤70°C)   A   12     AC-3 (≤440V ≤55°C)   A   6     AC-4 (400V)   A   3.3     Rated operational power AC-3 (T≤55°C)     230V   kW   1.5     400V   kW   2.2     415V   kW   2.4     440V   kW   2.5     500V   kW   3     690V   kW   3     Rated operational power AC-1 (T≤40°C)     230V   kW   6     400V   kW   10     500V   kW   13     690V   kW   18     IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series     524V   A   9     48V   A   8     75V   A   4     110V   A   3     220V   A   -     IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series     524V   A   12     48V   A   11     75V   A   6     220V   A   -     IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series     524V   A   12     48V   A   11     75V   A   6     220V   A   -     IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series     524V   A   12     48V   A   11     75V   A   7     110V   A   6     220V   A   -     IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series     524V   A   14     48V   A   14     75V   A   8	Operational current le			
AC-1 (≤70°C) A 12 AC-3 (≤440V ≤55°C) A 6 AC-4 (400V) A 3.3  Rated operational power AC-3 (T≤55°C)  230V kW 1.5 400V kW 2.2 415V kW 2.4 444V kW 2.5 500V kW 3 690V kW 3 690V kW 3  Rated operational power AC-1 (T≤40°C)  230V kW 6 400V kW 10 500V kW 13 690V kW 13 690V kW 13  EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 9 48V A 8 75V A 4 110V A 3 220V A 7 110V A 6 220V A 7 110V A 6 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤40°C)	Α	16
AC-3 (≤440V ≤55°C) A 6 AC-4 (400V) A 3.3  Rated operational power AC-3 (T≤55°C)  230V kW 1.5 400V kW 2.2 415V kW 2.4 440V kW 2.5 500V kW 3 690V kW 3  Rated operational power AC-1 (T≤40°C)  230V kW 6 400V kW 13 690V kW 13 690V kW 13 690V kW 18  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 9 48V A 8 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 12 48V A 11 75V A 7 110V A 6 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤55°C)	Α	14
AC-4 (400V)		AC-1 (≤70°C)	Α	12
Rated operational power AC-3 (T≤55°C)  230V kW 1.5 400V kW 2.2 415V kW 2.4 440V kW 2.5 500V kW 3 690V kW 3 690V kW 10 500V kW 10 500V kW 10 500V kW 13 690V kW 18  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 9 48V A 8 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 12 48V A 11 75V A 7 110V A 6 220V A -  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-3 (≤440V ≤55°C)	Α	6
230V   kW   1.5   400V   kW   2.2   415V   kW   2.4   440V   kW   2.5   500V   kW   3   690V   kW   3   690V   kW   3   690V   kW   3   690V   kW   10   500V   kW   13   690V   kW   18   690		AC-4 (400V)	Α	3.3
400V   kW   2.2   415V   kW   2.4   440V   kW   2.5   500V   kW   3   690V   kW   3   690V   kW   3   3   690V   kW   3   690V   kW   3   690V   kW   10   600V   kW   13   690V   kW   18   600V   kW   10   6	Rated operational power AC-3 (T≤55°C)			
A15V   kW   2.4   440V   kW   2.5   500V   kW   3   690V   kW   10   500V   kW   13   690V   kW   18   690V		230V	kW	1.5
A40V   kW   2.5   500V   kW   3   690V   kW   10   600V   kW   10   600V   kW   13   690V   kW   18   690V   k		400V	kW	2.2
Soov   kW   3   690V   kW   3   8   8   8   8   8   8   8   8   8		415V	kW	2.4
Rated operational power AC-1 (T≤40°C)   230V   kW   6   400V   kW   10   500V   kW   13   690V   kW   18   18   18   18   18   18   19   19		440V	kW	2.5
Rated operational power AC-1 (T≤40°C)  230V kW 6 400V kW 10 500V kW 13 690V kW 18  IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series  ≤24V A 9 48V A 8 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 12 48V A 11 75V A 7 110V A 6 220V A −  IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 12 48V A 11 75V A 7 110V A 6 220V A −		500V	kW	3
		690V	kW	3
A00V   kW   10   500V   kW   13   690V   kW   18	Rated operational power AC-1 (T≤40°C)			
Soov   kW   13   690V   kW   18		230V	kW	6
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series   S24V   A   9		400V	kW	10
Section   Sec				
		690V	kW	18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V   A   4   110V   A   3   220V   A   -			Α	9
110V   A   3   220V   A   -			Α	
EC max current le in DC1 with L/R $\leq$ 1ms with 2 poles in series   $\leq$ 24V   A   12   48V   A   11   75V   A   7   110V   A   6   220V   A   -				
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series   ≤24V				3
		220V	Α	
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
EC max current le in DC1 with L/R $\leq$ 1ms with 3 poles in series   $\leq$ 24V A 14 48V A 14 75V A 8				
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series  ≤24V A 14  48V A 14  75V A 8				6
≤24V A 14 48V A 14 75V A 8	150	220V	Α	
48V A 14 75V A 8	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		_	
75V A 8				
110V A 8				
		110V	Α	8



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	220V	Α	1
IFC many asymmetric in DC4 with L/D < 4 man with 4 males in agriculture	220 V	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	40.4V	۸	
	≤24V	A	_
	48V	A	_
	75V	A	_
	110V	A	_
150	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	_
	≤24V	Α	6
	48V	Α	5
	75V	Α	2
	110V	Α	1
	220V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	7
	48V	Α	7
	75V	Α	4
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
·	≤24V	Α	9
	48V	Α	9
	75V	Α	5
	110V	Α	4
	220V	Α	0,5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	_
	48V	Α	_
	75V	A	_
	110V	A	_
	220V	A	_
Short-time allowable current for 10s (IEC/EN60947-1)	2231	A	96
Protection fuse			
1 Total Culott Tuda	aG (IEC)	Α	16
	gG (IEC) aM (IEC)	A	6
Making capacity (RMS value)	aivi (IEC)	A	92
		A	92
Breaking capacity at voltage	4.4017	۸	70
	440V	A	72 72
	500V	A	72
Desistance records (support of the	690V	Α	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	2.6
	AC-3	W	0.36
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



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		max	Ibin	9
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section		2	0.75
		min	mm²	0.75
	Florible a/w lux conductor costion	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	IIIax	111111	2.5
	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				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	220
Auxiliary contact char	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
	5.2	500V	Α	1.4
Operating current DC	712	440)/		
0 "	240	110V	A	2.9
Operating current DC	713	0.41/	۸	0.0
		24V 48V	A	2.9
		48 V 60 V	A A	1.4 1.2
		110V	A	0.6
		110V 125V	A	0.55
		220V	A	0.33
		600V	A	0.1
Operations				J
Mechanical life			cycles	20000000
Electrical life			cycles	500000
Safety related data				
Performance level B	10d according to EN/ISO 13489-1			
		rated load	cycles	500000
	med	chanical load	cycles	20000000
EMC compatibility				yes
<u> </u>				
DC coil operating	age		V	48
DC coil operating DC rated control volta DC operating voltage			V	48
DC coil operating DC rated control volta			V %Us	75



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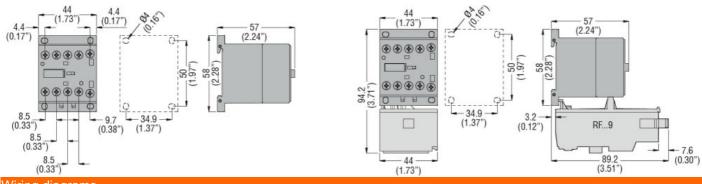
		max	%Us	115
	drop-out			
		min	%Us	10
		max	%Us	25
Average coil consumpt	ion ≤20°C			
		in-rush	W	3.2
		holding	W	3.2
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			
	Closing NO			40
		min	ms	12
	0 : 110	max	ms	21
	Opening NO			
		min	ms	9
	01 1 110	max	ms	18
	Closing NC	_		
		min	ms	17
		max	ms	26
	Opening NC	_		
		min	ms	7
		max	ms	17
	in DC			
	Closing NO			
		min	ms	18
		max	ms	25
	Opening NO			
		min	ms	2
		max	ms	3
	Closing NC			
		min	ms	3
		max	ms	5
	Opening NC			
		min	ms	11
		max	ms	17
UL technical data				
Rated operational volta	ge AC (UL)		V	600
Full-load current (FLA)	for three-phase AC motor			
		at 480V	Α	4.8
		at 600V	Α	3.9
Yielded mechanical per	formance			
	for single-phase AC motor			
		110/120V	HP	0.3
		230V	HP	1
	for three-phase AC motor			
	•	200/208V	HP	1.5
		220/230V	HP	2
		460/480V	HP	3
		575/600V	HP	3
General USE				
_ 55.S <b>552</b>	Contactor			
		AC current	Α	16
				· •



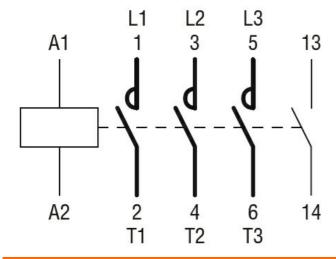
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Short-circuit protection fuse, 600V			
High fault			
	Short circuit current	kA	100
	Fuse rating	Α	30
	Fuse class		J
Standard fault			
	Short circuit current	kA	5
	Fuse rating	Α	30
Contact rating of auxiliary contacts according to UL			A600 - Q600
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	+70
Storage temperature			
• ,	min	°C	-60
	max	°C	+80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			
(0.17") (0.17") (2.24")	(1.73") (1.73") (1.73")	(2	57 .24")



### Wiring diagrams



## 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



### 11BG0610D048

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UL 60947-4-1

CCC
cULus
EAC

ETIM classification

ETIM 8.0

Certificates

EC000066 -Power contactor, AC switching