11BG0901D048 electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC AUXILIARY CONTACT



Product designation Product type designation			Power contactor BG09
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		А	20
Operational current le			
	AC-1 (≤40°C)	А	20
	AC-1 (≤55°C)	A	18
	AC-1 (≤70°C)	A	15
	AC-3 (≤440V ≤55°C)	A	9
	AC-4 (400V)	A	4
Rated operational power AC-3 (T≤55°C)			•
	230V	kW	2.2
	400V	kW	4
	415V	kW	4.3
	440V	kW	4.5
	500V	kW	5
	690V	kW	5
Rated operational power AC-1 (T≤40°C)	0001		•
	230V	kW	8
	400V	kW	14
	400V 500V	kW	16
	690V	kW	22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	0001		
	≤24V	А	12
	48V		10
	46V 75V	A A	
	110V	A	4 3
	220V		3
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series	220 V	A	_
The max current le in DCT with $L/R \le 100$ with 2 poles in series	(0.1)/	٨	45
	≤24V	A	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			10
	≤24V	A	16
	48V	A	16
	75V	A	10
	110V	А	10

ENERGY AND AUTOMATION

11BG0901D048 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

11BG0901D048



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC AUXILIARY CONTACT

220V А 2 IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series ≤24V А 16 48V А 16 75V А 10 110V А 10 220V А 2 IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series ≤24V А 7 48V 6 А 75V 2 А 110V А 1 220V А IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series ≤24V А 8 48V 8 А 75V А 5 110V А 4 220V А \_ IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series ≤24V А 10 48V 10 А 75V А 6 110V А 5 220V А 0,8 IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series ≤24V А 10 48V А 10 75V А 6 110V 5 А 220V 0.8 А Short-time allowable current for 10s (IEC/EN60947-1) А 96 Protection fuse gG (IEC) A 20 aM (IEC) А 10 Making capacity (RMS value) А 92 Breaking capacity at voltage 440V А 72 500V А 72 690V А 72 Resistance per pole (average value) mΩ 10 Power dissipation per pole (average value) W 4 lth AC-3 W 0.81 Tightening torque for terminals min Nm 0.8 max Nm 1 min Ibin 9 lbin 9 max Tightening torque for coil terminal min Nm 0.8 Nm 1 max min lbin 9



electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC

AUXILIARY CONTACT

11BG0901D048

		max	lbin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			4.0
	Elevitele/e lue environten en stien	max		12
	Flexible w/o lug conductor section	min	mm2	0.75
		min	mm² mm²	0.75 2.5
	Flexible c/w lug conductor section	max	11111	2.0
		min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section	max		2.0
		min	mm²	1.5
		max	mm²	2.5
Dower terminal prote	ation according to IEC/EN 60520			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 Conductor section			g	224
Conductor section	AWG/kcmil conductor section			
	AvvG/kcmii conductor section	max		12
Auxiliary contact chai	racteristics	max		12
Thermal current Ith			А	10
IEC/EN 60947-5-1 de	esignation			A600 - Q600
Operating current AC				
		230V	А	3
		400V	А	1.9
			٨	1.4
		500V	A	1.4
Operating current DC	212	500V	A	1.4
Operating current DC	C12	500V 110V	A	2.9
		110V 24V		
		110V 24V 48V	A	2.9 2.9 1.4
		110V 24V 48V 60V	A	2.9 2.9 1.4 1.2
		110V 24V 48V 60V 110V	A A A A A	2.9 2.9 1.4 1.2 0.6
		110V 24V 48V 60V 110V 125V	A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55
		110V 24V 48V 60V 110V 125V 220V	A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55 0.3
Operating current DC		110V 24V 48V 60V 110V 125V	A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55
Operating current DC		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Operating current DC Operations Mechanical life		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000
Operating current DC Operations Mechanical life Electrical life		110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	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	213	110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data		110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	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	213 10d according to EN/ISO 13489-1	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000
Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	213 10d according to EN/ISO 13489-1 m	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000 500000 20000000
	213 10d according to EN/ISO 13489-1	110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000

11BG0901D048



electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC

ENERGY AND AUTOMATION

AUXILIARY CONTACT

DC rated control voltage	je			V	48
DC operating voltage					
	pick-up				
			min	%Us	75
			max	%Us	115
	drop-out			0/110	10
			min	%Us %Us	10 25
Average coil consump	tion <20°C		max	7005	20
Average con consump			in-rush	W	3.2
			holding	Ŵ	3.2
Max cycles frequency			Toroning		0.2
Mechanical operation				cycles/h	3600
Operating times				ý	
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	12
			max	ms	21
		Opening NO			•
			min	ms	9
			max	ms	18
		Closing NC	min	-	47
			min	ms ms	17 26
		Opening NC	max	1115	20
		Opening NC	min	ms	7
			max	ms	, 17
	in DC			-	
		Closing NO			
		C C	min	ms	18
			max	ms	25
		Opening NO			
			min	ms	2
			max	ms	3
		Closing NC			0
			min	ms	3
		Opening NC	max	ms	5
			min	ms	11
			max	ms	17
UL technical data					
Full-load current (FLA)	for three-phase A	AC motor			
( ) ( )			at 480V	А	7.6
			at 600V	А	6.1
Yielded mechanical pe	erformance				
	for single-phase	AC motor			
			110/120V	HP	0.5
			230V	HP	1.5
	for three-phase	AC motor			_
			200/208V	HP	2
			220/230V	HP	3
			460/480V	HP	5
			575/600V	HP	5

11BG0901D048 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



ENERGY AND AUTOMATION

11BG0901D048 electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC AUXILIARY CONTACT

ding to UL erature	AC current Short circuit current Fuse rating Fuse class Short circuit current Fuse rating Fuse class min max	A kA A kA A	20 100 30 J 5 30 RK5 A600 - Q600
erature	Short circuit current Fuse rating Fuse class Short circuit current Fuse rating Fuse class min	kA A kA A	100 30 J 5 30 RK5 A600 - Q600
erature	Short circuit current Fuse rating Fuse class Short circuit current Fuse rating Fuse class min	kA A kA A	100 30 J 5 30 RK5 A600 - Q600
erature	Fuse rating Fuse class Short circuit current Fuse rating Fuse class min	A kA A	30 J 5 30 RK5 A600 - Q600
erature	Fuse rating Fuse class Short circuit current Fuse rating Fuse class min	A kA A	30 J 5 30 RK5 A600 - Q600
erature	Fuse rating Fuse class Short circuit current Fuse rating Fuse class min	A kA A	30 J 5 30 RK5 A600 - Q600
erature	Fuse class Short circuit current Fuse rating Fuse class min	kA A °C	J 5 30 RK5 A600 - Q600
erature	Short circuit current Fuse rating Fuse class min	A °C	5 30 RK5 A600 - Q600
erature	Fuse rating Fuse class min	A °C	30 RK5 A600 - Q600
erature	Fuse rating Fuse class min	A °C	30 RK5 A600 - Q600
erature	Fuse class min	°C	RK5 A600 - Q600
erature	min		A600 - Q600
erature			
			-50
			-50
			-50
iture			
iture	Παλ		-30 +70
		0	170
	min	°C	-60
		°C	+80
	Пах		3000
			0000
			3
			U
			RF9
$ \begin{bmatrix} -3 \\ 5 \\ 21 \\ \\ 6 \\ 22 \\ 73 \end{bmatrix} $			
	5 21 / 6 22	$\begin{array}{c} (2.24^{n}) \\ (2.24^{n}) \\ (1.37^{n}) \\ (1.37^{n}) \\ (1.37^{n}) \\ (1.37^{n}) \\ (1.37^{n}) \\ (0.12^{n}) \\ (0.12^{n}) \\ (0.12^{n}) \\ (0.12^{n}) \\ (0.12^{n}) \\ (1.37^{n}) $	m $ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array}\\ \end{array}\\ \end{array}\\ \end{array}\\ \begin{array}{c} \end{array}\\ \end{array}\\ \end{array}\\ \begin{array}{c} \end{array}\\ \end{array}\\ \end{array}\\ \begin{array}{c} \end{array}\\ \end{array} $

## Compliance

CSA C22.2 n° 60947-1



ENERGY AND AUTOMATION

11BG0901D048 electric THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, DC COIL, 48VDC, 1NC

AUXILIARY CONTACT

	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 classificatio	n .

**ETIM 8.0** 

EC000066 -Power contactor, AC switching