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	BOAPHIA MR
-	2 T1 4 T2 8 T1 14 A2

Product designation Product type designation		Power contactor BG09
Contact characteristics		5003
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	A	20
Operational current le		20
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)		
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	А	12
48V	А	10
75V	А	4
110V	А	3
220V	А	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series		
≤24V	А	15
48V	А	14
75V	А	9
110V	А	8
220V	А	_
IEC max current le in DC1 with L/R \leq 1ms with 3 poles in series		
≤24V	А	16
48V	А	16
75V	А	10
110V	А	10



	220V	А	2
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	16
	48V	А	16
	75V	А	10
	110V	А	10
	220V	A	2
EC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series			
	≤24V	А	7
	48V	A	6
	75V	A	2
	110V	A	1
IEC may surrent to in DC2 DCE with $1/D < 45$ may with 2 palas in series	220V	A	_
EC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series	-0.41/	۸	0
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	_
IEC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series			
	≤24V	А	10
	48V	Α	10
	75V	А	6
	110V	А	5
	220V	Α	0.8
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series			
	≤24V	А	10
	48V	А	10
	75V	А	6
	110V	А	5
	220V	A	0.8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	А	20
	aM (IEC)	A	10
Making capacity (RMS value)		A	92
Breaking capacity at voltage		~	92
Dicaring capacity at vollage	44017	۸	70
	440V	A	72
	500V	A	72
	690V	<u>A</u>	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
	AC3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8



		max	lbft	0.74
	simultaneously connectable		nr.	2
Conductor section				
	Flexible w/o lug conductor section	min	mm ²	0.75
		min max	mm² mm²	2.5
	Flexible c/w lug conductor section	IIIdX	111111	2.0
	Thexible C/Wildy conductor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor se			2.0
		min	mm²	1.5
		max	mm²	2.5
Power terminal protect	ction according to IEC/EN 60529			IP20 when wire
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
			~	35mm
Weight			g	220
Auxiliary contact chara Type of contact				1 NO
Thermal current Ith			A	10
IEC/EN 60947-5-1 de	signation		A	A600 - Q600
Operating current AC	-			A000 - Q000
	10	230V	А	3
		400V	A	1.9
		500V	A	1.4
Operating current DC	12			
		110V	А	2.9
Operating current DC	13			
		24V	А	2.9
		48V	А	1.4
		60V	А	1.2
		110V	А	0.6
		125V	А	0.55
		220V	А	0.3
		600V	А	0.1
Operations				
Mechanical life			cycles	2000000
Electrical life			cycles	500000
Safety related data				
Pertormance level B1	0d according to EN/ISO 13489-1		<u>.</u>	
		rated load	cycles	500000
Minnen egetete eres "		mechanical load	cycles	2000000
	ing to IEC/EN 609474-4-1			yes
EMC compatibility				Yes
DC coil operating			11	24
DC rated control volta DC operating voltage	-		V	24
DC operating voltage	pick-up		0/11-	75
	ріск-ир	min max	%Us %Us	75 115



	duon out				
	drop-out		min	%Us	10
			max	%Us	25
Average coil consun	ntion <20°C		Пах	/003	20
Average con consum			in-rush	W	3.2
			holding	W	3.2
Max cycles frequenc	V		Holding	~~	0.2
Mechanical operation				cycles/h	3600
Operating times	•			0,0100,11	
Average time for Us	control				
	in AC				
		Closing NO			
		5	min	ms	12
			max	ms	21
		Opening NO			
			min	ms	9
			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			0
			min	ms	2
		Closing NC	max	ms	3
		Closing NC	min	ms	3
			max	ms	5
		Opening NC	max	1113	5
			min	ms	11
			max	ms	17
UL technical data			max	1110	
Full-load current (FL	A) for three-phase A	C motor			
,			at 480V	А	7.6
			at 600V	А	6.1
Yielded mechanical	performance				
	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
General USE	-				
	Contactor				
	Contactor			-	~ ~
			AC current	А	20
Short-circuit protecti			AC current	A	20

11BG0910D024 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



LIVERGITAND ACTOMATION				
		Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class	A	J
	Standard fault	Fuse class		J
	Standard Tault	Short circuit current	kA	5
		Fuse rating	A	30
Contact rating of au	ixiliary contacts according to UL	Fuse failing	A	A600 - Q600
Ambient conditions				A000 - Q000
Temperature				
remperature	Operating temperature			
	Operating temperature	min	°C	-50
		min	°C	-50 +70
		max	U	+70
	Storage temperature		° ^	<u></u>
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				
44 (1.73") (0.17") (0.17") (0.3") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33") (0.33")			(2.28") 5	57 .24") RF9 RF9 (0.30")
A1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
Certifications and c	ompliance			
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			
	02000111			

Certificates

UL 60947-4-1



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	cULus	
	EAC	
assification		
		EC000066 -

ETIM 8.0

ETIM cla

EC000066 -Power contactor, AC switching