



Product designation Product type designation			Power contactor BGF09
Contact characteristics			20100
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	160
	AC-3 (≤440V ≤55°C)	А	9
	AC-4 (400V)	А	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 $L/R \le 1$ ms with 1 poles in series			
	≤24V	A	12
	48V	A	10
	75V	A	4
	110V	A	3
IEC may aurrent lo in DC1 with L/D < 1mg with 2 pales in series	220V	A	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series	≤24V	۸	15
	≤24∨ 48V	A A	15 14
	48V 75V		
	110V	A A	9 8
	220V	A	
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	2201	A	_
	≤24V	А	16
	48V	A	16
	48V 75V	A	10
	110V	A	10
	220V	A	2
IFC may current le in DC1 with $L/R < 1$ ms with 4 poles in series	2201	<u>^</u>	-

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 \leq 15ms with 1 poles in series			
	≤24V	А	7
	48V	А	6
	75V	А	2
	110V	А	1
	220V	А	_
EC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series			
	≤24V	А	8
	48V	А	8
	75V	А	5
	110V	А	4
	220V	А	_
IEC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series			
	≤24V	А	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0.8
IEC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series	2201	7.	0.0
	≤24V	А	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0.8
Short-time allowable current for 10s (IEC/EN60947-1)	2201	A	96
Protection fuse		,,	
	gG (IEC)	А	20
	aM (IEC)	A	10
Making capacity (RMS value)	a (. <u> </u>	A	92
Breaking capacity at voltage			
Droaking capacity at rollage	440V	А	72
	500V	A	72
	690V	A	72
Resistance per pole (average value)	0001	mΩ	10
Power dissipation per pole (average value)		11132	10
	lth	W	4
	AC3	W	0.81
Tightening torque for terminals	/////	**	0.01
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.6
	max	Ibin	0.7
Tightening torque for coil terminal	Пал		
	min	Nm	0.8
	max	Nm	1
	min	lbft	0.59
	max	lbft	0.74
Max number of wires simultaneously connectable	Παλ		2
WAA HUHDEI UI WIES SIHUILAHEUUSIY LUHHELLADIE		nr.	2



Conductor section

Conductor section				
	Flexible w/o lug conductor section			
		min	mm²	0.75
		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	on		
		min	mm²	1.5
		max	mm²	2.5
	tion according to IEC/EN 60529			IP20 when wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	180
Auxiliary contact chara	acteristics			4 NO
Type of contact				1 NC
Thermal current Ith			A	10
IEC/EN 60947-5-1 de	-			A600 - Q600
Operating current AC	15			_
		230V	A	3
		400V	A	1.9
<u> </u>		500V	A	1.4
Operating current DC	12			
	10	110V	A	2.9
Operating current DC	13	2 (1) (
		24V	A	2.9
		48V	A	1.4
		60V	A	1.1
		125V	A	0.3
		220V	A	0.1
Operationa		600V	А	0.6
Operations Mechanical life			ovelee.	20000000
Electrical life			cycles cycles	20000000 500000
Safety related data			cycles	500000
	0d according to EN/ISO 13489-1			
renomance level bi	ou according to EN/ISO 13469-1	rated load	ovoloo	500000
		mechanical load	cycles	2000000
Mirror contate accordi	ng to IEC/EN 609474-4-1		cycles	
EMC compatibility	119 10 1LO/LN 0034/4-4-1			yes
AC coil operating				yes
Rated AC voltage at 5	:0/60Hz		V	24
AC operating voltage			v	27
	of 50/60Hz coil powered at 50Hz			
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	75
		min	%Us %Us	75 115
	drop_out	max	/005	115
	drop-out	min	%Us	20
		111111	/005	20



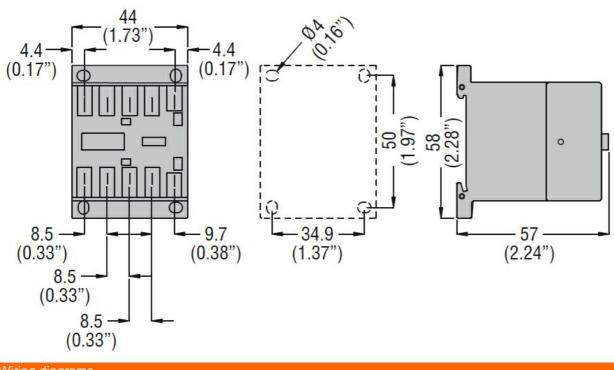
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz			
		pick-up			
			min	%Us	80
			max	%Us	115
		drop-out			
		·	min	%Us	20
			max	%Us	55
AC average coil cons	sumption at 20°C				
	of 50/60Hz coil po	owered at 50Hz			
	0. 00,000. <u>–</u> 00p.		in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil po	awarad at 60Hz	noiding	٧A	7
			in winds	\/A	05
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil powe	ered at 60Hz	_		
			in-rush	VA	30
			holding	VA	4
Dissipation at holding				W	0.95
lax cycles frequency	y				
lechanical operation				cycles/h	3600
Operating times					
verage time for Us	control				
	in AC				
		Closing NO			
			min	me	12
				ms	
			max	ms	21
		Opening NO			_
					9
			min	ms	
			min max	ms ms	18
		Closing NC			
		Closing NC			
		Closing NC	max	ms	18
		-	max min	ms ms	18 17
		Closing NC Opening NC	max min max	ms ms ms	18 17 26
		-	max min max min	ms ms ms ms	18 17 26 7
	in DC	-	max min max	ms ms ms	18 17 26
	in DC	Opening NC	max min max min	ms ms ms ms	18 17 26 7
	in DC	-	max min max min max	ms ms ms ms ms	18 17 26 7 17
	in DC	Opening NC	max min max min max min	ms ms ms ms ms	18 17 26 7 17 18
	in DC	Opening NC Closing NO	max min max min max	ms ms ms ms ms	18 17 26 7 17
	in DC	Opening NC	max min max min max min max	ms ms ms ms ms ms	18 17 26 7 17 18 25
	in DC	Opening NC Closing NO	max min max min max min max	ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2
	in DC	Opening NC Closing NO Opening NO	max min max min max min max	ms ms ms ms ms ms	18 17 26 7 17 18 25
	in DC	Opening NC Closing NO	max min max min max min max	ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2
	in DC	Opening NC Closing NO Opening NO	max min max min max min max	ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2
	in DC	Opening NC Closing NO Opening NO	max min max min max min max	ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3
	in DC	Opening NC Closing NO Opening NO Closing NC	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 3
	in DC	Opening NC Closing NO Opening NO	max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 3 5
	in DC	Opening NC Closing NO Opening NO Closing NC	max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 5 11
	in DC	Opening NC Closing NO Opening NO Closing NC	max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 3 5
		Opening NC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 5 11
JL technical data Full-load current (FL/	in DC	Opening NC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 3 5 11 17
		Opening NC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms ms	18 17 26 7 17 18 25 2 3 5 11

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	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			
		AC current	А	20
Short-circuit protecti	on fuse 600V			
enert eneur protect	High fault			
	rightadic	Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class	~	J
	Standard fault	1 436 61833		5
	Standard Tault	Short circuit current	kA	5
			A	30
Contract ration of any	ilian contacto constaling to LU	Fuse rating	A	
	iliary 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 & Protect	tion			
Pollution degree				3
Dimonoiono				

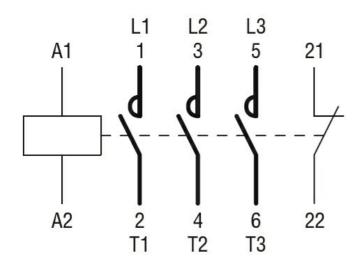
Dimensions



Wiring diagrams

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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