



Product designation Product type designation			Power contactor BF09
Contact characteristics			21.00
Number of poles		Nr.	4
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	25
Operational current le			
	AC-1 (≤40°C)	А	25
	AC-1 (≤55°C)	А	20
	AC-1 (≤70°C)	А	18
	AC-3 (≤440V ≤55°C)	А	9
	AC-4 (400V)	А	4.9
Rated operational power AC-1 (T≤40°C)			
	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	15
	48V	А	13
	75V	А	12
	110V	А	6
	220V	A	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	18
	48V	А	18
	75V	А	17
	110V	Α	12
	220V	A	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	15
	220V	A	10
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series		_	
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	16
	220V	А	12



IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series			
	≤24V	A	10
	48V	A	9
	75V	А	8
	110V	A	2
	220V	A	_
IEC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series			
	≤24V	А	13
	48V	А	11
	75V	А	10
	110V	Α	7
	220V	Α	2
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series			
	≤24V	А	15
	48V	А	15
	75V	А	13
	110V	А	11
	220V	А	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			-
	≤24V	А	15
	48V	A	15
	75V	A	15
	110V	A	12
	220V	A	7
Short time allowable aurrent for 10a (IEC/EN60047.1)	220 V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)		A	150
Protection fuse		٨	05
	gG (IEC)	A	25
	aM (IEC)	<u>A</u>	10
Making capacity (RMS value)		А	90
Breaking capacity at voltage			
	440V	A	72
	500V	А	72
	690V	A	71
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
	lth	W	1.6
	AC-3	W	0.2
Tightening torque for terminals			
	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable	max	Nr.	2
Conductor section			
AWG/Kcmil			
			10
	max		10
Flexible w/o lug conductor section			4
	min	mm²	1

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FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 110VAC

Flexible c/w lug conductor section	mm²	6
min		0
	mm²	1
max	mm²	4
Flexible with insulated spade lug conductor section		
min	mm²	1
max	mm²	4
Power terminal protection according to IEC/EN 60529		IP20 when
		properly wired
Mechanical features		
Operating position		
normal		Vertical plan
allowable		±30°
Fixing		Screw / DIN rail
Woight	~	35mm 358
Weight Conductor section	g	300
AWG/kcmil conductor section		
AWG/KCMII conductor section max		10
Operations		
Mechanical life	cycles	20000000
Electrical life	cycles	2000000
Safety related data	0y0l00	2000000
Performance level B10d according to EN/ISO 13489-1		
rated load	cycles	2000000
mechanical load	cycles	20000000
Mirror contats according to IEC/EN 609474-4-1	,	yes
EMC compatibility		yes
AC coil operating		
Rated AC voltage at 50/60Hz	V	110
AC operating voltage		
of 50/60Hz coil powered at 50Hz		
pick-up		
pick-up min	%Us	80
min	%Us %Us	80 110
min max drop-out	%Us	110
min max drop-out min	%Us %Us	110 20
min max drop-out min max	%Us	110
min max drop-out min max of 50/60Hz coil powered at 60Hz	%Us %Us	110 20
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up	%Us %Us %Us	110 20 55
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min	%Us %Us %Us %Us	110 20 55 85
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max	%Us %Us %Us	110 20 55
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out	%Us %Us %Us %Us %Us	110 20 55 85 110
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min	%Us %Us %Us %Us %Us	110 20 55 85 110 20
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max	%Us %Us %Us %Us %Us	110 20 55 85 110
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out Min max drop-out Min max	%Us %Us %Us %Us %Us	110 20 55 85 110 20
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max	%Us %Us %Us %Us %Us	110 20 55 85 110 20
min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out Min max AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	%Us %Us %Us %Us %Us %Us	110 20 55 85 110 20 55
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush	%Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 20 55 75
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding	%Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 20 55 75
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding of 50/60Hz coil powered at 60Hz	%Us %Us %Us %Us %Us %Us %Us VA VA	110 20 55 85 110 20 55 75 9
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding of 50/60Hz coil powered at 60Hz	%Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 20 55 75 9 70

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BF09T4A110 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 110VAC

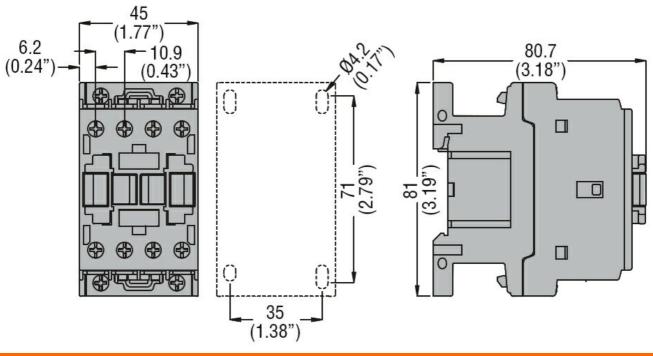
		holding	VA	9
Dissipation at holding	≤20°C 50Hz	Horanig	W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us of	control			
	in AC			
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			4.0
		min	ms	10
		max	ms	20
	Closing NC			4.4
		min max	ms	14 28
	Opening NC	max	ms	20
		min	ms	7
		max	ms	18
UL technical data		Пах	1110	10
) for three-phase AC motor			
	,	at 480V	А	7.6
		at 600V	A	0.375
Yielded mechanical p	erformance			
	for single-phase AC motor			
		110/120V	HP	0.75
		230V	HP	2
	for three-phase AC motor			
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	7.5
General USE				
	Contactor			
		AC current	Α	25
Short-circuit protectio				
	High fault			
		Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class		J
	Standard fault			_
		Short circuit current	kA	5
A making the second it is a second		Fuse rating	А	60
Ambient conditions				
Temperature	Operating tomperature			
	Operating temperature		° ^	50
		min	°C ℃	-50 70
	Storago tomporaturo	max	U	10
	Storage temperature	min	°C	-60
		max	°C	-60 80
Max altitude		Παλ	 	3000
Resistance & Protect	ion			
Pollution degree				3

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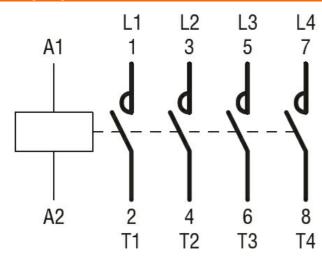
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Dimensions



Wiring diagrams



Certifications and compliance

Compliance		
Compliance		
	CSA C22.2 n° 60947-1	
	CSA C22.2 n° 60947-4-1	
	IEC/EN/BS 60947-1	
	IEC/EN/BS 60947-4-1	
	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
ETIM classification		
		EC000066 -
ETIM 8.0		Power contactor,
		AC switching

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