



Product designation Product type designation			Power contactor BF09
Contact characteristics			BI 03
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		A	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
Short-time allowable current for 10s (IEC/EN60947-1)		А	150
Protection fuse			
	gG (IEC)	А	25
	aM (IEC)	А	10
Making capacity (RMS value)		А	90
Breaking capacity at voltage			
	440V	А	72
	500V	А	72
	690V	А	71
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
	Ith	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	lbin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2



48VAC, 2NO AND 2NC

Conductor section

	AWG/Kcmil			
	AWG/Renin	max		10
	Flexible w/o lug conductor section			
	-	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
	Elevible with insulated anode lug conductor costion	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				propeny mieu
Operating position				
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	360
Conductor section				
	AWG/kcmil conductor section			
		max		10
Operations				
Mechanical life			cycles	2000000
			cycles	2000000
Safety related data			cycles	2000000
Safety related data	0d according to EN/ISO 13489-1	rotod lood		
Safety related data		rated load	cycles	2000000
Safety related data Performance level B1	m	rated load nechanical load		2000000 2000000
Safety related data Performance level B1 Mirror contats accord			cycles	2000000 20000000 YES
Safety related data Performance level B1 Mirror contats accord EMC compatibility	m		cycles	2000000 2000000
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating	m ing to IEC/EN 609474-4-1		cycles	2000000 20000000 YES yes
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	m ing to IEC/EN 609474-4-1		cycles cycles	2000000 20000000 YES
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	m ing to IEC/EN 609474-4-1		cycles cycles	2000000 20000000 YES yes
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	m ing to IEC/EN 609474-4-1 50/60Hz		cycles cycles	2000000 20000000 YES yes
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz		cycles cycles	2000000 20000000 YES yes
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	nechanical load	cycles cycles V	2000000 20000000 YES yes 48
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	min max	cycles cycles V V %Us %Us	2000000 20000000 YES yes 48 80 110
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	min min max min	cycles cycles V %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	m ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	min max	cycles cycles V V %Us %Us	2000000 20000000 YES yes 48 80 110
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min min max min	cycles cycles V %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	m ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min max	cycles cycles V %Us %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20 55
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min min max min max min	cycles cycles V %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20 55
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	min max min max	cycles cycles V %Us %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20 55
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min min max min max min max	cycles cycles V %Us %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20 55 85 110
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	min min max min max min	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 48 80 110 20 55 85 110 20
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5 AC operating voltage	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	min min max min max min max min max min	cycles cycles V %Us %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 80 110 20 55 85 110
Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5 AC operating voltage	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	min min max min max min max min max min	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 48 80 110 20 55 85 110 20
	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	min min max min max min max min max min	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	2000000 20000000 YES yes 48 48 80 110 20 55 85 110 20

OVE electric ENERGY AND AUTOMATION

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

48VAC, 2NO AND 2NC

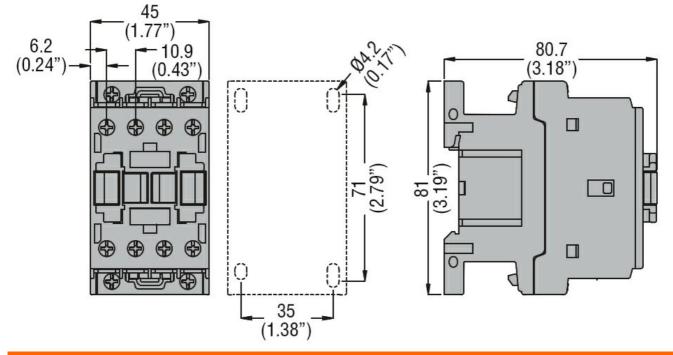
BF09T2A048

	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	<u></u>		
		in-rush	VA	75
		holding	VA	9
Dissinction at holdin		noiding	W	2.5
Dissipation at holdin	-		VV	2.3
Max cycles frequend				
Mechanical operatio	n		cycles/h	3600
Operating times				
Average time for Us				
	in AC			
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	10
		max	ms	20
	Closing NC			
	· · · · · · · · · · · · · · · · · · ·	min	ms	14
		max	ms	28
	Opening NC			
	oponing No	min	ms	7
		max	ms	, 18
II to chained data		IIIdA	1115	10
JL technical data				
-ull-load current (FL	A) for three-phase AC motor		_	
		at 480V	A	7.6
		at 600V	А	9
Yielded mechanical	performance			
	for single-phase AC motor			
		110/120V	HP	0.8
		230V	HP	2
	for three-phase AC motor			
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	5 7.5
General USE		575/000		1.5
Selleral USE	Operator			
	Contactor			0.5
			•	
		AC current	А	25
		AC current	A	25
		AC current	A	25
	Operating temperature			
	Operating temperature	AC current	°C	-50
	Operating temperature			
Ambient conditions Temperature	Operating temperature Storage temperature	min	°C	-50
	· · ·	min	°C	-50
	· · ·	min max min	0° 0° 0°	-50 70 -60
Temperature	· · ·	min max	℃ ℃ ℃ ℃	-50 70 -60 80
Temperature Max altitude	Storage temperature	min max min	0° 0° 0°	-50 70 -60
Temperature	Storage temperature	min max min	℃ ℃ ℃ ℃	-50 70 -60 80

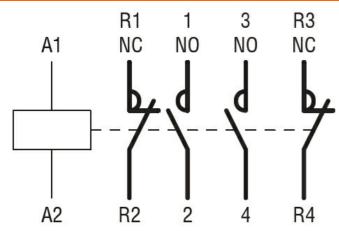
BF09T2A048



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 48VAC, 2NO AND 2NC



Wiring diagrams



Certifications and 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		
ETIM 8.0		EC000066 - Power contactor, AC switching