

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, DC COIL, 60VDC, 2NO AND 2NC



Product designation Product type designation			Power contactor BF18
Contact characteristics			5. 10
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		Α	32
Operational current le			
	AC-1 (≤40°C)	Α	32
	AC-1 (≤55°C)	Α	26
	AC-1 (≤70°C)	Α	23
	AC-3 (≤440V ≤55°C)	Α	18
	AC-4 (400V)	Α	8.5
Rated operational power AC-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	20
Making capacity (RMS value)		Α	180
Breaking capacity at voltage			
	440V	Α	144
	500V	Α	120
	690V	Α	94
Resistance per pole (average value)		$m\Omega$	2.5
Power dissipation per pole (average value)			
	Ith	W	2.6
	AC-3	W	0.8
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	Ibin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2



BF18T2D060

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Flexible wio lug conductor section					
Flexible w/o lug conductor section	Conductor section	NMC//comil			
Flexible w/o lug conductor section	F			10	
Flexible c/w lug conductor section				10	
Flexible c/w lug conductor section		_	mm²	1	
Plexible with insulated spade lug conductor section Plexible with insulated spade		max	mm²	6	
Flexible with insulated spade lug conductor section	F	Flexible c/w lug conductor section			
Flexible with insulated spade lug conductor section min mm mm mm mm mm mm		min			
min max mm² 1	-		mm²	4	
Power terminal protection according to IEC/EN 60529 Power terminal protection allowable Power terminal protection allowable Power terminal protection Power terminal	ŀ		· 2	4	
Power terminal protection according to IEC/EN 60529 Mechanical features					
Property wired Property Property wired Property			111111		
Mechanical features	Power terminal protection	n according to IEC/EN 60529			
Normal allowable Section 1988	Mechanical features				
Allowable \$30° \$	Operating position				
Screw / DIN rail 35mm 3					
Neight g 496		allowable			
Conductor section AWG/kcmil conductor section max 10 Operations Mechanical life cycles 20000000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 yES EMC compatibility yes DC coil operating DC coil operating V 60 DC rated control voltage V 60 DC operating voltage y 10 min %Us 50 50 50 <th cols<="" td=""><td></td><td></td><td></td><td>35mm</td></th>	<td></td> <td></td> <td></td> <td>35mm</td>				35mm
AWG/kcmil conductor section max 10			g	496	
max 10 Operations Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data rated load cycles 1600000 mechanical load cycles 200000000 Mirror contats according to IEC/EN 609474-4-1 YES EMC compatibility yes DC coil operating V 60 DC operating voltage yu 60 DC operating voltage min %Us 70 pick-up min %Us 10 drop-out min %Us 10 Average coil consumption ≤20°C in-rush wull wull wull wull wull wull wull wul					
Comparitions	A				
Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data cycles 1600000 Performance level B10d according to EN/ISO 13489-1 Part and Ioad cycles 1600000 Performance level B10d according to EN/ISO 13489-1 Part and Ioad cycles 1600000 Part and Ioad cycles 20000000 Part and Ioad cycles 200000000 Part and Ioad cycles 20000000 Part and Ioad cycles 200000000 Part and Ioad cycles 20000000 Part and Ioad cycles 2000000000 Part and Ioad cycles 20000000000 Part and Ioad cycl	Onevetions	max		10	
Electrical life cycles 1600000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 200000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes CC coil operating DC rated control voltage V 60 DC operating voltage pick-up min %Us 70 max %Us 125 drop-out min %Us 10 max %Us 40 Average coil consumption ≤20°C in-rush w 5.4 holding W 5.4 Max cycles frequency Mechanical operation Closing NO min Ms 8	•		cycles	20000000	
Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 200000000 mechanical load cycles 200000000000000000000000000000000000					
Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 20000000 mechanical load cycles cycle			Cyclcs	1000000	
rated load cycles 1600000 mechanical load cycles 20000000 mechanical load cycles		according to EN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility DC coil operating DC rated control voltage DC operating voltage pick-up min %Us 70 max %Us 125 drop-out min %Us 10 max %Us 40 Average coil consumption ≤20°C in-rush W 5.4 holding W 5.4 Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min ms 8		-	cycles	1600000	
EMC compatibility yes DC coil operating DC rated control voltage DC operating voltage		mechanical load	-	20000000	
DC rated control voltage	Mirror contats according	to IEC/EN 609474-4-1		YES	
DC rated control voltage DC operating voltage pick-up min %Us 70 max %Us 125 min max %Us 125 min max %Us 10 max %Us 40 max %Us 40 max min max min max m				yes	
DC operating voltage pick-up					
pick-up			V	60	
min %Us 70 max %Us 125					
max %Us 125 drop-out	p		0/ I Io	70	
drop-out min %Us 10 max %Us 40 Average coil consumption ≤20°C in-rush W 5.4 holding W 5.4 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8					
min %Us 10 max %Us 40 Average coil consumption ≤20°C in-rush W 5.4 holding W 5.4 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8			,,,,,,		
Average coil consumption ≤20°C in-rush w 5.4 holding w 5.4 Max cycles frequency by 5.4 Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC closing NO Closing NO min ms 8	•	•	%Us	10	
in-rush W 5.4 holding W 5.4 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8					
Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min ms 8	Average coil consumptio	n ≤20°C			
Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8					
Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8		holding	W	5.4	
Operating times Average time for Us control			1: //	2000	
Average time for Us control in AC Closing NO min ms 8			cycles/h	3600	
in AC Closing NO min ms 8		rol			
Closing NO min ms 8					
min ms 8	II				
			ms	8	
		max	ms	24	

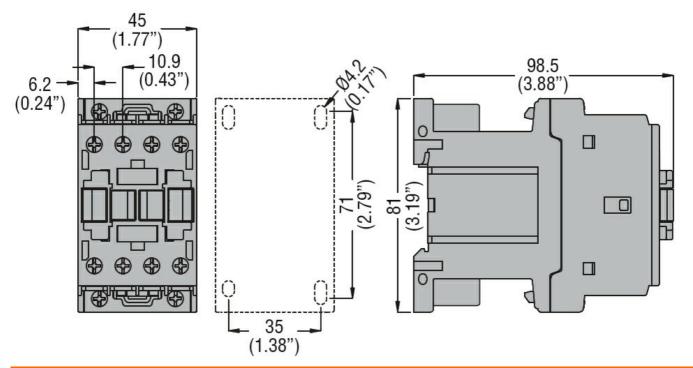


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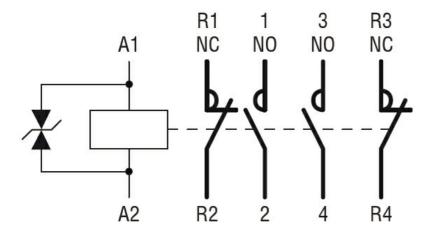
		Opening NO			
		oponing 110	min	ms	10
			max	ms	20
		Closing NC			
		J	min	ms	14
			max	ms	28
		Opening NC			
			min	ms	7
			max	ms	18
	in DC				
		Closing NO			
			min	ms	54
			max	ms	66
		Opening NO			
			min	ms	14
			max	ms	17
		Closing NC			
			min	ms	24
			max	ms	30
		Opening NC			
			min	ms	47
			max	ms	57
UL technical data					
Full-load current (FLA)	for three-phase AC moto	or			
			at 480V	Α	14
			at 600V	Α	17
Yielded mechanical pe					
	for single-phase AC me	otor			
			110/120V	HP	1
			230V	HP	3
	for three-phase AC mo	tor			
			200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
0 1110=			575/600V	HP	15
General USE					
	Contactor		A O		00
A mala i a mala a malitir			AC current	Α	32
Ambient conditions					
Temperature	On another set of the second				
	Operating temperature			۰.	50
			min	°C	-50 -70
	Otomore towns and a		max	°C	70
	Storage temperature		!	°C	60
			min	°C	-60 80
May altituda			max		
Max altitude	nn			m	3000
Resistance & Protection	лі 				2
Pollution degree Dimensions					3
Diffiensions					

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, DC COIL, 60VDC, 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