

# FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC



Product designation			Power contactor
Product type designation			BF18
Contact characteristics		nr.	4
Number of poles		nr. V	4
Rated insulation voltage Ui			690
Rated impulse withstand voltage Uimp		kV	6
Operating frequency	0		0.5
	Operational frequency min	Hz	25
0	Operational frequency max	Hz	400
Conventional free air thermal current Ith		Α	32
Operating current	0 " 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Operational current AC1 (≤40°C)	Α	32
	Operational current AC3 (≤440V ≤55°C)	Α	18
	Operational current AC4 (400V)	Α	8.5
Rated operational power AC1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
Short-time allowable current for 10s (IEC/EN6	0947-1)	Α	200
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	20
Making capacity (RMS value)		Α	180
Breaking capacity at voltage			
	Breaking capacity 440V	Α	144
	Breaking capacity 500V	Α	120
	Breaking capacity 690V	Α	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	2.6
	AC3	W	0.8
Tightening torque for terminals			
	min	Nm	1.5
	max	Nm	1.8
	min	lbft	1.1
	max	lbft	1.5
Tightening torque for coil terminal			
3 3 4	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
max number of wires simultaneously connecta		nr.	2
Conductor section	····		<del>-</del>

Conductor section

AWG



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		min		16
		max		10
	Flexible w/o lug conductor section			
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section		_	
		min	mm²	1
	Fig. 21. 20. See Left Level 1. Level 1. George	max	mm²	4
	Flexible with insulated spade lug conductor section		· 2	4
		min	mm² mm²	1 4
Power terminal protect	ion according to IEC/EN 60529	max	111111	IP20 when wired
Auxiliary contact chara				ii 20 when whea
Operational current AC			А	32
Operating current DC1				
3		440)/		Screw / DIN rail
		110V	Α	35mm
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature		2.0	
		min	°C	-60
Max altitude		max	°C	80
Operating position			m	3000
Operating position		normal		Vertical plan
		allowable		±30°
		anomabio		Screw / DIN rail
Mounting				35mm
Weight			g	0.36
Operations				
Mechanical life			Cycles	20000000
Electrical life			Cycles	1600000
Safety related data				
Performance level B10	od according to EN/ISO 13489-1			
		rated load	Cicli	1600000
EMO seems at it ills.		mechanical load	Cicli	20000000
EMC compatibility  AC coil operating				yes
AC operating voltage				
Ac operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	pion up	min	%Us	0.8
		max	%Us	1.1
	drop-out			
	•	min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.85
	Lance of	max	%Us	1.1
	drop-out			



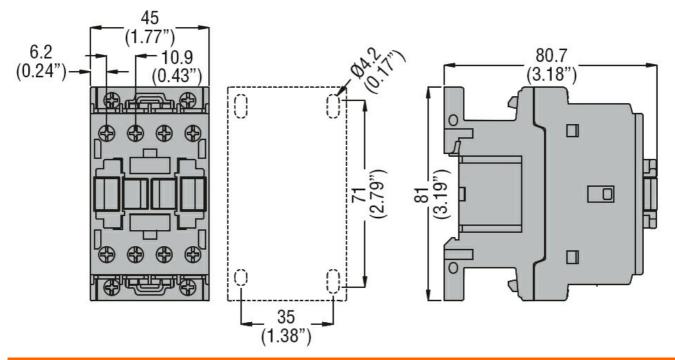


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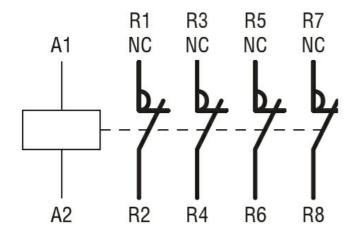
		min	%Us	0.2
		max	%Us	0.55
	of 60Hz coil powered at 60Hz	max	7003	0.00
	pick-up			
	pion up	min	%Us	0.8
		max	%Us	1.1
	drop-out	max	7000	
		min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz	<u> </u>		
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding :	≤20°C 50Hz		W	2.5
Max cycles frequency				
Wax cycles frequericy				
Mechanical operations			Cycles/h	n 3600
			Cycles/h	3600
Mechanical operations			Cycles/h	3600
Mechanical operations Operating times			Cycles/h	3600
Mechanical operations Operating times	ontrol		Cycles/h	3600
Mechanical operations Operating times	ontrol in AC	min	Cycles/h	14
Mechanical operations Operating times	ontrol in AC			
Mechanical operations Operating times	ontrol in AC	min	ms	14
Mechanical operations Operating times	ontrol in AC Closing NC	min	ms	14
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC	min max	ms ms	14 28
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC Opening NC	min max min	ms ms	14 28 7
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC	min max min max	ms ms ms	14 28 7
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC Opening NC	min max min max at 480V	ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC Opening NC	min max min max	ms ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC Opening NC	min max min max at 480V	ms ms ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NC Opening NC	min max min max at 480V at 600V	ms ms ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co  UL technical data Full-load current (FLA)  General USE	ontrol in AC Closing NC Opening NC for three-phase AC motor	min max min max at 480V	ms ms ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co  UL technical data Full-load current (FLA)  General USE  Other features	ontrol in AC Closing NC Opening NC for three-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	14 28 7 18 14 17
Mechanical operations Operating times Average time for Us co  UL technical data Full-load current (FLA)  General USE  Other features Pollution degree	ontrol in AC Closing NC Opening NC for three-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	14 28 7 18
Mechanical operations Operating times Average time for Us co  UL technical data Full-load current (FLA)  General USE  Other features	ontrol in AC Closing NC Opening NC for three-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	14 28 7 18 14 17

**ENERGY AND AUTOMATION** 

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### Wiring diagrams



#### Certifications and compliance

Certifications

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

Compliance

CCC

cULus

EAC

### ETIM 6 classification

EC000066 - Power contactor, AC switching