



Product designation			Power contactor
Product type designation			BF18
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	690
Rated impulse withstand voltage Uimp		kV	6
Operating frequency			-
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		A	32
Operating current			-
	Operational current AC1 (≤40°C)	А	32
	Operational current AC3 (≤440V ≤55°C)	A	18
	Operational current AC4 (400V)	A	8.5
Rated operational power AC1 (T≤40°C)		-	
F F ( - ·	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
Rated operational power AC3 (T≤55°C)			
	230V	kW	4
	400V	kW	7.5
	415V	kW	9
	440V	kW	9
	500V	kW	10
	690V	kW	10
Short-time allowable current for 10s (IEC/EN6	60947-1)	А	200
Protection fuse	,		
	gG (IEC)	А	32
	aM (IEC)	А	20
Making capacity (RMS value)		А	180
Breaking capacity at voltage			
	Breaking capacity 440V	А	144
	Breaking capacity 500V	А	120
	Breaking capacity 690V	А	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
,	Power dissipation pole (average value) Ith	W	2.6
	ÁC3	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



**BF1810A230** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 230VAC, 1NO AUXILIARY CONTACT

	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
max number of wires simultaneously connectable		nr.	2
Conductor section			
AWG			10
	min		16
Elseible over her eastern eastern	max		10
Flexible w/o lug conductor section		mm²	4
	min	mm²	1
Elevible a/w lug conductor acation	max	11111	6
Flexible c/w lug conductor section	min	$mm^2$	4
	min	mm² mm²	1
-	max	111111	4
Flexible with insulated spade lug conductor section	min	mm²	4
	min	mm²	1 4
Deverterring Invotestion according to IEC/EN COE20	max	111111	
Power terminal protection according to IEC/EN 60529 Auxiliary contact characteristics			IP20 when wire
			1 NO
Type of contact Thermal current Ith		۸	10
		А	
IEC/EN 60947-5-1 designation		•	A600 - P600
Operational current AC1 (≤40°C)		А	32
Operating current AC15			
	230V	A	3
	400V	А	1.9
	500V	A	1.4
Operating current DC12			
	110V	A	5.7
Operating current DC13			
	24V	A	5.7
	48V	A	2.9
	60V	А	2.3
	110V	А	Screw / DIN rail
			35mm
	125V	A	0.6
	220V	A	0.2
	600V	А	1.2
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position			
	normal		Vertical plan
	allowable		±30°
		_	Screw / DIN rail
Mounting			35mm

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Operations

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Mechanical life 20000000 Cycles Electrical life 1600000 Cycles Safety related data Performance level B10d according to EN/ISO 13489-1 1600000 rated load Cicli mechanical load Cicli 20000000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating AC operating voltage of 50/60Hz coil powered at 50Hz pick-up %Us 0.8 min max %Us 1.1 drop-out %Us 0.2 min max %Us 0.55 of 50/60Hz coil powered at 60Hz pick-up %Us 0.85 min max %Us 1.1 drop-out %Us min 0.2 %Us 0.55 max of 60Hz coil powered at 60Hz pick-up min %Us 0.8 max %Us 1.1 drop-out 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 VA 70 in-rush holding VA 6.5 of 60Hz coil powered at 60Hz VA 75 in-rush holding VA 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Cycles/h 3600 Mechanical operations Operating times Average time for Us control in AC **Closing NO** min 8 ms 24 max ms **Opening NO** min ms 10 20 max ms

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14

ms

min

Closing NC



			min		14
			max	ms	28
		Opening NC	Шах	mo	20
		Opening NC			-
			min	ms	7
			max	ms	18
JL technical data					
ull-load current (FLA	<ul> <li>for three-phase A</li> </ul>	C motor			
			at 480V	А	14
			at 600V	А	17
/ielded mechanical p	erformance				
		AC motor			
	for single-phase	AC III0I0I	-+ 440/4001/	<b>b</b>	4
			at 110/120V	hp	1
			at 230V	hp	3
	for three-phase A	C motor			
			at 200/208V	hp	5
			at 220/230V	hp	5
			at 460/480V	hp	10
			at 575/600V	hp	15
ontact rating of auxi	liany contacts accord	ling to LII		<u>ייר</u>	A600 - P600
	iary contacts accord				AUUU - FUUU
General USE					
	Contactor				
			AC current	А	32
Other features					
ollution degree					3
Dimensions					
6.2 (0.24")	(0.43")	71 ("2.79")		18") <sup>—</sup> —	

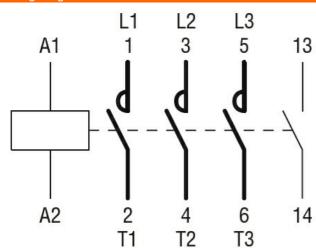
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The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



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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	

ETIM 6 classification

EC000066 - Power contactor, AC switching