



Product designation			Power contactor
Product type designation			BF18
Contact characteristics			-
Number of poles		Nr.	3
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	32
Operational current le			
	AC-1 (≤40°C)	А	32
	AC-1 (≤55°C)	А	26
	AC-1 (≤70°C)	А	23
	AC-3 (≤440V ≤55°C)	А	18
	AC-4 (400V)	А	8.5
Rated operational power AC-3 (T≤55°C)			
	230V	kW	4
	400V	kW	7.5
	415V	kW	9
	440V	kW	9
	500V	kW	10
	690V	kW	10
Rated operational power AC-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	A	17
	48V	A	15
	75V	A	15
	110V	A	6
IEC may autrent to in DC1 with $1/P < 1$ may with 2 pales in series	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series	<2414	۸	20
	≤24V 48V	A	20
	48V 75V	A	20
	75V 110V	A A	20 13
	220V	A	13
IEC max current le in DC1 with L/R \leq 1ms with 3 poles in series	2201	~	1
	≤24V	۸	22
	≤24∨ 48V	A A	22
	48V 75V	A	20
	110V	A	16
	1100	Л	10

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	220V	А	11	
IEC max current le in DC1 with L/R \leq 1ms with 4 poles in series				
	≤24V	A	22	
	48V	А	22	
	75V	А	20	
	110V	А	18	
	220V	Α	13	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series				
	≤24V	А	12	
	48V	А	11	
	75V	А	11	
	110V	А	2	
	220V	А	_	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series				
	≤24V	А	15	
	48V	A	13	
	75V	A	13	
	110V	A	8	
	220V	A	2	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	2201		L	
	≤24V	А	18	
	48V	A	18	
	48V 75V	A	16	
	110V	A	12	
	220V		6	
IFC may autrent to in DC2 DCE with L/D < 15mg with 4 palas in series	2200	A	0	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series	≤24V	٨	10	
		A	18	
	48V	A	18	
	75V	A	16	
	110V	A	13	
	220V	<u>A</u>	8	
Short-time allowable current for 10s (IEC/EN60947-1)		А	200	
Protection fuse				
	gG (IEC)	A	32	
	aM (IEC)	A	20	
Making capacity (RMS value)		А	180	
Breaking capacity at voltage				
	440V	А	144	
	500V	А	120	
	690V	А	94	
Resistance per pole (average value)		mΩ	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	Ibin	1.1	
	max	Ibin	1.5	
Tightening torque for coil terminal	max			
	min	Nm	0.8	
		Nm	0.8 1	
	max	Ibin		
	min	וזומו	0.8	

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		max	lbin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AWG/Kcmil			
	AWG/KCIIII	may		10
	Flexible w/o lug conductor section	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	max		0
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	Пах		7
	The side with insulated space by conductor section	min	mm²	1
		max	mm²	4
		Пах		IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rai
Fixing				35mm
Weight			g	491
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact chara	acteristics			
Thermal current Ith			А	10
			/ \	10
IEC/EN 60947-5-1 de	signation			A600 - P600
IEC/EN 60947-5-1 de Operating current AC	-			
	-	230V	A	
	-	230V 400V		A600 - P600
	-		A	A600 - P600 3
	15	400V	A A	A600 - P600 3 1.9
Operating current AC	15	400V	A A	A600 - P600 3 1.9
Operating current AC	15	400V 500V	A A A	A600 - P600 3 1.9 1.4
Operating current AC	15	400V 500V	A A A	A600 - P600 3 1.9 1.4
Operating current AC	15	400V 500V 110V	A A A A	A600 - P600 3 1.9 1.4 5.7
Operating current AC	15	400V 500V 110V 24V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7
Operating current AC	15	400V 500V 110V 24V 48V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Operating current AC	15	400V 500V 110V 24V 48V 60V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
Operating current AC	15	400V 500V 110V 24V 48V 60V 110V	A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Operating current AC	15	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current AC Operating current DC Operating current DC	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Operating current AC Operating current DC Operating current DC	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Operating current AC Operating current DC Operating current DC Operations Mechanical life	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	15	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	15 12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	15 12 13 0d according to EN/ISO 13489-1 m	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 20000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	15 12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000

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DC rated control voltag	10			V	48
DC operating voltage				V	40
De operating verage	pick-up				
	rr		min	%Us	70
			max	%Us	125
	drop-out				
			min	%Us	10
			max	%Us	40
Average coil consumpt	tion ≤20°C				- /
			in-rush	W	5.4
Max avalas fraguesav			holding	W	5.4
Max cycles frequency Mechanical operation				cycles/h	3600
Operating times				cycles/II	3000
Average time for Us co	ontrol				
, worage and for ee of	in AC				
		Closing NO			
		0	min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
			max	ms	20
		Closing NC			
			min	ms	14
			max	ms	28
		Opening NC	min	ms	7
			max	ms	, 18
	in DC		max	1110	10
		Closing NO			
		5	min	ms	54
			max	ms	66
		Opening NO			
			min	ms	14
			max	ms	17
UL technical data	<u> </u>				
Full-load current (FLA)	ior three-phase AC r	ΠΟΙΟΓ		۸	1 /
			at 480V at 600V	A A	14 17
Yielded mechanical pe	rformance		at 000 v	A	17
noidea meenanical pe	for single-phase AC	Cmotor			
			110/120V	HP	1
			230V	HP	3
	for three-phase AC	motor			
	·		200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
			575/600V	HP	15
General USE	0				
	Contactor		10		20
	Auxiliant costs sta		AC current	A	32
	Auxiliary contacts		AC voltage	17	600
			AC voltage AC current	V A	600 10
			AC current	А	ĨŬ

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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

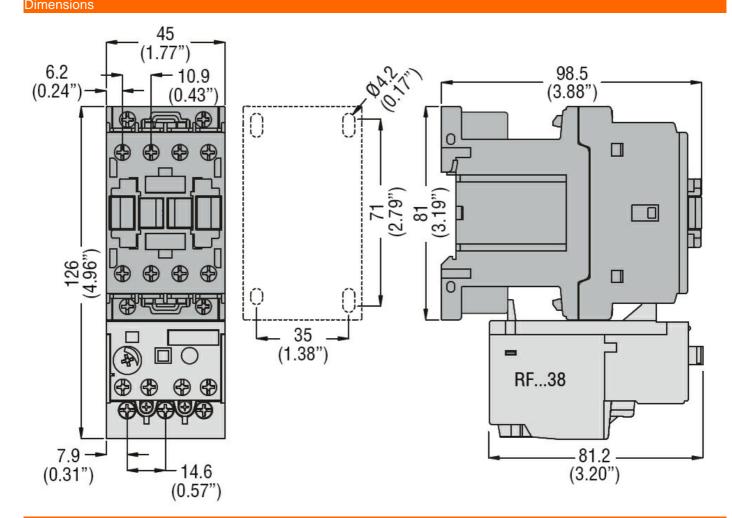


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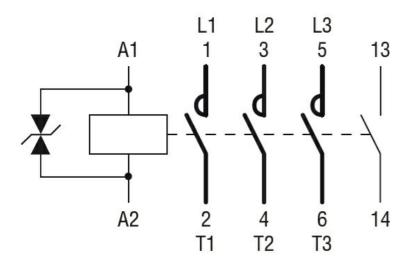
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		DC voltage	V	250
		DC current	А	1
Short-circuit protec	tion fuse, 600V			
	High fault			
	5	Short circuit current	kA	100
		Fuse rating	А	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	А	80
Contact rating of au	uxiliary contacts according to UL			A600 - P600
Ambient conditions	6			
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ection			
Pollution degree				3
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	

ETIM 8.0

ETIM cla

EC000066 -Power contactor, AC switching