



Product designation			Power contacto
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		A	32
Operational current le			
	AC-1 (≤40°C)	A	32
	AC-1 (≤55°C)	А	26
	AC-1 (≤70°C)	A	23
	AC-3 (≤440V ≤55°C)	А	18
	AC-4 (400V)	A	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
	220V	A	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	13
	220V	A	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	.	-	
	≤24V	A	22
	48V	A	22
	75V	A	20
	110V	А	16

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 12VDC, 1NO AUXILIARY CONTACT

	220V	А	11
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	Α	22
	48V	А	22
	75V	А	20
	110V	А	18
	220V	A	13
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201		10
	≤24V	А	12
	48V	A	11
	48V 75V		
		A	11
	110V	A	2
	220V	A	_
IEC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series			
	≤24V	A	15
	48V	Α	13
	75V	А	13
	110V	А	8
	220V	А	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	А	18
	48V	A	18
	40V 75V	A	16
	110V	A	12
	220V	A	6
IEC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series			
	≤24V	A	18
	48V	А	18
	75V	Α	16
	110V	А	13
	220V	А	8
Short-time allowable current for 10s (IEC/EN60947-1)		А	200
Protection fuse			
	gG (IEC)	А	32
	aM (IEC)	А	20
Making capacity (RMS value)	a (. <u> </u>)	A	180
Breaking capacity at voltage			100
Droaking oupdoily at voltage	440V	۸	144
	440V 500V	A	120
		А	94
		Λ	G/I
	690V	A	
		A mΩ	2.5
	690V	mΩ	2.5
	690V Ith	mΩ W	2.5 2.6
Power dissipation per pole (average value)	690V	mΩ	2.5
Power dissipation per pole (average value)	690V Ith	mΩ W	2.5 2.6
Power dissipation per pole (average value)	690V Ith	mΩ W	2.5 2.6
Power dissipation per pole (average value)	690V Ith AC-3	mΩ W W	2.5 2.6 0.8
Power dissipation per pole (average value)	690V Ith AC-3 min max	mΩ W W Nm	2.5 2.6 0.8 1.5 1.8
Power dissipation per pole (average value)	690V Ith AC-3 min max min	mΩ W W Nm Ibin	2.5 2.6 0.8 1.5 1.8 1.1
Power dissipation per pole (average value) Tightening torque for terminals	690V Ith AC-3 min max	mΩ W W Nm	2.5 2.6 0.8 1.5 1.8
Power dissipation per pole (average value) Tightening torque for terminals	690V Ith AC-3 min max min max	mΩ W W Nm Ibin Ibin	2.5 2.6 0.8 1.5 1.8 1.1 1.5
Resistance per pole (average value) Power dissipation per pole (average value) Tightening torque for terminals Tightening torque for coil terminal	690V Ith AC-3 min max min max min max	mΩ W W Nm Ibin Ibin	2.5 2.6 0.8 1.5 1.8 1.1 1.5 0.8
Power dissipation per pole (average value) Tightening torque for terminals	690V Ith AC-3 min max min max	mΩ W W Nm Ibin Ibin	2.5 2.6 0.8 1.5 1.8 1.1 1.5



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Max number of wires	simultaneously connectable	max	Ibin Nr.	0.74
Conductor section	Simulateously connectable		INI.	2
	AWG/Kcmil			
	AWORKIM	max		10
	Flexible w/o lug conductor section	max		10
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
	, and the second s	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal prote	ection according to IEC/EN 60529			IP20 when
•				properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
				35mm
Weight			g	480
Conductor section				
	AWG/kcmil conductor section			
				10
Auxilian, contact cha	rotoristico	max		10
Auxiliary contact char	racteristics	max	۸	
Thermal current Ith		max	A	10
Thermal current Ith IEC/EN 60947-5-1 d	esignation	max	A	
Thermal current Ith	esignation			10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 d	esignation	230V	A	10 A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 d	esignation	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC	esignation C15	230V	A	10 A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 d	esignation C15	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC	esignation C15 C12	230V 400V 500V 110V	A A A A	10 A600 - P600 3 1.9 1.4 5.7
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V	A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V	A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V	A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V	A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC Operations Mechanical life	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A Cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation C15 C12 C13	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A Cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation C15 C12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation C15 C12 C13 10d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 d Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	esignation C15 C12 C13 10d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000

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1NO AUXILIARY CONTACT

				N/	40
DC rated control voltage	ge			V	12
DC operating voltage					
	pick-up				
			min	%Us	70
			max	%Us	125
	drop-out				
			min	%Us	10
			max	%Us	40
Average coil consump	tion ≤20°C				
0			in-rush	W	5.4
			holding	W	5.4
Max cycles frequency			Tiolding	••	0.4
				cycles/h	2600
Mechanical operation				cycles/n	3000
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
			max	ms	20
		Closing NC	Пах	mo	20
			min	ma	14
				ms	
			max	ms	28
		Opening NC			
			min	ms	7
			max	ms	18
	in DC				
		Closing NO			
		-	min	ms	54
			max	ms	66
		Opening NO			
		oponingree	min	ms	14
					17
LIL technical data			max	ms	17
UL technical data	for three where A	2 motor			
Full-load current (FLA)	nor unree-phase AC				
			at 480V	A	14
			at 600V	A	17
Yielded mechanical pe					
	for single-phase /	AC motor			
			110/120V	HP	1
			230V	HP	3
	for three-phase A	C motor			
			200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
			575/600V	HP	15
			070/0UV		10
General USE					
	Contactor				
			AC current	Α	32
	Auxiliary contacts				
	-		AC voltage	V	600
			AC current	А	10

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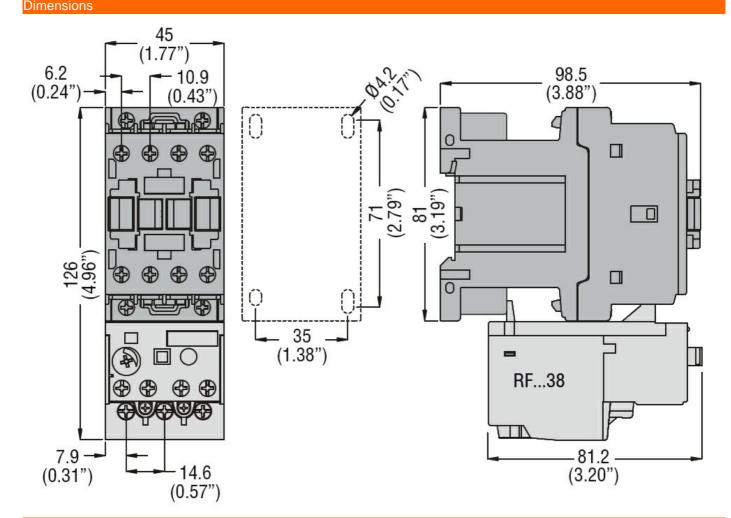
The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



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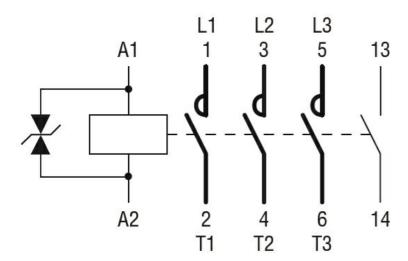
IE (AC3) = 18A,	DC COIL,	12VDC,
1NO AUX	(ILIARY CO	ONTACT

		DC voltage	V	250
		DC current	А	1
Short-circuit protect	tion fuse, 600V			
	High fault			
	-	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	ixiliary contacts according to UL			A600 - P600
Ambient conditions				
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

EC000066 -Power contactor, AC switching