



Product designation			Power contactor
Product type designation			BF18
Contact characteristics		<b>.</b>	•
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			0.5
	min	Hz	25
150 Occupation of the second constitution	max	Hz	400
IEC Conventional free air thermal current Ith		Α	32
Operational current le		_	
	C-1 (≤40°C)	A	32
	C-1 (≤55°C)	A	26
	C-1 (≤70°C)	Α	23
· ·	10V ≤55°C)	A	18
	C-4 (400V)	Α	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)	0001		
	230V	kW	12
	400V	kW	21
	500V	kW	26
150	690V	kW	36
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	10 A) /		4 7
	≤24V	A	17
	48V	A	15
	75V	A	15
	110V	A	6
IFC may assument to in DC4 with 1/D < 4 may with 2 males in position	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	10 A) /		0.0
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	13
IFC may autrent to in DC4 with 1/D < 4ma with 2 materials	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	20 AV	۸	22
	≤24V	A	22
	48V	A	22
	75V	A	20
	110V	Α	16



	220V	Α	11
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	22
	48V	Α	22
	75V	Α	20
	110V	Α	18
	220V	Α	13
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	12
	48V	Α	11
	75V	Α	11
	110V	Α	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	15
	48V	Α	13
	75V	Α	13
	110V	Α	8
	220V	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
· ·	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	12
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V	- , ,	
120 max can once in 200 200 mar 2/10 from that it poles in contes	≤24V	Α	18
	48V	A	18
	75V	A	16
	110V	A	13
	220V	A	8
Short-time allowable current for 10s (IEC/EN60947-1)	220 V	A	200
Protection fuse			200
1 Totalian Tuda	gG (IEC)	Α	32
	aM (IEC)	A	20
Making capacity (RMS value)	aivi (ILO)	A	180
Breaking capacity (NWS value)			100
Broaking dapaoity at voltage	440V	Α	144
	500V	A	120
	690V	A	94
Resistance per pole (average value)	030 V	mΩ	2.5
Power dissipation per pole (average value)		11177	۷.J
rowei dissipation per pole (average value)	141-	14/	2.6
	lth	W	2.6
Tightoning town of a town in all	AC-3	VV	0.8
Tightening torque for terminals	!	Nime	1 5
	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
Title to the control of the control	max	Ibin	1.5
Tightening torque for coil terminal			
Tightening torque for coil terminal	min	Nm	0.8
Tightening torque for coil terminal			



NA	de la constant	max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A VA (C / ( / c ma )			
	AWG/Kcmil	may		10
	Flovible w/e lug conductor section	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	max	111111	0
	Tickloic of windy contactor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		•
		min	mm²	1
		max	mm²	4
				IP20 when
Power terminal protec	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	498
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	signation			A600 - P600
	15			
Operating current AC	15	230V	A	3
	15	400V	Α	1.9
Operating current AC <sup>2</sup>				
Operating current AC <sup>2</sup>		400V 500V	A A	1.9 1.4
Operating current AC	12	400V	Α	1.9
Operating current AC	12	400V 500V 110V	A A	1.9 1.4 5.7
Operating current AC	12	400V 500V 110V 24V	A A A	1.9 1.4 5.7 5.7
Operating current AC	12	400V 500V 110V 24V 48V	A A A	1.9 1.4 5.7 5.7 2.9
Operating current AC	12	400V 500V 110V 24V 48V 60V	A A A A A	1.9 1.4 5.7 5.7 2.9 2.3
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	1.9 1.4 5.7 5.7 2.9 2.3 1.25
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Operating current AC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	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  Operations	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	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	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	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 Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A Cycles	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  Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	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	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13  Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 200000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 200000000 yes
Operating current AC Operating current DC Operating current DC Operating current DC  Operations Mechanical life Electrical life Safety related data Performance level B1	12 13  Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A Cycles cycles	1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 200000000

**ENERGY AND AUTOMATION** 

DC rated control voltage	ge			V	125
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				
			in-rush	W	5.4
			holding	W	5.4
Max cycles frequency					
Mechanical operation				cycles/h	3600
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			
			min	ms	14
			max	ms	28
		Opening NC	_		
			min	ms	7
	<del></del>		max	ms	18
	in DC				
		Closing NO			
			min	ms	54
		0 1 110	max	ms	66
		Opening NO			
			min	ms	14
		0	max	ms	17
		Closing NC			0.4
			min	ms	24
		O i NO	max	ms	30
		Opening NC			4.7
			min	ms	47
III. to obnical data			max	ms	57
UL technical data	for three phase AC	motor			
Full-load current (FLA)	nor unee-phase AC r	HOIOI	at 1001/	٨	4.4
			at 480V	A	14
Violded messels sisted	rformor		at 600V	Α	17
Yielded mechanical pe		` matar			
	for single-phase AC	MOLOI	440/400\/	ЦD	1
			110/120V	HP	1
	for the second of		230V	HP	3
	for three-phase AC	ΠΟΤΟΓ	000/0001	110	F
			200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
			575/600V	HP	15

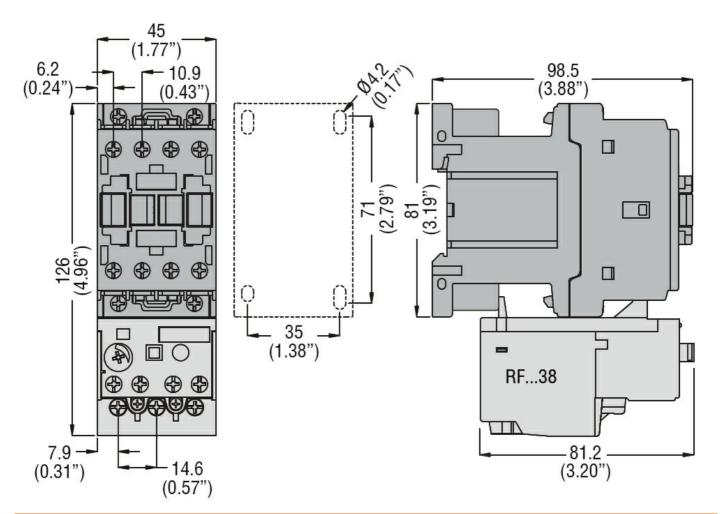




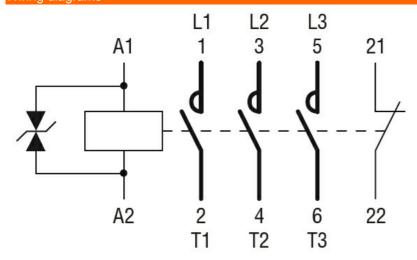
Contactor   AC current	0 11105				
AC current	General USE	_			
Auxiliary contacts  AC voltage V 600 AC current A 10 DC voltage V 250 DC current A 1 DC voltage v 3 DC v		Contactor			
AC voltage V 600 AC current A 10 DC voltage V 250 DC current A 1 DC voltage V 250 DC current A 1  Short-circuit protection fuse, 600V High fault  Short circuit current KA 100 Fuse rating A 600 Fuse class J  Standard fault  Short circuit current KA 5 Fuse rating A 80  Contact rating of auxiliary contacts according to UL  Ambient conditions  Temperature  Operating temperature  Operating temperature  Storage temperature  min °C -50 max °C 70  Storage temperature  min °C -60 max °C 80  Max altitude m 3000  Resistance & Protection  Pollution degree  Storage temperature			AC current	A	32
AC current A 10 DC voltage V 250 DC current A 1 To DC voltage DC current Equation DC voltage DC vo		Auxiliary contacts			
DC voltage   V   250     DC current				V	
DC current   A   1					
Short-circuit protection fuse, 600V   High fault   Short circuit current   KA   100   Fuse rating   A   60   Fuse class   J   Standard fault   Short circuit current   KA   5   Fuse rating   A   80   Standard fault   Short circuit current   Fuse rating   A   80   Standard fault   Short circuit current   Fuse rating   A   80   Standard fault   Short circuit current   Fuse rating   A   80   Standard fault   Short circuit current   Fuse rating   A   80   Standard fault   Short circuit current   Fuse rating   A   80   Standard fault   Short circuit current   KA   5   Fuse rating   A   80   Standard fault   Short circuit current   KA   5   Fuse rating   A   80   Standard fault   Short circuit current   KA   5   Fuse rating   A   80   Standard fault   Short circuit current   KA   5   Fuse rating   A   80   Standard fault current   Fuse rating   A   80   Standard fault current   Short circuit current   KA   5   Fuse rating   A   80   Standard fault current   Short circuit current   KA   5   Fuse rating   A   80   Standard fault current   Short circuit current   KA   5   Fuse rating   A   80   Standard fault current   Short circuit current   KA   5   Fuse rating   A   80   Standard fault current   Short circuit curren				V	250
High fault			DC current	Α	1
Short circuit current   KA   100   Fuse rating   Fuse class   J	Short-circuit protection	on fuse, 600V			
Fuse rating		High fault			
Fuse class   J			Short circuit current	kA	100
Standard fault   Short circuit current   KA   5   Fuse rating   A   80			Fuse rating	Α	60
Short circuit current   Fuse rating   A   80			Fuse class		J
Fuse rating   A   80		Standard fault			
Contact rating of auxiliary contacts according to UL			Short circuit current	kA	5
Ambient conditions   Care			Fuse rating	Α	80
Ambient conditions   Temperature   Operating temperature     min °C -50 max °C 70	Contact rating of auxi	liary contacts according to UL			A600 - P600
Operating temperature	Ambient conditions	·			
Operating temperature           min         °C         -50           max         °C         70           Storage temperature           min         °C         -60           max         °C         80           Max altitude         m         3000           Resistance & Protection           Pollution degree         3					
min °C -50 max °C 70	•	Operating temperature			
max °C 70		o'h erennig rennip erenen e	min	°C	-50
Storage temperature           min         °C         -60           max         °C         80           Max altitude         m         3000           Resistance & Protection         3			max	_	
min °C -60 max °C 80  Max altitude m 3000  Resistance & Protection  Pollution degree 3		Storage temperature			
Max altitude m 3000 Resistance & Protection Pollution degree 3		go .opo.a.a.o	min	°C	-60
Max altitude m 3000 Resistance & Protection Pollution degree 3					
Resistance & Protection Pollution degree 3	Max altitude		· · · · · · · · · · · · · · · · · · ·		
Pollution degree 3		tion			
<u> </u>					3
	Dimensions				

**ENERGY AND AUTOMATION** 

### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 125VDC, 1NC AUXILIARY CONTACT



#### 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



#### BF1801D125

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 125VDC, 1NC AUXILIARY CONTACT

CCC			
cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching