



			44
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		Α	32
Operational current le			
·	AC-1 (≤40°C)	Α	32
	AC-1 (≤55°C)	Α	26
	AC-1 (≤70°C)	Α	23
	AC-3 (≤440V ≤55°C)	Α	18
	AC-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)			
(- 10 C)	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	17
	48V	Α	15
	75V	Α	15
	110V	Α	6
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	<u>-</u>		
	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	13
	220V	Α	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			•
carrent to in Bo . mai Ert = into mai o potoo in oonoo	≤24V	Α	22
	48V	A	22
	75V	A	20
	110V	A	16
	1100	$^{\wedge}$	10



	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			



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AVA 0.44			
	AWG/Kcmil			4.0
	Clavible w/s has penductor postion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	111111	0
	r lexible 6/W lug corrudctor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
	r loxilore mar integrated operate ray contracted coolien	min	mm²	1
		max	mm²	4
	(''			IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	358
Conductor section				
	AWG/kcmil conductor section			
A 112		max		10
IALIVIIIary contact chara	acteristics			
Auxiliary contact chara	20101101100		۸	10
Thermal current Ith			Α	10 A600 B600
Thermal current Ith IEC/EN 60947-5-1 de	signation		Α	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	signation	2201/		A600 - P600
•	signation	230V	A	A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 de	signation	400V	A A	A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15		A	A600 - P600 3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V	A A A	3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V	A A	A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V	A A A	3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V 24V	A A A	3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V	A A A	3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V 24V 48V	A A A A	3 1.9 1.4 5.7 5.7 2.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V 24V 48V 60V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current Ith IEC/EN 60947-5-1 de	signation 15	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	signation 15	400V 500V 110V 24V 48V 60V 110V 125V	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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	signation 15	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	signation 15	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life	signation 15	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	signation 15 12 13	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	signation 15	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	3 1.9 1.4 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 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	signation 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	3 1.9 1.4 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 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Safety related data Performance level B1	signation 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	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 200000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	signation 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	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 1600000 yes
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	signation 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	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 200000000



Rated AC voltage a	at 50/60Hz		V	230
AC operating voltag				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
	T	max	%Us	110
	drop-out		0/11-	00
		min	%Us	20
	of 50/60Hz coil powered at 60Hz	max	%Us	55
	pick-up			
	ρισκ-αρ	min	%Us	85
		max	%Us	110
	drop-out	Παλ	/003	110
	arop out	min	%Us	20
		max	%Us	55
C average coil co	nsumption at 20°C	max		
	of 50/60Hz coil powered at 50Hz			
	2. 23. 23. <u>2</u> 23. po. 3. 33 at 30. 12	in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz	9		
	·	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
	·	in-rush	VA	75
		holding	VA	9
		riolaling	V/\	
Dissipation at holdi	ng ≤20°C 50Hz	Holding	W	2.5
Max cycles frequen	су	Holding	W	2.5
Max cycles frequen Mechanical operation	су	noung		2.5
Max cycles frequen Mechanical operation Operating times	on	Holding	W	2.5
Max cycles frequen Mechanical operation Operating times	on s control	Holding	W	2.5
Max cycles frequent Mechanical operation Operating times	s control in AC	noiding	W	2.5
Max cycles frequent Mechanical operation Operating times	on s control		W cycles/h	2.5 3600
Max cycles frequent Mechanical operation Operating times	s control in AC	min	W cycles/h ms	2.5 3600
Max cycles frequent Mechanical operation Operating times	s control in AC Closing NO		W cycles/h	2.5 3600
Max cycles frequent Mechanical operation Operating times	s control in AC	min max	W cycles/h ms ms	2.5 3600 8 24
Max cycles frequent Mechanical operation Operating times	s control in AC Closing NO	min max min	W cycles/h ms ms	2.5 3600 8 24 10
Max cycles frequent Mechanical operation Operating times	s control in AC Closing NO Opening NO	min max	W cycles/h ms ms	2.5 3600 8 24
Max cycles frequen Mechanical operation Operating times	s control in AC Closing NO	min max min max	W cycles/h ms ms ms	2.5 3600 8 24 10 20
Max cycles frequent Mechanical operation Operating times	s control in AC Closing NO Opening NO	min max min max min	W cycles/h ms ms ms ms	2.5 3600 8 24 10 20
Max cycles frequen Mechanical operation Decrating times	on s control in AC Closing NO Opening NO Closing NC	min max min max	W cycles/h ms ms ms	2.5 3600 8 24 10 20
Max cycles frequen Mechanical operation Decrating times	s control in AC Closing NO Opening NO	min max min max min max	w cycles/h ms ms ms ms	2.5 3600 8 24 10 20 14 28
Max cycles frequen Mechanical operation Operating times	on s control in AC Closing NO Opening NO Closing NC	min max min max min max min	w cycles/h ms ms ms ms ms	2.5 3600 8 24 10 20 14 28
Max cycles frequent Mechanical operation Operating times Everage time for Us	on s control in AC Closing NO Opening NO Closing NC	min max min max min max	w cycles/h ms ms ms ms	2.5 3600 8 24 10 20 14 28
Max cycles frequent Mechanical operation Operating times Average time for Use May be a supply of the	s control in AC Closing NO Opening NO Closing NC Opening NC	min max min max min max min	w cycles/h ms ms ms ms ms	2.5 3600 8 24 10 20 14 28
Max cycles frequent Mechanical operation Derating times Exverage time for Use May be a seen of the May be a seen o	on s control in AC Closing NO Opening NO Closing NC	min max min max min max min	w cycles/h ms ms ms ms ms	2.5 3600 8 24 10 20 14 28
Max cycles frequent Mechanical operation Derating times Exverage time for Use May be a seen of the May be a seen o	s control in AC Closing NO Opening NO Closing NC Opening NC	min max min max min max min max	w cycles/h ms ms ms ms ms	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequent Mechanical operation Operating times Average time for Us Average time for Us Tull-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	min max min max min max min max	W cycles/h ms ms ms ms ms ms A	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequent Mechanical operation Operating times Average time for Use The State of St	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC I performance	min max min max min max min max	W cycles/h ms ms ms ms ms ms A	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequent Mechanical operation Operating times Exverage time for Use May be a supported to the support of the suppor	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	min max min max min max min max	W cycles/h ms ms ms ms ms ms A	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequent Mechanical operation Operating times Exverage time for Use May be a supported to the support of the suppor	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC I performance	min max min max min max at 480V at 600V	w cycles/h ms ms ms ms ms ms A A	2.5 3600 8 24 10 20 14 28 7 18
Max cycles frequent Mechanical operation Operating times Average time for Us Average time for Us Tull-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC I performance	min max min max min max at 480V at 600V	W cycles/h ms ms ms ms ms A A HP	2.5 3600 8 24 10 20 14 28 7 18

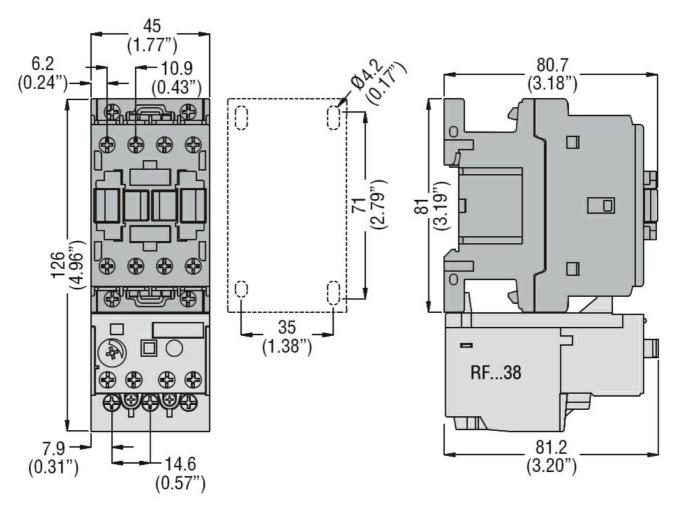




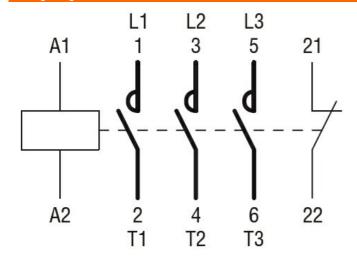
		220/230V	HP	5
		460/480V	HP	10
		575/600V	HP	15
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
	·	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect	ion fuse, 600V			
	High fault			
	•	Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	80
Contact rating of au	xiliary 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	ction			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 230VAC, 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



BF1801A230

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

CCC			
cULus	_	_	
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching