



			44
Product designation			Power contactor
Product type designation			BF18
Contact characteristics			20
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
operational inequality	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)	A	8.5
Rated operational power AC-3 (T≤55°C)	ΛΟ + (+00 )		0.0
Nation operational power Ao-o (1-00 o)	230V	kW	4
	400V	kW	7.5
	415V	kW	9
	440V	kW	9
	500V	kW	
	690V	kW	10 10
Poted energtional newer AC 1 (T<40°C)	090 V	KVV	10
Rated operational power AC-1 (T≤40°C)	2201/	LANA	10
	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	40 AV /		4-
	≤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			
	≤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			
	≤24V	Α	22
	48V	Α	22
	75V	Α	20
	110V	Α	16



BF1810A230

	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	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
The max current to in 500-500 with E/N = 10m3 with 2 poles in series	≤24V	Α	15
	48V	A	
	48 V 75 V		13
		A	13
	110V	A	8
150	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	-0.01		4.0
	≤24V	A	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			
	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	13
	220V	Α	8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	20
Making capacity (RMS value)	, ,	Α	180
Breaking capacity at voltage			
	440V	Α	144
	500V	A	120
	690V	A	94
Resistance per note (average value)	090 v	mΩ	2.5
Resistance per pole (average value)		11177	۷.ن
Power dissipation per pole (average value)	141	107	2.0
	Ith	W	2.6
Till to die to en a forte estado	AC-3	W	0.8
Tightening torque for terminals			4.5
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8



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

		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
	= = = = = = = = = = = = = = = = = = = =	max		10
	Flexible w/o lug conductor section		2	4
		min	mm²	1
	Flexible c/w lug conductor section	max	mm²	6
	Flexible C/W lug conductor Section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section		111111	<u> </u>
	Tiexible with insulated space tag conductor section	min	mm²	1
		max	mm²	4
				IP20 when
Power terminal prote	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
Auxiliary contact cha	racteristics			4.0
Thermal current Ith			Α	10
IEC/EN 60947-5-1 d				A600 - P600
Operating current AC	715	0001/	۸	0
		230V 400V	A A	3 1.9
		500V	A	1.4
Operating current DC	212	300 V		1.4
Operating current be	712	110V	Α	5.7
Operating current DC	213	1101		0.1
Operating ourrent be	710	24V	Α	5.7
		48V	A	2.9
		60V	A	2.3
		110V	Α	1.25
		125V	Α	1.1
		220V	Α	0.55
		600V	Α	0.2
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1600000
Safety related data				
Performance level B	10d according to EN/ISO 13489-1			
		rated load	cycles	1600000
		mechanical load	cycles	20000000
EMC compatibility				yes
AC coil operating	50/0011			222
Rated AC voltage at			V	230
AC operating voltage	( 50/0011			

of 50/60Hz coil powered at 50Hz

pick-up



		min	%Us	80
		max	%Us	110
	drop-out		,,,,,	
	drop out	min	%Us	20
		min		
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
	·	min	%Us	20
		max	%Us	55
AC average coil consu	Imption at 20°C	IIIUX	7003	
AC average con const				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz		-	
	·	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	Holding	v, t	<u> </u>
	or our iz con powered at ouriz	-امنسیت!	١/٨	75
		in-rush	VA	75
		holding	VA	9
Dissipation at holding	≤20°C 50Hz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times			•	
Average time for Us co	ontrol			
3				
J	in AC			
Ü				
Ü	in AC	min	ms	8
Ü	in AC Closing NO	min max	ms ms	8 24
Ü	in AC			
Ü	in AC Closing NO			
Ü	in AC Closing NO	max min	ms ms	10
	in AC Closing NO Opening NO	max	ms	24
	in AC Closing NO	max min max	ms ms ms	24 10 20
	in AC Closing NO Opening NO	max min max min	ms ms ms	<ul><li>24</li><li>10</li><li>20</li><li>14</li></ul>
	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	24 10 20
	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	24 10 20 14 28
	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7
	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms	24 10 20 14 28
UL technical data	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7 18
	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7
UL technical data Rated operational volt	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7 18
UL technical data Rated operational volt	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms	24 10 20 14 28 7 18
UL technical data Rated operational volt	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms v	24 10 20 14 28 7 18 600
UL technical data Rated operational volta Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC Opening NC opening NC	max min max min max min max	ms ms ms ms ms ms	24 10 20 14 28 7 18
UL technical data Rated operational volt	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC  age AC (UL) of for three-phase AC motor	max min max min max min max	ms ms ms ms ms v	24 10 20 14 28 7 18 600
UL technical data Rated operational volta Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC Opening NC opening NC	max min max min max min max  at 480V at 600V	ms ms ms ms ms v	24 10 20 14 28 7 18 600 14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC  age AC (UL) of for three-phase AC motor	max min max min max min max  at 480V at 600V	ms ms ms ms ms ms A A	24 10 20 14 28 7 18 600 14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  age AC (UL)  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V	ms ms ms ms ms v	24 10 20 14 28 7 18 600 14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC  age AC (UL) of for three-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V	ms ms ms ms ms ms A A	24  10 20  14 28  7 18  600  14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  age AC (UL)  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V	ms ms ms ms ms ms A A	24 10 20 14 28 7 18 600 14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  age AC (UL)  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V	ms ms ms ms ms ms A HP HP	24  10 20  14 28  7 18  600  14 17
UL technical data Rated operational volta Full-load current (FLA)	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  age AC (UL)  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V  200/208V 220/230V	ms ms ms ms ms ms Ms A HP HP	24 10 20 14 28 7 18 600 14 17 1 3
UL technical data Rated operational volta Full-load current (FLA)	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  age AC (UL)  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V 200/208V	ms ms ms ms ms ms  Ms A  HP HP	24 10 20 14 28 7 18 600 14 17

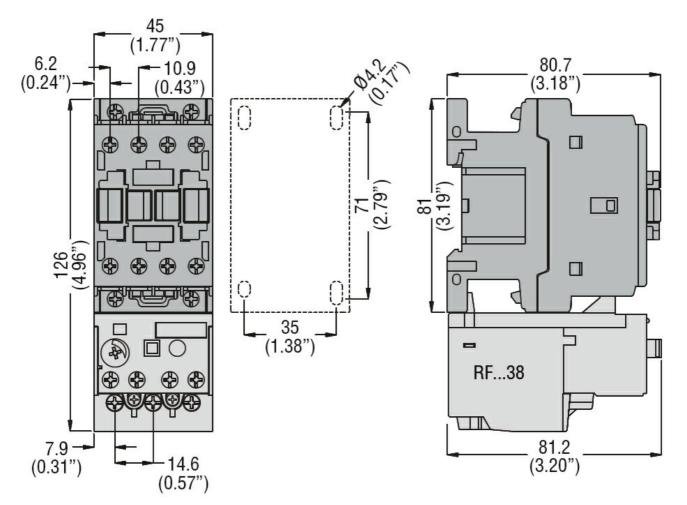




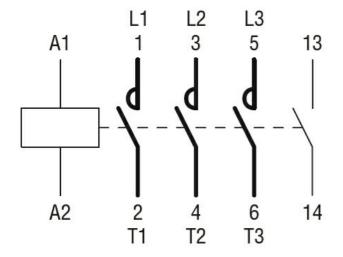
General USE						
General USE	Comtostor					
	Contactor	AC current	۸	32		
	Auviliany contacts	AC current	Α	32		
	Auxiliary contacts	A.C. voltogo	\/	600		
		AC voltage V 600 AC current A 10 DC voltage V 250				
01 - 4 - 2 - 2 - 2 - 2 - 2 - 2	. (	DC current	A	1		
Short-circuit protection						
	High fault					
		Short circuit current Fuse rating Fuse class				
	-	Fuse class		J		
	Standard fault					
		Short circuit current	kA	5		
		Fuse rating	A	80		
	ary 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 & Protecti	on					
Pollution degree				3		
Dimensions						

**ENERGY AND AUTOMATION** 

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

CCC



### BF1810A230

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

cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching