



Product designation Product type designation			Power contactor 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)			
	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			
·	≤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



	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
Title de la constant	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



	max	Ibin	0.74
simultaneously connectable		Nr.	2
A1110 // C			
AWG/Kcmii			4.0
Flavible w/s lug conductor costice	max		10
Flexible w/o lug conductor section	min	mama ²	4
			1 6
Florible c/w lug conductor section	IIIax	111111	0
r lexible 6/w rag conductor section	min	mm²	1
			4
Flexible with insulated spade lug conductor section			•
		mm²	1
			4
			IP20 when
tion according to IEC/EN 60529			properly wired
	normal		Vertical plan
	allowable		±30°
			Screw / DIN rail
			35mm
		g	494
AWG/kcmil conductor section			
	max		10
acteristics			
		^	4.0
		Α	10
esignation		Α	10 A600 - P600
	0001		A600 - P600
esignation	230V	A	A600 - P600 3
esignation	400V	A A	A600 - P600 3 1.9
esignation 15		A	A600 - P600 3
esignation	400V 500V	A A A	3 1.9 1.4
esignation 15	400V	A A	A600 - P600 3 1.9
esignation 15	400V 500V 110V	A A A	A600 - P600 3 1.9 1.4 5.7
esignation 15	400V 500V 110V 24V	A A A	A600 - P600 3 1.9 1.4 5.7
esignation 15	400V 500V 110V 24V 48V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
esignation 15	400V 500V 110V 24V	A A A	A600 - P600 3 1.9 1.4 5.7
esignation 15	400V 500V 110V 24V 48V 60V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
esignation 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
esignation 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
esignation 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
esignation 15	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
esignation 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
esignation 15 12 13	400V 500V 110V 24V 48V 60V 110V 125V 220V	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
esignation 15	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 16000000
esignation 15 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
esignation 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
esignation 15 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
esignation 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
	AWG/kcmil conductor section	AWG/Kcmil Flexible w/o lug conductor section Flexible c/w lug conductor section Flexible with insulated spade lug conductor section Flexible with insulated spade lug conductor section min max Flexible with insulated spade lug conductor section min max ction according to IEC/EN 60529 normal allowable	AWG/Kcmil The simultaneously connectable AWG/Kcmil The simultaneously connectable Max Flexible w/o lug conductor section Min mm² max mm² Flexible c/w lug conductor section Min mm² max mm² Flexible with insulated spade lug conductor section Min mm² max mm² Flexible with insulated spade lug conductor section Min mm² max mm² Cition according to IEC/EN 60529 AWG/kcmil conductor section Max



DC rated control voltage	ne			V	12
DC operating voltage	<u>,~</u>			v	
	pick-up				
			min	%Us	70
			max	%Us	125
	drop-out				
			min	%Us	10
			max	%Us	40
Average coil consump	tion ≤20°C		in much	147	F 4
			in-rush	W	5.4 5.4
Max cycles frequency			holding	W	5.4
Mechanical operation				cycles/h	3600
Operating times				Cyclc3/11	3000
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		-	min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
		01 : 110	max	ms	20
		Closing NC	min	 .	14
			min max	ms ms	28
		Opening NC	IIIax	1113	20
		Opening 110	min	ms	7
			max	ms	18
	in DC				
		Closing NO			
			min	ms	54
			max	ms	66
		Opening NO			4.4
			min	ms	14
		Closing NC	max	ms	17
		Closing NC	min	ms	24
			max	ms	30
		Opening NC	3/		-
		. •	min	ms	47
			max	ms	57
UL technical data					
Full-load current (FLA)	for three-phase	AC motor			
			at 480V	A	14
Walle I and a	•		at 600V	Α	17
Yielded mechanical pe		oo AC matar			
	for single-phas	SE AC MOTOL	110/120V	ШD	1
			110/120V 230V	HP HP	1 3
	for three-phase	e AC motor	230 V	1115	<u> </u>
	ioi unco-pnast		200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
			575/600V	HP	15

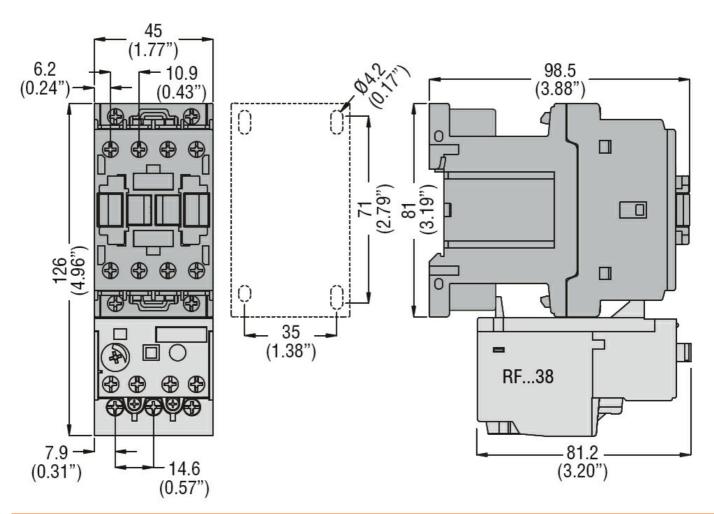




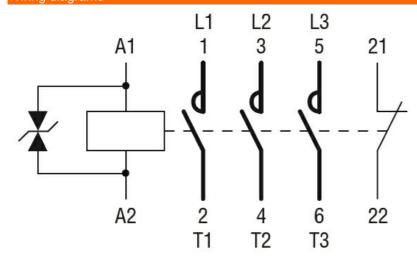
Contactor AC current	0 11105				
AC current	General USE	_			
Auxiliary contacts AC voltage V 600 AC current A 10 DC voltage V 250 DC current A 10 Fuse rating A 60 Fuse class J Standard fault Short circuit current kA 5 Fuse rating A 80 Contact rating of auxiliary contacts according to UL Arbient conditions Temperature Operating temperature Operating temperature Storage temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Wax altitude m 3000 Resistance & Protection		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 3			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 auxiliary 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			
· ·					3
	Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 12VDC, 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



BF1801D012

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 12VDC, 1NC AUXILIARY CONTACT

CCC				
cULus	_	_	_	
EAC				

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching