



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	A	17
	48V	A	15
	75V	A	15
	110V	A	6
IFC many assument to its DC4 with L/D < 4 man with 0 males in agriculture	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	<041/	۸	20
	≤24V 48V	A A	20 20
	75V		
	110V	A A	20 13
	220V	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	2201		<u> </u>
ILO MAX current le in DOT with L/N > This with 3 poles in selles	≤24V	Α	22
	≤24 V 48 V	A	22
	75V	A	20
	110V	A	16
	1100	77	



	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 600-600 with E/N = 10m3 with 2 poics in 3cmc3	≤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



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A1440/64			
	AWG/Kcmil			10
	Florible w/o lug conductor coetion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIdx	111111	0
	Tickliste of wildy contactor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Dower terminal prote	etion according to IFC/FN 60520			IP20 when
Power terminal prote	ection according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	495
Conductor section	ANAIC/hanail a an duatan a a stian			
	AWG/kcmil conductor section	max		10
		max		10
Auxiliary contact chai	ractoristics	max		
Auxiliary contact char	racteristics	Пах	Δ	
Thermal current Ith		max	Α	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation	max	A	
Thermal current Ith IEC/EN 60947-5-1 de	esignation			10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V 400V	A A A	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - P600
Thermal current lth IEC/EN 60947-5-1 do Operating current AC	esignation C15	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 do Operating current AC	esignation C15	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V	A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V	A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V	A A A A	10 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 Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V	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 lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V	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 de Operating current AC Operating current DC Operating current DC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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 de Operating current AC Operating current DC	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	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 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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 de Operating current AC  Operating current DC  Operating current DC  Operating current DC  Operating current DC  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 Cycles	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 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation C15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 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
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	esignation C15 C12 C13 C10	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 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
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 B	esignation C15 C12 C13 C10 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 Cycles cycles	10 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 16000000
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 Electrical life Safety related data Performance level B	esignation C15 C12 C13 C10	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 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



DC rated control voltage	ae			V	24
DC operating voltage	·			-	
1 0 0	pick-up				
			min	%Us	70
			max	%Us	125
	drop-out				
			min	%Us	10
			max	%Us	40
Average coil consump	tion ≤20°C		in much	107	<b>5</b> 4
			in-rush	W	5.4 5.4
Max cycles frequency			holding	VV	5.4
Mechanical operation				cycles/h	3600
Operating times				0,0100/11	0000
Average time for Us co	ontrol				
3	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
		Ola aira a NO	max	ms	20
		Closing NC	min	ms	14
			max	ms	28
		Opening NC	IIIdx	1113	20
		opening 110	min	ms	7
			max	ms	18
	in DC				
		Closing NO			
			min	ms	54
		0 : 110	max	ms	66
		Opening NO			4.4
			min	ms	14 17
		Closing NC	max	ms	1 /
		Closing NO	min	ms	24
			max	ms	30
		Opening NC	<del></del> -		
		. •	min	ms	47
			max	ms	57
UL technical data					
Full-load current (FLA)	for three-phase	AC motor			
			at 480V	A	14
Violated as a decision			at 600V	Α	17
Yielded mechanical pe		oo AC motor			
	for single-phas	BE AC ITIOLOF	110/120V	HP	1
			230V	HP	1 3
	for three-phase	e AC motor	230 V	1 11	<u> </u>
	ioi anoc phase		200/208V	HP	5
			220/230V	HP	5
			460/480V	HP	10
			575/600V	HP	15

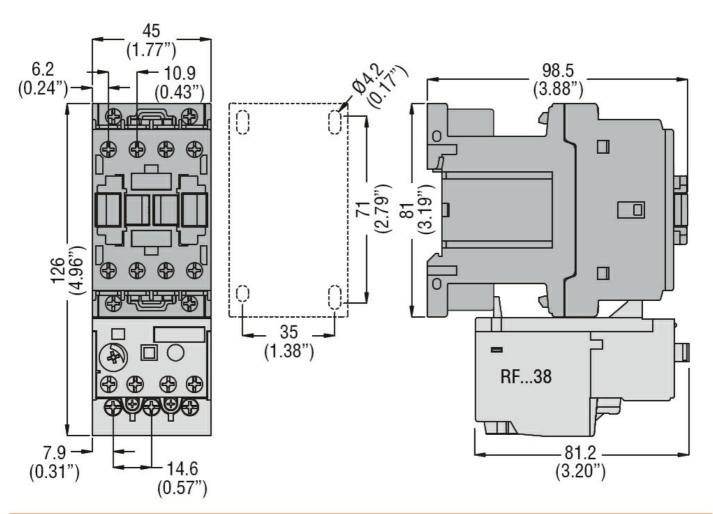




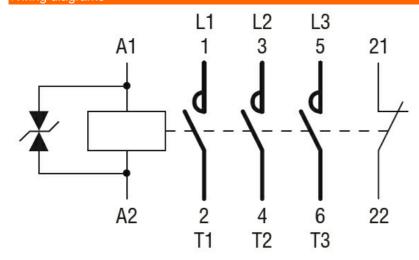
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protection	on fuse, 600V			
	High fault			
	-	Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	80
Contact rating of aux	iliary contacts according to UL			A600 - P600
Ambient conditions	,			
Temperature				
	Operating temperature			
	a haramad assurption	min	°C	-50
		max	°C	70
	Storage temperature			<del>-</del>
	2.2.2.ge topo.atae	min	°C	-60
		max	°C	80
Max altitude		· · · · · · · · · · · · · · · · · · ·	 m	3000
Resistance & Protec	tion			
Pollution degree				3
Dimensions				
Dimensions —				

**ENERGY AND AUTOMATION** 

### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 24VDC, 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



### BF1801D024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, DC COIL, 24VDC, 1NC AUXILIARY CONTACT

CCC	
cULus	
EAC	

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching