



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		А	32
Operational current le			
	AC-1 (≤40°C)	А	32
	AC-1 (≤55°C)	А	26
	AC-1 (≤70°C)	А	23
/	AC-3 (≤440V ≤55°C)	А	18
	AC-4 (400V)	А	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 $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	17
	48V	А	15
	75V	А	15
	110V	А	6
	220V	А	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	20
	110V	А	13
	220V	Α	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	22
	48V	А	22
	75V	А	20
	110V	А	16



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 60HZ, 120VAC, 1NC AUXILIARY CONTACT

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220V А 11 IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series ≤24V А 22 48V А 22 75V 20 А 110V А 18 220V А 13 IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series ≤24V А 12 48V 11 А 75V 11 А 2 110V А 220V А IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series ≤24V А 15 48V А 13 75V А 13 110V А 8 220V А 2 IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series ≤24V A 18 48V А 18 75V А 16 110V А 12 220V А 6 IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series ≤24V A 18 48V А 18 75V А 16 110V А 13 220V 8 А Short-time allowable current for 10s (IEC/EN60947-1) А 200 Protection fuse gG (IEC) А 32 aM (IEC) А 20 Making capacity (RMS value) А 180 Breaking capacity at voltage 440V А 144 500V А 120 690V А 94 Resistance per pole (average value) 2.5 mΩ Power dissipation per pole (average value) W 2.6 lth AC-3 W 0.8 Tightening torque for terminals min Nm 1.5 max Nm 1.8 min Ibin 1.1 lbin 1.5 max Tightening torque for coil terminal min Nm 0.8 Nm 1 max min lbin 0.8

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 60HZ, 120VAC, 1NC AUXILIARY CONTACT

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Max number of wires	simultaneously connectable	max	Ibin Nr.	0.74
Conductor section			INF.	2
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section	max		10
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal prote	ction according to IEC/EN 60529			IP20 when
· · · · ·	3 1 1 1			properly wired
Mechanical features				
Operating position		normal		Vertical plan
		allowable		±30°
		anowable		Screw / DIN ra
Fixing				35mm
Weight			g	356
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact char	racteristics			
Thermal current Ith			A	10
Thermal current lth IEC/EN 60947-5-1 de	esignation		A	10 A600 - P600
Thermal current Ith	esignation		A	A600 - P600
Thermal current lth IEC/EN 60947-5-1 de	esignation	230V	A	A600 - P600 3
Thermal current lth IEC/EN 60947-5-1 de	esignation	400V	A A	A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215		A	A600 - P600 3
Thermal current lth IEC/EN 60947-5-1 de	esignation 215	400V 500V	A A A	A600 - P600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V	A A	A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V	A A A A	A600 - P600 3 1.9 1.4 5.7
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V 60V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V 60V 110V	A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V 60V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V	A A A 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
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A 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 Operations Mechanical life	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A 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 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	esignation 215 212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A 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 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	esignation 215 212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A 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 20000000 1600000 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 215 212 213 10d according to EN/ISO 13489-1 me	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A 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
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 215 212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A 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

electric ENERGY AND AUTOMATION

BF1801A12060 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 60HZ,

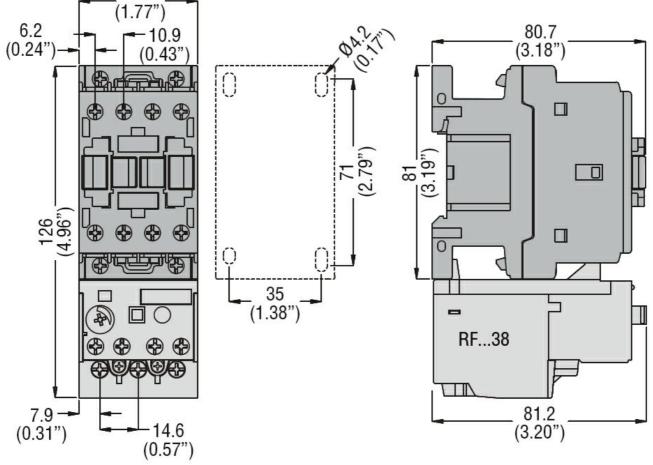
120VAC, 1NC AUXILIARY CONTACT

Rated AC voltage at 60Hz			V	120
AC operating voltage				
of 6	60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consumption	on at 20°C			
of 6	60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤20°0	C 50Hz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us control				
in A				
,	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
	e por migrie	min	ms	10
		max	ms	20
	Closing NC			
		min	ms	14
		max	ms	28
	Opening NC	Пах	into	20
	opolinig i to	min	ms	7
		max	ms	18
UL technical data				
Full-load current (FLA) for th	nree-phase AC motor			
		at 480V	А	14
		at 600V	A	17
Yielded mechanical perform	Jance			
-	single-phase AC motor			
			HP	1
		110/120\/		3
		110/120V 230V		
	three-phase AC motor	110/120V 230V	HP	5
	three-phase AC motor	230V	HP	
	three-phase AC motor	230V 200/208V	HP HP	5
	three-phase AC motor	230V 200/208V 220/230V	HP HP HP	5 5
	three-phase AC motor	230V 200/208V 220/230V 460/480V	HP HP HP HP	5 5 10
for	three-phase AC motor	230V 200/208V 220/230V	HP HP HP	5 5
for T		230V 200/208V 220/230V 460/480V	HP HP HP HP	5 5 10
for T	three-phase AC motor	230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP	5 5 10 15
for General USE 	ntactor	230V 200/208V 220/230V 460/480V	HP HP HP HP	5 5 10
for T		230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP A	5 5 10 15 32
for General USE 	ntactor	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage	HP HP HP HP A	5 5 10 15 32 600
for General USE 	ntactor	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	HP HP HP HP A	5 5 10 15 32 600 10
General USE	ntactor	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current DC voltage	HP HP HP HP V A V	5 5 10 15 32 600 10 250
for General USE 	ntactor kiliary contacts	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	HP HP HP HP A	5 5 10 15 32 600 10



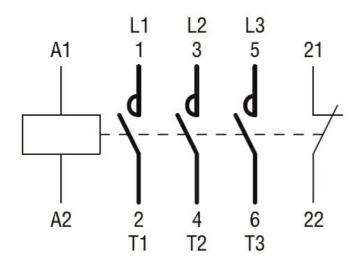
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	Short circuit current	kA	100
	Fuse rating	А	60
	Fuse class		J
Standard fault			
	Short circuit current	kA	5
	Fuse rating	А	80
Contact rating of auxiliary contacts according to UL			A600 - P600
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			
45			
(1.77")			



Wiring diagrams





Certifications and compliance

Comp	liance

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
	cULus
	EAC
ETIM classification	

ETIM 8.0

EC000066 -Power contactor, AC switching