

Product designation			Power contactor
Product type designation			BFK18
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		A	32
Operational current le		,,	02
	AC-3 (≤440V ≤55°C)	А	18
	AC-4 (400V)	A	8.5
Rated operational power AC-6b (T≤40°C)		7.	0.0
	230V	kvar	9
	400V	kvar	15
	500V	kvar	17
	690V	kvar	20
Short-time allowable current for 10s (IEC/EN60947-1)	0001	A	200
Protection fuse		7.	200
	gG (IEC)	А	40
	aM (IEC)	A	20
Making capacity (RMS value)		A	180
Breaking capacity at voltage		~~~~	100
broaking oupdoky at voltage	440V	А	144
	500V	A	120
	690V	A	94
Resistance per pole (average value)	0001	mΩ	2.5
Power dissipation per pole (average value)		11132	2.0
	Ith	W	2.6
	AC3	W	0.8
Tightening torque for terminals		••	0.0
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal	Пах	IOIII	1.0
	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
Max number of wires simultaneously connectable	IIIdA	nr.	2
Conductor section		111.	۷

Flexible w/o lug conductor section

min mm²

1



	max	mm²	6
Flexible c/w lug conduc			
	min	mm²	1
	max	mm²	4
Flexible with insulated	spade lug conductor section		
	min	mm²	1
	max	mm²	4
Power terminal protection according to IEC/EN	60529		IP20 when wired
Mechanical features			
Operating position			
	normal		vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
		-	35mm
Weight		g	418
Auxiliary contact characteristics			1 NO
Type of contact Thermal current Ith		Α	1 NO 10
		A	A600 - P600
IEC/EN 60947-5-1 designation			A600 - P600
Operating current AC15	230V	٨	3
	230V 400V	A A	3 1.9
	400V 500V	A	1.9
Operating current DC12	5001	A	1.4
Operating current DC12	110V	А	5.7
Operating current DC13	1164	A	5.7
Operating current DC13	24V	۸	5.7
	48V	A A	2.9
	48V 60V	A	2.3
	110V	A	1.25
	125V	A	1.1
	220V	A	0.6
	600V	A	0.0
Operations	0001	~	0.1
Mechanical life		cycles	20000000
Electrical life		cycles	400000
Safety related data		0y0l03	400000
Performance level B10d according to EN/ISO	13489-1		
· · · · · · · · · · · · · · · · · · ·	rated load	cycles	400000
	mechanical load	cycles	20000000
Mirror contats according to IEC/EN 609474-4-1		0)0.00	true
EMC compatibility			Yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	12
	max	V	600
AC operating voltage			
of 50/60Hz coil powere	ed at 50Hz		
· ·	pick-up		
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55

BFK1810A230



	of 50/60Hz coil	powered at 60Hz			
		pick-up			
			min	%Us	85
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
C operating voltage					
	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 pov	vered at 60Hz			
			in-rush	VA	75
			holding	VA	9
issipation at holdin	-			W	2.5
lax cycles frequend					
lechanical operatio	ns			cycles/h	3600
perating times					
verage time for Us					
	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	10
			max	ms	20
		Closing NC			
			min	ms	14
			max	ms	28
		Opening NC			
			min	ms	7
				-	
			max	ms	18
	in DC				
	in DC	Closing NO			
	in DC	Closing NO			
	in DC	Closing NO	max	ms	18
	in DC	Closing NO Opening NO	max min	ms ms	<u>18</u> 54
	in DC	-	max min	ms ms	<u>18</u> 54
	in DC	-	max min max	ms ms ms	18 54 66
	in DC	-	max min max min	ms ms ms ms	18 54 66 14
	in DC	Opening NO	max min max min	ms ms ms ms	18 54 66 14
	in DC	Opening NO	max min max min max	ms ms ms ms ms	18 54 66 14 17
	in DC	Opening NO	max min max min max min	ms ms ms ms ms ms	18 54 66 14 17 24
	in DC	Opening NO Closing NC	max min max min max min	ms ms ms ms ms ms	18 54 66 14 17 24
	in DC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms ms ms	18 54 66 14 17 24 30
L technical data	in DC	Opening NO Closing NC	max min max min max min max min	ms ms ms ms ms ms ms ms	18 54 66 14 17 24 30 47
		Opening NO Closing NC Opening NC	max min max min max min max min	ms ms ms ms ms ms ms ms	18 54 66 14 17 24 30 47
JL technical data Full-load current (FL	in DC A) for three-phase A	Opening NO Closing NC Opening NC	max min max min max min max min	ms ms ms ms ms ms ms ms	18 54 66 14 17 24 30 47

for single-phase AC motor

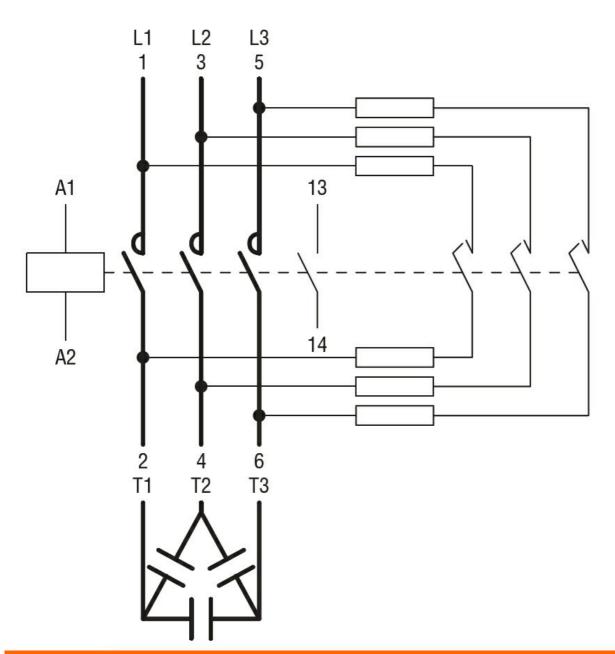


ENERGY AND ACTOMATION					
		110/120V	hp	1	
		230V	hp	3	
	for three-phase AC motor				
		200/208V	hp	5	
		220/230V	hp	5	
		460/480V	hp	10	
		575/600V	hp	15	
Contact rating of aux	iliary contacts according to UL	010,0001	ΠP	A600 - P60	0
General USE				7000 100	
	Auxiliary contacts		.,		
		AC voltage	V	600	
		AC current	А	10	
		DC voltage	V	250	
		DC current	А	1	
Ambient conditions					
Temperature					
	Operating temperature				
	oporating tomporation	min	°C	-50	
			°C		
	<u></u>	max	U	70	
	Storage temperature				
		min	°C	-60	
		max	°C	80	
				3000	
Max altitude			m	3000	
	tion		m	3000	
Resistance & Protect	tion		m		
Resistance & Protect Pollution degree	tion		m	3	
Resistance & Protect			m		
Resistance & Protect Pollution degree		116.6	m		
Resistance & Protec Pollution degree Dimensions		116.6(4.59")	m		
Resistance & Protect Pollution degree Dimensions 6.2	tion _ 10.9 (0.43")	116.6(4.59")	000000		_
Resistance & Protec Pollution degree Dimensions		116.6(4.59")	000000		Ĩ
Resistance & Protect Pollution degree Dimensions 6.2		116.6(4.59")	000000		7
Resistance & Protect Pollution degree Dimensions 6.2	_ 10.9 (0.43")		000000		Ĩ
Resistance & Protect Pollution degree Dimensions 6.2	_ 10.9 (0.43")		000000		
Resistance & Protect Pollution degree Dimensions 6.2			000000 D]
Resistance & Protect Pollution degree Dimensions					
Resistance & Protect Pollution degree Dimensions				3	
Resistance & Protect Pollution degree Dimensions				3	
Resistance & Protect Pollution degree Dimensions				3	5.~)
Resistance & Protect Pollution degree Dimensions				3	4.45"~)
Resistance & Protect Pollution degree Dimensions				3	[(4.45"∼)]
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)
Resistance & Protect Pollution degree Dimensions				3	(4.45"~)

Wiring diagrams

BFK1810A230





Certifications and compliance

Compliance

Compliance	
	CSA C22.2 n° 60947-1
	CSA C22.2 n° 60947-4-1
	IEC/EN 60947-1
	IEC/EN 60947-4-1
	UL 60947-1
	UL 60947-4-1
Certificates	
	CCC
	cULus
	EAC
ETIM 6 classification	

EC000066 - Power contactor, AC switching

BFK1810A230