

Product designation				Power contactor	
Product type designation				BFK18	
<b>Contact characteristics</b>					
Number of poles	Nr.			3	
Rated insulation voltage $U_i$ IEC/EN	V			690	
Rated impulse withstand voltage $U_{imp}$	kV			6	
Operational frequency	min	Hz	25		
	max	Hz	400		
IEC Conventional free air thermal current $I_{th}$	A			32	
Rated operational power AC-6b ( $T \leq 40^\circ C$ )	230V	kvar	9		
	400V	kvar	15		
	440...480V	kvar	17		
	690V	kvar	20		
Short-time allowable current for 10s (IEC/EN60947-1)	A			200	
Protection fuse	gG (IEC)	A	40		
		A	180		
Making capacity (RMS value)				180	
Breaking capacity at voltage	440V	A	144		
	500V	A	120		
	690V	A	94		
Resistance per pole (average value)	m $\Omega$			2.5	
Power dissipation per pole (average value)	$I_{th}$	W	2.6		
Tightening torque for terminals	min	Nm	1.5		
	max	Nm	1.8		
	min	lbin	1.1		
	max	lbin	1.5		
Tightening torque for coil terminal	min	Nm	0.8		
	max	Nm	1		
	min	lbin	Prodotti finiti		
	max	lbin	Prodotti finiti		
Max number of wires simultaneously connectable	Nr.			2	
Conductor section	Flexible w/o lug conductor section				
	min	mm <sup>2</sup>	1		
	max	mm <sup>2</sup>	6		
	Flexible c/w lug conductor section				
	min	mm <sup>2</sup>	1		
	max	mm <sup>2</sup>	4		
	Flexible with insulated spade lug conductor section				
	min	mm <sup>2</sup>	1		
	max	mm <sup>2</sup>	4		
	Power terminal protection according to IEC/EN 60529				IP20 when wired
	<b>Mechanical features</b>				
	Operating position	normal allowable		Vertical plan $\pm 30^\circ$	

Fixing				Screw / DIN rail 35mm
Weight	g			418
<b>Auxiliary contact characteristics</b>				
Type of contact				1 NO
Thermal current I <sub>th</sub>	A			10
IEC/EN 60947-5-1 designation				A600 - P600
Operating current AC15	230V	A	3	
	400V	A	1.9	
	500V	A	1.4	
	Operating current DC12			
Operating current DC13	24V	A	5.7	
	48V	A	2.9	
	60V	A	2.3	
	110V	A	1.25	
	125V	A	1.1	
	220V	A	0.6	
	600V	A	0.1	
<b>Operations</b>				
Mechanical life	cycles			20000000
Electrical life	cycles			400000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
			rated load	cycles 400000
			mechanical load	cycles 20000000
Mirror contacts according to IEC/EN 60947-4-1				YES
EMC compatibility				Yes
Rated AC voltage at 60Hz				V 120
<b>AC coil operating</b>				
AC operating voltage				
of 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 at 20°C				
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				
			in-rush	VA 75
			holding	VA 9
Dissipation at holding ≤20°C 50Hz				W 2.5
<b>Max cycles frequency</b>				
Mechanical operation				cycles/h 3600

### Operating times

Average time for Us control

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

### UL technical data

General USE

Contactor

AC current	A	32
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Auxiliary contacts

AC voltage	V	600
AC current	A	10
DC voltage	V	250
DC current	A	1

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
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### Resistance & Protection

Pollution degree

3

### Dimensions

### Wiring diagrams

### Certifications and 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 classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor