

Product designation				Power contactor
Product type designation				BFK18
Contact characteristics				
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 ($T \leq 40^\circ\text{C}$)	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 Ω			2.5
Power dissipation per pole (average value)	I_{th}	W	2.6	
	min	Nm	1.5	
Tightening torque for terminals	max	Nm	1.8	
	min	lbin	1.1	
	max	lbin	1.5	
	min	Nm	0.8	
Tightening torque for coil terminal	max	Nm	1	
	min	lbin	Prodotti finiti	
Max number of wires simultaneously connectable	Nr.			2
Conductor section	Flexible w/o lug conductor section			
	min	mm ²	1	
	max	mm ²	6	
	Flexible c/w lug conductor section			
	min	mm ²	1	
	max	mm ²	4	
Flexible with insulated spade lug conductor section				
	min	mm ²	1	
	max	mm ²	4	
Power terminal protection according to IEC/EN 60529				IP20 when wired
Mechanical features				
Operating position	normal allowable		Vertical plan $\pm 30^\circ$	

Fixing				Screw / DIN rail 35mm
Weight	g			4080
Auxiliary contact characteristics				
Type of contact				1 NO
Thermal current I _{th}	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	
Operations				
Mechanical life	cycles			20000000
Electrical life	cycles			400000
Safety related data				
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	230
AC coil operating				
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
Max cycles frequency				
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