

Product designation				Power contactor
Product type designation				BFK80
<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			8
Operational frequency	min	Hz	25	
	max	Hz	400	
IEC Conventional free air thermal current $I_{th}$	A			115
Rated operational power AC-6b ( $T \leq 40^\circ C$ )	230V	kvar	30	
	400V	kvar	50	
	440...480V	kvar	56	
	690V	kvar	65	
Short-time allowable current for 10s (IEC/EN60947-1)	A			640
Protection fuse	gG (IEC)	A	125	
		A	800	
Making capacity (RMS value)				800
Breaking capacity at voltage	440V	A	640	
	500V	A	625	
	690V	A	456	
Resistance per pole (average value)	m $\Omega$			0.6
Power dissipation per pole (average value)	$I_{th}$	W	7.9	
Tightening torque for terminals	min	Nm	4	
	max	Nm	5	
	min	lbin	2.95	
	max	lbin	3.69	
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>	1.5	
	max	mm <sup>2</sup>	35	
	Flexible c/w lug conductor section			
	min	mm <sup>2</sup>	1.5	
	max	mm <sup>2</sup>	35	
Power terminal protection according to IEC/EN 60529				IP20 front
<b>Mechanical features</b>				
Operating position	normal			Vertical plan
	allowable			$\pm 30^\circ$
Fixing				Screw / DIN rail 35mm
Weight	g			1090
<b>Operations</b>				

Mechanical life		cycles	15000000
Electrical life		cycles	400000

**Safety related data**

Performance level B10d according to EN/ISO 13489-1

	rated load	cycles	400000
	mechanical load	cycles	15000000

EMC compatibility		Yes
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Rated AC voltage at 60Hz	V	575
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**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	210
holding	VA	15

of 50/60Hz coil powered at 60Hz

in-rush	VA	195
holding	VA	13

of 60Hz coil powered at 60Hz

in-rush	VA	210
holding	VA	15

Dissipation at holding ≤20°C 50Hz	W	5
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**Max cycles frequency**

Mechanical operation	cycles/h	3600
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**Operating times**

Average time for Us control

in AC

Closing NO

min	ms	12
max	ms	28

Opening NO

min	ms	8
max	ms	22

in DC

Closing NO

min	ms	40
max	ms	85

Opening NO

min	ms	20
max	ms	55

**UL technical data**

General USE

Contactor

AC current	A	115
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**Ambient conditions**

Temperature

Operating temperature

min	°C	-50
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	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
<b>Resistance &amp; Protection</b>			
Pollution degree			3
<b>Dimensions</b>			
<b>Wiring diagrams</b>			
<b>Certifications and compliance</b>			
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		
<b>ETIM classification</b>			
ETIM 8.0			EC001079 - Capacitor contactor