

Product designation				Power contactor
Product type designation				BFK80
Contact characteristics				
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 Ω			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 ²	1.5	
	max	mm ²	35	
	Flexible c/w lug conductor section			
	min	mm ²	1.5	
	max	mm ²	35	
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position	normal			Vertical plan
	allowable			$\pm 30^\circ$
Fixing				Screw / DIN rail 35mm
Weight	g			1090
Operations				

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	24
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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
			max	ms
		Opening NO	min	ms
			max	ms
	in DC			
		Closing NO	min	ms
			max	ms
		Opening NO	min	ms
			max	ms

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
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			
ETIM classification				
ETIM 8.0				EC001079 - Capacitor contactor