

Product designation				Power contactor
Product type designation				BFK50
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	90		
Rated operational power AC-6b ($T \leq 40^\circ C$)	230V	kvar	22	
	400V	kvar	40	
	440...480V	kvar	41	
	690V	kvar	46	
Short-time allowable current for 10s (IEC/EN60947-1)	A	400		
Protection fuse	gG (IEC)	A	80	
		A	500	
Making capacity (RMS value)				
Breaking capacity at voltage	440V	A	400	
	500V	A	352	
	690V	A	312	
Resistance per pole (average value)	m Ω	0.8		
Power dissipation per pole (average value)	I_{th}	W	6.5	
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 allowable			Vertical plan $\pm 30^\circ$
				Screw / DIN rail 35mm
Fixing				
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	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	90
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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