

Product designation			Power contactor
Product type designation			BFK50
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	90	
Rated operational power AC-6b (T≤40°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)		A	500
Breaking capacity at voltage	440V	A	400
	500V	A	352
	690V	A	312
Resistance per pole (average value)	mΩ	0.8	
Power dissipation per pole (average value)	Ith	W	6.5
Tightening torque for terminals	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	Prodotti finiti
	max	Ibin	Prodotti finiti
Max number of wires simultaneously connectable	Nr.	2	
Conductor section			
Flexible w/o lug conductor section	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section	min	mm²	1.5
	max	mm²	35
Power terminal protection according to IEC/EN 60529		IP20 front	
Mechanical features			
Operating position	normal	Vertical plan	
	allowable	±30°	
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 mechanical load	cycles cycles	400000 15000000
EMC compatibility			
Rated AC voltage at 60Hz		V	120
AC coil operating			
AC operating voltage			
	of 60Hz coil powered at 60Hz pick-up	min max	%Us %Us 80 110
	drop-out	min max	%Us %Us 20 55
AC average coil consumption at 20°C			
	of 50/60Hz coil powered at 50Hz	in-rush holding	VA VA 210 15
	of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA 195 13
	of 60Hz coil powered at 60Hz	in-rush holding	VA VA 210 15
Dissipation at holding ≤20°C 50Hz		W	5
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control			
	in AC		
	Closing NO	min max	ms ms 12 28
	Opening NO	min max	ms ms 8 22
	in DC		
	Closing NO	min max	ms ms 40 85
	Opening NO	min max	ms ms 20 55
UL technical data			
General USE			
	Contactior	AC current	A 90
Ambient conditions			
Temperature			
	Operating temperature	min	°C -50

Storage temperature	max	°C	70
	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		