

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		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
-------------------	-----

Rated AC voltage at 60Hz	V	460
--------------------------	---	-----

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
-----------------------------------	---	---

Max cycles frequency

Mechanical operation	cycles/h	3600
----------------------	----------	------

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
-------------	-----------	------------	---	----

Ambient conditions

Temperature	Operating temperature	min	°C	-50
-------------	-----------------------	-----	----	-----

		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