





Product type designation BFK09 Contact characteristics Nr. 3 Rated insulation voltage Ui IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min Hz 25 max Lt 25 max Index of the product of the produc	Product designation			Power contactor
Number of poles Nr. 3 Rated insulation voltage Ui IEC/EN v 690 Rated insulation voltage Uimp kV 6 Operational frequency min Hz 25 max Hz 400 IEC Conventional free air thermal current lth A 25 Rated operational power AC-6b (Ts40°C) 230V kvar 45 400V kvar 7.5 440480V kvar 9 60 80 kvar 9 60 150 <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td>BFK09</td>	· · · · · · · · · · · · · · · · · · ·			BFK09
Rated insulation voltage Uir IEC/EN V 690 Rated impulse withstand voltage Uimp kV 6 Operational frequency min max HZ 25 IEC Conventional free air thermal current Ith A 25 Rated operational power AC-6b (T≤40°C) 230V kvar 4.5 4400480V kvar 7.5 440480V kvar 7.5 440480V kvar 7.5 440480V kvar 7.5 440480V kvar 10 Short-time allowable current for 10s (IEC/EN60947-1) A 150 Protection fuse gG (IEC) A 16 Making capacity (RMS value) A 90 Breaking capacity at voltage 440V A 72 800V A 71 Resistance per pole (average value) mnΩ 2.5 Power dissipation per pole (average value) Ith W 1.6 Tightening torque for terminals min Nm 1.5 max min	Contact characteristics			
Rated impulse withstand voltage Uimp kV 6 Operational frequency min min max Hz 25 max Hz 400 IEC Conventional free air thermal current Ith a 25 25 Rated operational power AC-6b (T≤40°C) 230V kvar 4.5 400 4.5 400 400V kvar 7.5 400 800V kvar 9 600V kvar 10 500 500V kvar 10 72 500V kvar 10	Number of poles		Nr.	3
Propertional frequency Propertional freq			V	690
Min	Rated impulse withstand voltage Uimp		kV	6
Rated operational free air thermal current lth	Operational frequency			
EC Conventional free air thermal current lth Rated operational power AC-6b (T≤40°C) 230V kvar 4.5 400V kvar 7.5 440480V kvar 7.5 440480V kvar 10 690V		min	Hz	25
Rated operational power AC-6b (T≤40°C) 230V kwar A.5 400V kvar 7.5 440 480V kvar 9 690V kvar 10 440 480V kvar 9 690V kvar 10 50 440 480V kvar 10 50 50 4 50 4 50 50 50 50 4 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50 50		max	Hz	400
Resistance per pole (average value) Resistance per pole (average v	IEC Conventional free air thermal current Ith		Α	25
A 000	Rated operational power AC-6b (T≤40°C)			
Add Ad		230V	kvar	4.5
Short-time allowable current for 10s (IEC/EN60947-1)		400V	kvar	7.5
Short-time allowable current for 10s (IEC/EN60947-1)		440480V	kvar	9
Protection fuse gG (IEC)		690V	kvar	10
Making capacity (RMS value)	Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Making capacity (RMS value) A 90	Protection fuse			
Breaking capacity at voltage		gG (IEC)	Α	16
Add Add	Making capacity (RMS value)		Α	90
Soov A 72 690V A 71	Breaking capacity at voltage			
Resistance per pole (average value) mΩ 2.5		440V	Α	72
Resistance per pole (average value) mΩ 2.5		500V	Α	72
Power dissipation per pole (average value) Ith W 1.6		690V	Α	71
Ith W 1.6	Resistance per pole (average value)		mΩ	2.5
Tightening torque for terminals	Power dissipation per pole (average value)			
Min Nm 1.5 max Nm 1.8 min Ibin 1.1 max Ibin 1.5		Ith	W	1.6
Max Nm 1.8 min Ibin 1.1 max Ibin 1.5	Tightening torque for terminals			
Min		min	Nm	1.5
Tightening torque for coil terminal		max	Nm	1.8
Tightening torque for coil terminal min Nm 0.8 max Nm 1 min lbin 0.8 max lbin 0.74 Max number of wires simultaneously connectable Conductor section AWG/Kcmil max 10 Flexible w/o lug conductor section min mm² 1 max mm² 6		min	lbin	1.1
min Nm 0.8 max Nm 1 min lbin 0.8 max lbin 0.74		max	lbin	1.5
Max Nm 1 min Ibin 0.8 max Ibin 0.74	Tightening torque for coil terminal			
Max number of wires simultaneously connectable Nr. 2 Conductor section AWG/Kcmil max 10 Flexible w/o lug conductor section min mm² 1 min mm² 6		min	Nm	0.8
Max number of wires simultaneously connectable Nr. 2 Conductor section AWG/Kcmil max 10 Flexible w/o lug conductor section min mm² 1 max mm² 6		max	Nm	1
Max number of wires simultaneously connectable Nr. 2 Conductor section AWG/Kcmil max 10 Flexible w/o lug conductor section min mm² 1 max mm² 6		min	lbin	0.8
AWG/Kcmil		max	lbin	0.74
AWG/Kcmil max	Max number of wires simultaneously connectable		Nr.	2
Flexible w/o lug conductor section min mm² 1 max mm² 6	Conductor section		_	
Flexible w/o lug conductor section min mm² 1 max mm² 6	AWG/Kcmil			
min mm² 1 max mm² 6		max		10
max mm² 6	Flexible w/o lug conductor section		_	
		min	mm²	1
Flevible c/w lug conductor section		max	mm²	6
r lexible c/w lug conductor section	Flexible c/w lug conductor section			
min mm² 1		min	mm²	1





		max	mm²	4
	Flexible with insulated spade lug conductor sect			4
		min max	mm² mm²	1 4
Power terminal protect	tion according to IEC/EN 60529	max		IP20 when properly wired
Mechanical features				properly mied
Operating position				
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	416
Auxiliary contact chara	cteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 des				A600 - P600
Operating current AC1	5		_	_
		230V	A	3
		400V	A	1.9
Operating current DC1	2	500V	Α	1.4
Operating current DC1	2	110V	Α	5.7
Operating current DC1	3			
		24V	Α	5.7
		48V	Α	2.9
		60V	Α	2.3
		110V	Α	1.25
		125V	Α	1.1
		220V	A	0.6
Operations		600V	Α	0.1
Mechanical life			cycles	20000000
Electrical life			cycles	400000
Safety related data			oy old o	100000
	od according to EN/ISO 13489-1			
	-	rated load	cycles	400000
		mechanical load	cycles	20000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50	0/60Hz		V	110
AC operating voltage	-4 50/001			
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	max	7003	110
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out		0/11-	20
		min	%Us	20

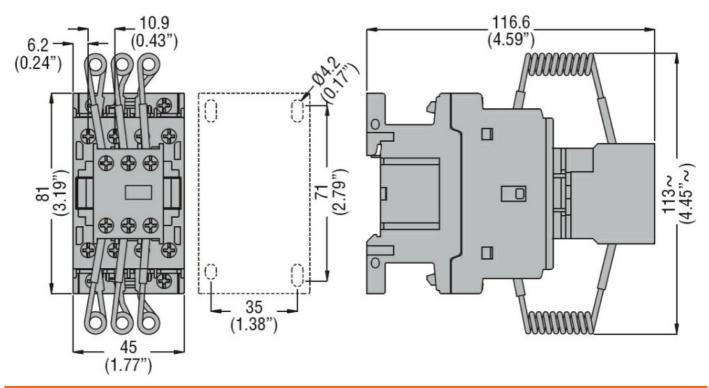




	max	%Us	55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	75
	holding	VA	9
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	70
	holding	VA	6.5
of 60Hz coil powered at 60Hz			
	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz		W	2.5
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control			
in AC			
Closing NO			0
	min	ms	8
On anima NO	max	ms	24
Opening NO			4.0
	min	ms	10
Closing MC	max	ms	20
Closing NC	min	m .o	14
	min max	ms ms	28
UL technical data	max	1113	20
Rated operational voltage AC (UL)		V	600
General USE		<u> </u>	
Contactor			
Comación	AC current	Α	25
Auxiliary contacts	710 00.110111		
,,	AC voltage	V	600
	AC current	A	10
	DC voltage	V	250
	DC current	Α	1
Contact rating of auxiliary contacts according to UL			A600 - P600
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
Ciorago tomporataro			00
Ciorago temperaturo	min	°C	-60
Storage temperature	min max	°C	-60 80
Max altitude			
		°C	80
Max altitude		°C	80

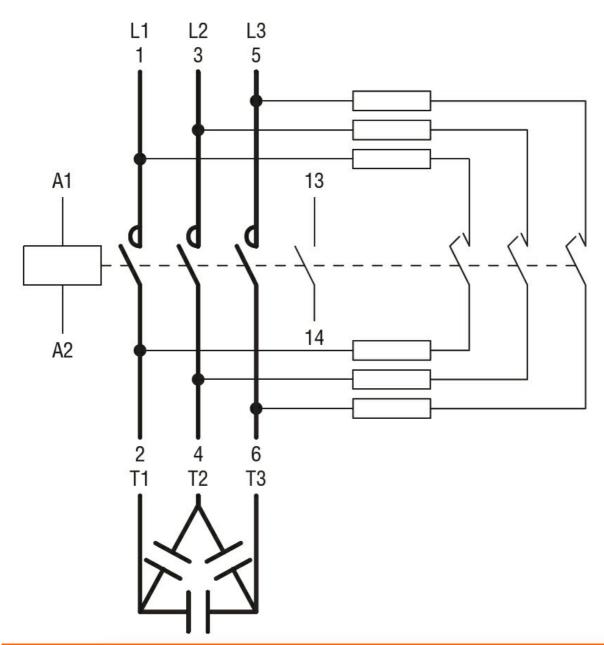






Wiring diagrams





Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC001079 -Capacitor contactor