



ENERGY AND AUTOMATION

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, electric INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 100KVAR, **COIL 400VAC 50/60HZ**



Product designation				Power contactor
Product type designa				BFK150
Contact characteristic	CS		N In	2
Number of poles	A LUISO/EN		Nr.	3
Rated insulation volta			V	690
Rated impulse withst			kV	8
Operational frequence	У			
		min	Hz	25
		max	Hz	400
	e air thermal current Ith		Α	165
Rated operational po	wer AC-6b (T≤40°C)		_	
		230V	kvar	50
		400V	kvar	100
		440480V	kvar	115
		690V	kvar	150
	current for 10s (IEC/EN60947-1)		Α	1200
Protection fuse				
		gG (IEC)	Α	160
Making capacity (RM	S value)		Α	1500
Breaking capacity at	voltage			
		440V	Α	1200
		500V	Α	1025
		690V	Α	905
Resistance per pole	(average value)		m?	0.45
Power dissipation pe	r pole (average value)			
		Ith	W	12
Tightening torque for	terminals			
		min	Nm	6
		max	Nm	7
		min	lbin	4.4
		max	lbin	5.2
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.59
		max	lbin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2/0
	Flexible w/o lug conductor section			
	•	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
	5	min	mm²	1.5





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Power terminal protection according to IEC/EN 60529 IP20 from Mechanical features Secret / DIN re allowabile \$150° \$	D	'	max	mm²	70	
Comparition	-	ion according to IEC/EN 60529			IP20 front	
Name						
Fixing Screw / DIN ra DIN rate	Operating position		normal		Vertical plan	
Screw / DIN ra 35mm					•	
Medight Samm Performance Samm Performance Per			anowabio			
AWG/kcmil conductor section max 2/0	Fixing					
Conductor section max 2/0 Operations cycles 15000000 Mechanical life cycles 15000000 Electrical life cycles 15000000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 400000 cycles 400000 cycles 400000 cycles 400000 cycles 400000 cycles 15000000 cycles 400000 cycles 400000 cycles 15000000 cycles 15000000 cycles 400000 cycles 15000000 cycles 15000000 cycles 15000000 cycles 15000000 cycles 15000000 cycles 15000000 cycles <th cols<="" td=""><td>Weight</td><td></td><td></td><td>g</td><td>2095</td></th>	<td>Weight</td> <td></td> <td></td> <td>g</td> <td>2095</td>	Weight			g	2095
Mechanical life	Conductor section					
Operations Mechanical life cycles 15000000 Electrical life cycles 800000 Safety related data Performance level B10d according to EN/ISO 13489-1 In rated load cycles 400000 cycles 400000 cycles 15000000 EMC control operating yes AC coll operating y 400 AC operating voltage pick-up min %Us 80 AC operating voltage max %Us 110 drop-out min %Us 20 max %Us 150 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush Va 300 AC average coil consumption at 20°C of 50/60Hz coil powered at 60Hz in-rush VA 300 of 60Hz coil powered at 60Hz in-rush VA 300 of 60Hz coil powered at 60Hz in-rush VA		AWG/kcmil conductor section				
Mechanical life cycles 15000000 Electrical life cycles 800000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 EMC compatibility yes AC coll operating Rated AC voltage at 50/60Hz V 400 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min % US 80 Mare an in the control of 50/60Hz coil powered at 60Hz min % US 85 MC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush via			max		2/0	
Electrical life	•					
Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load mec				-		
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 400000 mechanical load cycles 15000000 EMIC compatibility yes AC coll operating V 400 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min while will be a second wi				cycles	800000	
Rated load mechanical load cycles 400000 mechanical load cycles 15000000 mechanical load cycles 15000000 mechanical load cycles 15000000 mechanical load cycles 150000000 mechanical load cycles 150000000 mechanical load cycles mechani						
EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up of 50/60Hz coil powered at 60Hz pick-up drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Acverage time for Us control	Performance level B10	d according to EN/ISO 13489-1				
EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %US 80 max %US 110 drop-out min %US 20 max %US 55 of 50/60Hz coil powered at 60Hz pick-up min %US 85 max %US 110 drop-out min %US 85 max %US 110 drop-out min %US 40 max %US 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control				-		
AC coil operating Rated AC voltage at 50/60Hz V 400 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min wx wus wus wus wus wus wus 110 min wx wus 110 drop-out min wx wus 20 max wus wus 55 of 50/60Hz coil powered at 60Hz pick-up min wx wus 85 max wus wus 55 drop-out min wx wus 40s wus 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush wus 300 holding wus 20°C wus 17 min-rush wus 300 holding wus 17 wus 17 wus 17 wus 17 wus 17 wus 17 wus 18 wus 17 wus 18 wu	EMO		mechanical load	cycles		
Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up pick-up min win will will will will will will wil					yes	
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of soliding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control		0/60H ₇		V	400	
of 50/60Hz coil powered at 50Hz pick-up min		0/00/12		V	400	
Pick-up Min %Us 80 max %Us 110 Min Mus 80 max %Us 110 Min Mus 20 max %Us 55 Min Mus M	Ac operating voltage	of 50/60Hz coil powered at 50Hz				
Min Mus 80 Max Mus 110 Mus 110 Mus		•				
Max Mus 110		ριοκ αρ	min	%Us	80	
Max						
min		drop-out			-	
of 50/60Hz coil powered at 60Hz pick-up min		·	min	%Us	20	
Pick-up min %Us 85 max %Us 110			max	%Us	55	
Min Mus 85 Max Mus 110		of 50/60Hz coil powered at 60Hz				
Max WUs 110		pick-up				
Acc average coil consumption at 20°C Of 50/60Hz coil powered at 50Hz In-rush VA 300 holding VA 20 VA 17 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 17 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 17 Of 60Hz coil powered at 60Hz In-rush VA 300 holding VA 20 VA			min			
Max %Us yUs bs 40 max wull will will will will will will will			max	%Us	110	
max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush holding VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush holding VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control		drop-out				
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 300 holding VA 20 of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control						
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in-rush	AC average coll consu	•				
holding VA 20		of 50/60Hz coil powered at 50Hz	in ruch	١/٨	200	
of 50/60Hz coil powered at 60Hz in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control						
in-rush VA 300 holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Cycles/h 1500 Operating times Average time for Us control		of 50/60Hz coil powered at 60Hz	Holding	v /\	20	
holding VA 17 of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control		5. 55/55/12 55/1 powered at 60/12	in-rush	VA	300	
of 60Hz coil powered at 60Hz in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control						
in-rush VA 300 holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control		of 60Hz coil powered at 60Hz			-	
holding VA 20 Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency		1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	in-rush	VA	300	
Dissipation at holding ≤20°C 50Hz W 6.5 Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control						
Max cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control	Dissipation at holding	≤20°C 50Hz	<u> </u>			
Operating times Average time for Us control						
Average time for Us control	Mechanical operation			cycles/h	1500	
in AC	Average time for Us co					
Clasing NO						

Closing NO



3



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	min	ms	16
	max	ms	32
Opening NO			
	min	ms	9
	max	ms	24

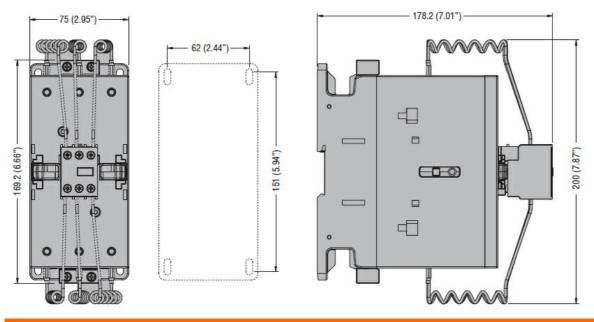
UL technical data

General USE

Contactor

		AC current	Α	165
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			_
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protecti	on			

Pollution degree **Dimensions**

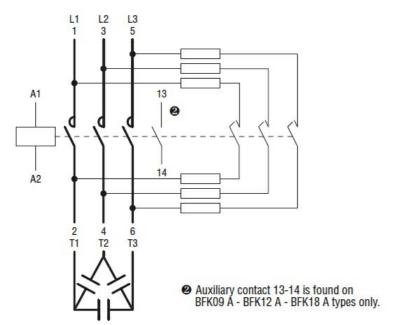


Wiring diagrams



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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