

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 25KVAR, COIL 230VAC 50/60HZ



Product designation			Power contactor
Product type designation Contact characteristics			BFK32
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated insulation voltage of IEC/EN Rated impulse withstand voltage Uimp		kV	6
		KV	0
Operational frequency			0.5
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	56
Rated operational power AC-6b (T=40°C)			
	230V	kvar	14
	400V	kvar	25
	440480V	kvar	27.5
	690V	kvar	30
Short-time allowable current for 10s (IEC/EN60947-1)		Α	320
Protection fuse			
	gG (IEC)	Α	63
Making capacity (RMS value)		Α	320
Breaking capacity at voltage			
	440V	Α	256
	500V	Α	240
	690V	Α	192
Resistance per pole (average value)		m?	2
Power dissipation per pole (average value)			
	Ith	W	6
Tightening torque for terminals			
Tigritorining torquo for terrimidio	min	Nm	2.5
	max	Nm	3
	min	lbin	1.8
	max	lbin	2.2
Tightoning targue for sail terminal	IIIax	IDIII	۷.۷
Tightening torque for coil terminal		Nina	0.0
	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		6
Flexible w/o lug conductor section			
	min	mm²	2.5
	max	mm²	16
Flexible c/w lug conductor section			
	min	mm²	1





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Flexible with insulated spade lug conductor section min max mm² 1 1 1 1 1 1 1 1 1			max	mm²	10	
Power terminal protection according to IEC/EN 60529 mmx In 1920 when wired position Operating position Fixing normal allowable Vertical plan allowable ± 30° Fixing Screw / DIN rail 35mm Weight 0 0 0 Conductor section max c cycles 2000000 Mechanical life cycles 2000000 Electrical life cycles 2000000 Safety related data cycles 400000 EMC compatibility rated load mechanical load cycles 400000 EMC coll constaling Tated load mechanical load cycles 400000 EMC coll constaling Tated load mechanical load cycles 400000 EMC coll constaling Tated load mechanical load cycles 400000 EMC coll constaling Tated load mechanical load cycles 400000 EMC coll constaling Tated load mechanical load cycles 400000 A Coll coll coll powered at 60Hz min		Flexible with insulated spade lug conductor	section			
Power terminal protection according to IEC/EN 60529 P20 when wired Nechanical features Nechanical featu			min	mm²	1	
Mechanical features Operating position normal allowable "Vertical plan allowable" 3.30° Fixing \$30° 30° Weight \$35mm 35mm Weight \$6 \$2000000 Conductor section max \$6 Operations \$20000000 \$6 Mechanical life \$2000000 \$60000 Electrical life \$2000000 \$60000 Safety related data \$2000000 \$60000 Performance level B10d according to EN/ISO 13489-1 rated load conditions \$20000000 EMC compatibility \$100000 \$20000000 EMC compatibility \$100000 \$20000000 EMC compatibility \$1000000 \$20000000 EMC compatibility \$1000000 \$20000000 EMC compatibility \$100000000 \$200000000 EMC compatibility \$1000000000000000000000000000000000000			max	mm²	10	
Operating position Notical plan allowabile solution allowabil		tion according to IEC/EN 60529			IP20 when wired	
Priving Pri						
Fixing Screw / DIX nail 35mm Screw / DIX nail 35	Operating position					
Screw / DIN rail 35mm Scre						
Fixing			allowable			
AWG/kcmil conductor section	Fixing					
Max	Weight			g	400	
Operations Cycles 20000000 Electrical life cycles 20000000 Electrical life cycles 4000000 Electrical life cycles 400000 EVERTAGE AGA CYCLES (ACCORDING) TO SALES (ACCORDING) Trated load cycles 400000 EMC compatibility yes AC coil operating Y 230 AC coil operating voltage of 50/60Hz coil powered at 50Hz minin (MUS) 80 MININ (MUS) 80 AC operating voltage of 50/60Hz coil powered at 60Hz minin (MUS) 80 MUS) 80 MUS) 80 MUS) MUS) <th colsp<="" td=""><td>Conductor section</td><td></td><td></td><td></td><td></td></th>	<td>Conductor section</td> <td></td> <td></td> <td></td> <td></td>	Conductor section				
Operations Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 cycles 20000000 EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz V 230 AC operating voltage of 50/60Hz coil powered at 50Hz min %Us 80 min %Us 110 drop-out min %Us 20 of 50/60Hz coil powered at 60Hz pick-up min %Us 25 of 50/60Hz coil powered at 60Hz pick-up min %Us 20 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz in-rush holding VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush holding VA 7		AWG/kcmil conductor section				
Mechanical life			max		6	
Electrical life	•					
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles and cycles and cycles and cycles are allowed mechanical load mechanical load mechanical load cycles and cycles are allowed as a cycles and cycles are allowed as a cycles and cycles are allowed as a cycles and cycles are allowed as a cycles and cycles are allowed as a cycles						
Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 cycles 200000000 cycles c				cycles	1600000	
Rated load cycles 400000 2000000000 200000000000000	•					
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min	Performance level B10	od according to EN/ISO 13489-1				
EMC compatibility				-		
Rated AC voltage at 50/60Hz			mechanical load	cycles		
Rated AC voltage at 50/60Hz V 230					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 85 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 75 holding VA 9 of 50/60Hz coil powered at 60Hz in-rush VA 70 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 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		0/0011				
of 50/60Hz coil powered at 50Hz pick-up min		0/60Hz		V	230	
Pick-up Min WUs 80 Max WUs 110 Min WUs 20 Max WUs 55 Max Mus Mus	AC operating voltage					
Min WUS 80 max WUS 110 Min min wus 110 Min min wus 55 Min min wus 85 max wus 110 Min wus 110 Min wus 110 Min wus 55 Min wus 55 Min wus 55 Min wus wus 55 Min wus wus 55 Min wus wus 55 Min wus		· · · · · · · · · · · · · · · · · · ·				
Max Mus 110		pick-up		0/11	0.0	
Acceptable Acc						
Min		dran out	max	%US	110	
Max Mus 55		drop-out	min	0/ I Io	20	
of 50/60Hz coil powered at 60Hz pick-up min max %Us 85 max %Us 110 drop-out min max %Us 20 max 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush holding VA 75 holding VA 9 of 50/60Hz coil powered at 60Hz in-rush holding VA 70 holding VA 70 holding VA 70 holding VA 75 holding VA 75 holding VA 9						
Pick-up min %Us 85 max %Us 110 Min min %Us 110 Min min %Us 20 max %Us 55 Min Min %Us 55 Min Min		of 50/60Hz coil powered at 60Hz	IIIdA	/003	33	
Min WUs 85 110 Morp-out Min WUs 20 Max WUs 55 AC average coil consumption at 20°C Of 50/60Hz coil powered at 50Hz Min-rush VA 75 holding VA 9 Of 50/60Hz coil powered at 60Hz Min-rush VA 70 holding VA 7 Of 60Hz coil powered at 60Hz Min-rush VA 70 Molding VA 7 Of 60Hz coil powered at 60Hz Min-rush VA 75 Holding VA 7 Of 60Hz coil powered at 60Hz Min-rush VA 75 Molding VA 9 Dissipation at holding = 20°C 50Hz W 2.5 Max cycles frequency W 2.5 Max cycles frequency Mechanical operation Cycles/h 3600		•				
Max Mus 110 Mus 110 Mus Mus 20 Mus 55 Mus 55 Mus Mus 55 Mus Mus 55 Mus Mus 55 Mus Mus Mus 55 Mus		pick-up	min	% le	85	
Max Substitution Max Mus Substitution Mus M						
Min WUs 20 max WUs 55		dron-out	παλ	,003	. 10	
Max %Us 55		Grop out	min	%Us	20	
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 7 of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 7 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						
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 7 of 60Hz coil powered at 60Hz in-rush VA 7 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	AC average coil consu	imption at 20°C				
in-rush	<u> </u>					
holding VA 9		1	in-rush	VA	75	
of 50/60Hz coil powered at 60Hz in-rush holding VA 70 holding VA 7 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 W 2.5 Mechanical operation cycles/h 3600						
in-rush VA 70 holding VA 7		of 50/60Hz coil powered at 60Hz	<u> </u>			
of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 9 Dissipation at holding =20°C 50Hz Max cycles frequency Mechanical operation cycles/h 3600		·	in-rush	VA	70	
of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 9 Dissipation at holding =20°C 50Hz Max cycles frequency Mechanical operation cycles/h 3600			holding	VA	7	
in-rush VA 75 holding VA 9 Dissipation at holding =20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600		of 60Hz coil powered at 60Hz	<u> </u>			
Dissipation at holding =20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600		-	in-rush	VA	75	
Max cycles frequency Mechanical operation cycles/h 3600			holding	VA	9	
Max cycles frequency Mechanical operation cycles/h 3600	Dissipation at holding	=20°C 50Hz		W	2.5	
Mechanical operation cycles/h 3600						
				cycles/h	3600	
	Operating times					



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Average time for Us control

in AC

losing	

	min	ms	8
	max	ms	24
Opening NO			

5 min ms 15 max ms

Closing NC 9 min ms 20 max ms

AC current

Α

56

3

UL technical data

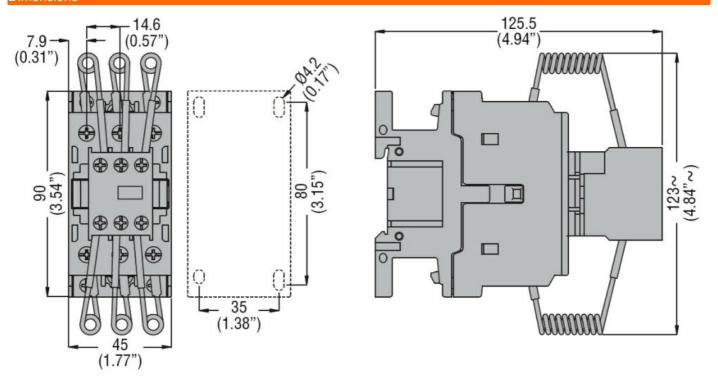
General USE

Contactor

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

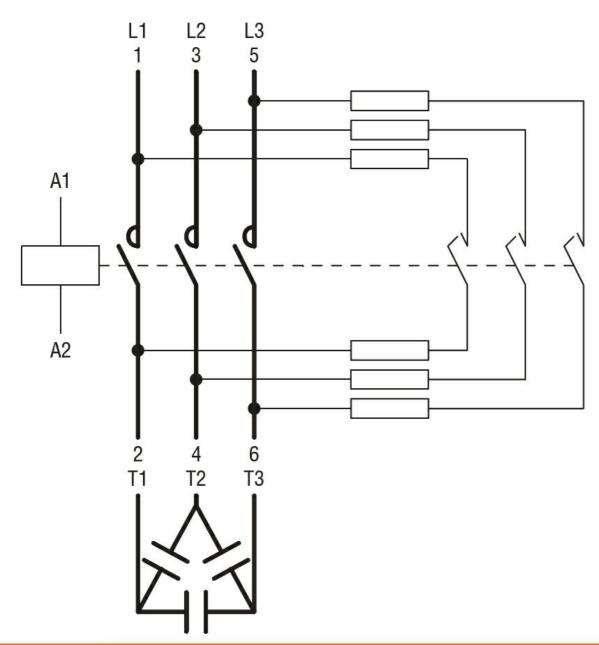
Dimensions



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

EAC

ETIM classification

ETIM 8.0

EC001079 -Capacitor contactor