

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 24VAC 50/60HZ



Product designation				Power contactor
Product type designat	ion			BFK50
Contact characteristics	3			
Number of poles			Nr.	3
Rated insulation voltage	ge Ui IEC/EN		V	690
Rated impulse withsta			kV	8
Operational frequency	· · ·			
		min	Hz	25
		max	Hz	400
IEC Conventional free	air thermal current lth	max	A	90
Rated operational pov				
		230V	kvar	22
		400V	kvar	40
		400V 440480V	kvar	40
		440480V 690V	kvar	46
Short time allowable a	Number of the $(IEC/EN600.47.1)$	090 V	A	40
	current for 10s (IEC/EN60947-1)		A	400
Protection fuse			•	00
		gG (IEC)	<u>A</u>	80
Making capacity (RMS			A	500
Breaking capacity at v	oltage			
		440V	A	400
		500V	A	352
		690V	A	312
Resistance per pole (a			mΩ	0.8
Power dissipation per	pole (average value)			
		Ith	W	6.5
Tightening torque for t	erminals			
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	lbin	3.69
Tightening torque for a	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires a	simultaneously connectable		Nr.	2
Conductor section	·			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ		
		min	mm²	1.5
		11111	111111	1.J

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BFK5000A024

		max	mm²	35
	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data				
Performance level B10	Od according to EN/ISO 13489-1			
		rated load	cycles	400000
		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating				<u>.</u>
Rated AC voltage at 50	0/60Hz		V	24
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		min	%Us %Us	110
	drop-out	max	7005	110
	000-001	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	тах	/000	00
	pick-up			
	1 F	min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz	· · ·		105
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	-امریس میں	١/٨	210
		in-rush	VA	210 15
Dissingtion at holding	<20°C 50H7	holding	VA W	15 5
Dissipation at holding :			VV	ບ 
Max cycles frequency Mechanical operation			aveloc/b	3600
Operating times			cycles/h	3000
Average time for Us co				
Average line for US CC	in AC			

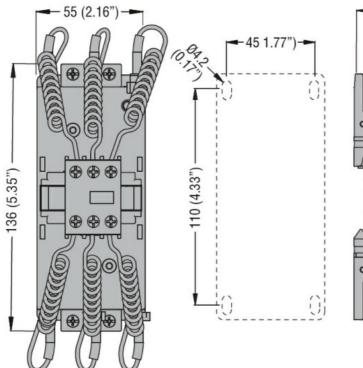
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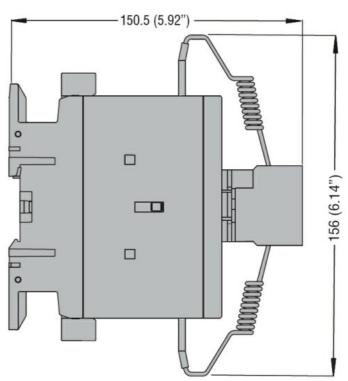


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			min	ms	12
			max	ms	28
		Opening NO	тах	ino	20
		opening No	min	ms	8
			max	ms	22
	in DC		Пах	illo	
		Closing NO			
		-	min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	А	90
Ambient conditions					
Temperature					
·	Operating temperatu	ıre			
			min	°C	-50
			max	°C	70
	Storage temperature	9			
	<u> </u>		min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protect	tion				
Pollution degree					3

Dimensions [mm (in)]

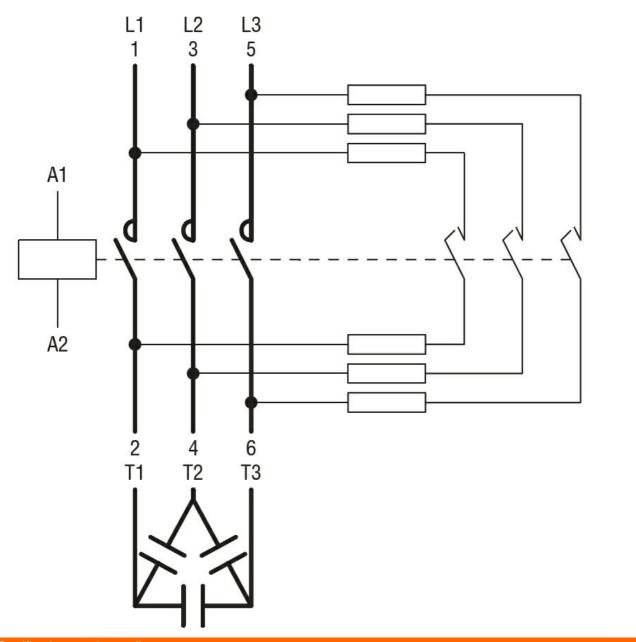






CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 24VAC 50/60HZ





### Certifications and compliance

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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	Compliance		
IEC/EN/BS 60947-1           IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC           cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-1	
IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-4-1	
UL 60947-1           UL 60947-4-1           Certificates <u>CCC</u> cULus   ETIM classification ETIM 8.0 EC001079 - Capacitor		IEC/EN/BS 60947-1	
UL 60947-4-1 Certificates CCC CULus ETIM classification ETIM 8.0 ECO01079 - Capacitor		IEC/EN/BS 60947-4-1	
Certificates CCC cULus ETIM classification ETIM 8.0 ETIM 8.0 EC001079 - Capacitor		UL 60947-1	
CCC         cULus         ETIM classification         ETIM 8.0		UL 60947-4-1	
cULus       ETIM classification       EC001079 - Capacitor	Certificates		
ETIM classification EC001079 - ETIM 8.0 Capacitor		CCC	
EC001079 - ETIM 8.0 Capacitor		cULus	
ETIM 8.0 Capacitor	ETIM classification		
	ETIM 8.0		Capacitor

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 48VAC 50/60HZ



				1 10 1
Product designation				Power contactor
Product type designation				BFK50
Contact characteristics	5			
Number of poles			Nr.	3
Rated insulation voltage			V	690
Rated impulse withsta	nd voltage Uimp		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	air thermal current Ith		А	90
Rated operational pow	ver AC-6b (T≤40°C)			
		230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable c	urrent for 10s (IEC/EN60947-1)		А	400
Protection fuse				
		gG (IEC)	А	80
Making capacity (RMS	value)	<b>. . . . . . .</b>	А	500
Breaking capacity at v				
<b>3</b> • • • • • • • •		440V	А	400
		500V	A	352
		690V	A	312
Resistance per pole (a	average value)		mΩ	0.8
Power dissipation per				
r offer diocipation por		lth	W	6.5
Tightening torque for the	erminals			0.0
rightening terque for t		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for c	coil terminal	Пах	10111	0.00
rightening torque for e		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires a	simultaneously connectable	Παλ	Nr.	2
Conductor section			111.	۲
	AWG/Kcmil			
	AWORKIM	max		2
	Flexible w/o lug conductor section	Παλ		۷
	I TENDIE WOTUG CONDUCTOR SECTION	min	mm²	1.5
			mm²	35
	Elevible e/w lug conductor agotion	max	11111-	30
	Flexible c/w lug conductor section		mm <sup>2</sup>	15
		min	mm²	1.5

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 48VAC 50/60HZ

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		max	mm²	35
-	ion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data				
Performance level B10	0d according to EN/ISO 13489-1			
		rated load	cycles	400000
		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating			. <i>.</i>	
Rated AC voltage at 50	)/60Hz		V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	0/110	80
		min	%Us %Us	110
	drop-out	max	7005	110
	urop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	тах	/000	00
	pick-up			
	r r	min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz	<b>.</b> .		105
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz		١/٨	210
		in-rush	VA VA	210 15
Dissipation at holding	<20°C 50Hz	holding	W VA	5
Max cycles frequency			VV	5
Max cycles frequency Mechanical operation			cycles/h	3600
Operating times			0,000,00	
Average time for Us co	ontrol			
	in AC			

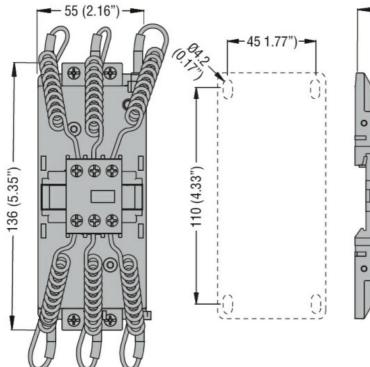
**Closing NO** 

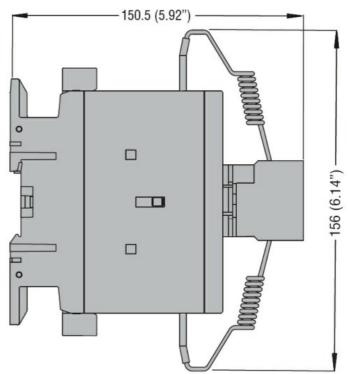


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			min	ms	12
			max	ms	28
		Opening NO		-	-
		opogo	min	ms	8
			max	ms	22
	in DC			_	
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
		1 5	min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	А	90
Ambient conditions					
Temperature					
	Operating temperature	е			
			min	°C	-50
			max	°C	70
	Storage temperature				
	<b>.</b> .		min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protecti	on				
Pollution degree					3

Dimensions [mm (in)]

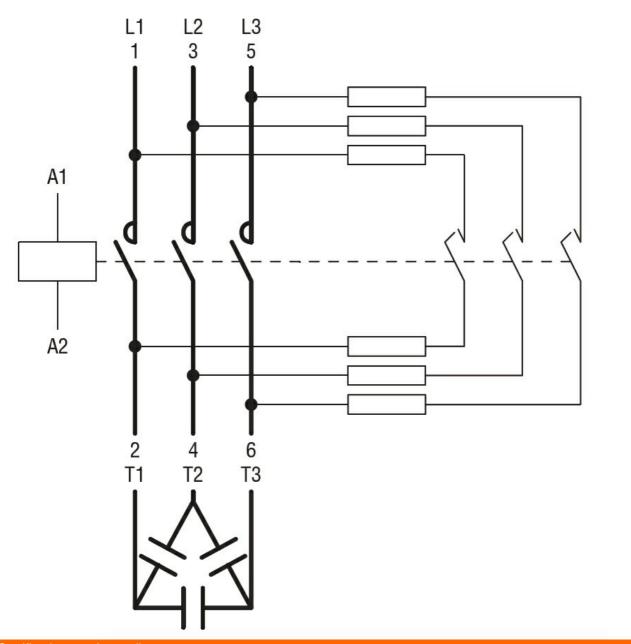






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## Certifications and compliance

Compl	liance

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UL 60947-4-1 Certificates CCC CULus ETIM classification ETIM 8.0 ECO01079 - Capacitor		IEC/EN/BS 60947-4-1	
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CCC         cULus         ETIM classification         ETIM 8.0		UL 60947-4-1	
cULus       ETIM classification       EC001079 - Capacitor	Certificates		
ETIM classification EC001079 - ETIM 8.0 Capacitor		CCC	
EC001079 - ETIM 8.0 Capacitor		cULus	
ETIM 8.0 Capacitor	ETIM classification		
	ETIM 8.0		Capacitor

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 110VAC 50/60HZ



Product designation         Power contactor           Product type designation         BFK50           Contact characteristics         Number of poles         N.         3           Rated insulation voltage UIEC/EN         V         690         690           Rated insulation voltage UIEC/EN         V         690         690           Rated insulation voltage UIEC/EN         V         8         0           Operational frequency         min         Hz         25           EC conventional frequency         max         Hz         400           EC conventional frequency         230V         kvar         22           4000V         kvar         40         440         440           4400         kvar         41         690V         kvar         46           Short-time allowable current for 10s (EC/EN60947-1)         A         400         400         500V         A         350           Breaking capacity (RMS value)         A         500         500V         A         352         690V         A         400           Power dissipation per pole (average value)         mQ         0.8         5         min         Nm         4         5         min         Nm         5					
Contact characteristics         Nr.         3           Number of poles         Nr.         3           Rated insulation voltage UIEC/EN         V         690           Rated insulation voltage UIEC/EN         KV         8           Operational frequency         min         Hz         25           max         Hz         400         1           IEC Conventional free air thermal current lth         A         90           Rated operational power AC-6b (T≤40°C)         230V         kvar         22           400V         kvar         40         440         440           4400480V         kvar         41         690V         kvar         41           690V         Kvar         40         440         440         440         500           Protection fuse         gG (IEC)         A         80         440V         A         400           Breaking capacity (RMS value)         A         500         B         352         690V         A         352           Resistance per pole (average value)         mΩ         0.8         Power dissipation per pole (average value)         mΩ         0.8         Power dissipation per pole (average value)         min         Nm         4 <td>Product designation</td> <td></td> <td></td> <td></td> <td>Power contactor</td>	Product designation				Power contactor
Number of poles         Nr.         3           Rated insulation voltage UI IEC/EN         V         690           Rated insulation voltage UImp         KV         8           Operational frequency         min         Hz         25           max         Hz         400         1           IEC Conventional free air thermal current lth         A         90           Rated operational power AC-6b (T≤40°C)         230V         kvar         22           400V         kvar         41         690V         kvar         41           690V         kvar         41         690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400         90           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500         Breaking capacity at voltage           440V         A         400         500V         A         312           Resistance per pole (average value)         m0         0.8         90         690V         A         312           Resistance per pole (average value)         m0         0.8         90         65         100         65	Product type designat	ion			BFK50
Rated insulation voltage UI IEC/EN         V         690           Rated impulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           max         Hz         400         1           IEC Conventional free air thermal current lth         A         90           Rated operational power AC-6b (T≤40°C)         230V         kvar         22           400V         kvar         41         690V         kvar         41           690V         kvar         41         690V         kvar         41           690V         kvar         41         690V         kvar         41           690V         kvar         46         500	Contact characteristic	S			
Rated inpulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           max         Hz         400           IEC Conventional frequency         230V         kvar         42           Rated operational power AC-6b (T≤40°C)         230V         kvar         40           440480V         kvar         41         690V         kvar         40           5hort-time allowable current for 10s (IEC/EN60947-1)         A         400         90         80           Making capacity (RMS value)         G (IEC)         A         80         80           Breaking capacity at voltage         440V         A         400         500V         A         352           Breaking capacity at voltage         440V         A         400         500V         A         352           Resistance per pole (average value)         mΩ         A         500         8690V         A         352           Tightening torque for coil terminals         min         Nm         4         5         100         2.95           Tightening torque for coil terminal         min         Nm         1         1         1         1         1         1 <t< td=""><td>Number of poles</td><td></td><td></td><td>Nr.</td><td>3</td></t<>	Number of poles			Nr.	3
Rated inpulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           max         Hz         400           IEC Conventional frequency         230V         kvar         42           Rated operational power AC-6b (T≤40°C)         230V         kvar         40           440480V         kvar         41         690V         kvar         40           5hort-time allowable current for 10s (IEC/EN60947-1)         A         400         90         80           Making capacity (RMS value)         G (IEC)         A         80         80           Breaking capacity at voltage         440V         A         400         500V         A         352           Breaking capacity at voltage         440V         A         400         500V         A         352           Resistance per pole (average value)         mΩ         A         500         8690V         A         352           Tightening torque for coil terminals         min         Nm         4         5         100         2.95           Tightening torque for coil terminal         min         Nm         1         1         1         1         1         1 <t< td=""><td>Rated insulation voltage</td><td>ge Ui IEC/EN</td><td></td><td>V</td><td>690</td></t<>	Rated insulation voltage	ge Ui IEC/EN		V	690
Operational frequency         min         Hz         25           max         Hz         400         1EC Conventional free air thermal current lth         A         90           Rated operational power AC-6b (T≤40°C)         230 V         kvar         40           440480V         kvar         40           440480V         kvar         41           690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500         Breaking capacity at voltage           440V         A         400         500V         A         352           690V         A         312         86         690V         A         312           Resistance per pole (average value)         mΩ         0.8         7         7         7         8         6.5         7           Tightening torque for terminals         min         Nm         4         0.8         7         8         8         7           Tightening torque for coil terminal         min         Nm         1         1         1         1		-		kV	8
$\begin{array}{c c c c c c c c c c c c c c c c c c c $					
$\begin{array}{c c c c c } \hline max & Hz & 400 \\ \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			min	Hz	25
IEC Conventional free air thermal current lth         A         90           Rated operational power AC-6b (T540°C)         230V         kvar         22           400V         kvar         40           440480V         kvar         41           690V         kvar         41           690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500         Breaking capacity at voltage         440V         A         400           Breaking capacity at voltage         440V         A         400         500V         A         312           Resistance per pole (average value)         mΩ         0.8         700V         A         312           Tightening torque for terminals         min         Nm         5         110         3.69           Tightening torque for coil terminal         min         Nm         5         110         0.74           Max number of wires simultaneously connectable         Nr.         2         2         Conductor section         115         15           Max number of wires simultaneously con					
Rated operational power AC-6b (T≤40°C)         230V       kvar       22         400V       kvar       40         400V       kvar       41         690V       kvar       41         690V       kvar       41         690V       kvar       46         Short-time allowable current for 10s (IEC/EN60947-1)       A       400         Protection fuse         gG (IEC)       A       80         Making capacity (RMS value)       A       500         Breaking capacity at voltage         440V       A       400         Source get (IEC)       A       80         Making capacity (RMS value)       A       400         Breaking capacity (RMS value)       A       400         Breaking capacity at voltage         440V       A       400         Breaking capacity (RMS value)       M       400         Breaking capacity (RMS value)       M       400         Breaking capacity (RMS value)       M       400         Breaki	IEC Conventional free	air thermal current lth			
230V         kvar         22           400V         kvar         40           440480V         kvar         41           690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           500V         A         352         690V         A         352           690V         A         312         Resistance per pole (average value)         mQ         0.8           Power dissipation per pole (average value)         mQ         0.8         9           Tightening torque for terminals         min         Nm         4           max         Nm         5         min         1bin         2.95           Tightening torque for coil terminal         min         Nm         4.80         1           Max number of wires simultaneously connectable         Nr.         2         2         Conductor section           Ibin         0.8         max         1.5         max         1.5         1.5					
$\begin{array}{c cccccc} & 400 & kvar & 40 \\ 440 \dots 480V & kvar & 41 \\ 690V & kvar & 46 \\ \hline \\ $			230\/	kvar	22
440480V         kvar         41           690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500           Breaking capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           Source of the second					
690V         kvar         46           Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           Short-time allowable current for 10s (IEC/EN60947-1)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         A         400           500V         A         352           690V         A         312           Resistance per pole (average value)         mΩ         0.8           Power dissipation per pole (average value)         min         Nm         4           Tightening torque for terminals         min         Nm         4           max         Nm         5         min         1bin         3.69           Tightening torque for coil terminal         min         Nm         4         max         Nm         1           Max number of wires simultaneously connectable         Nr.         2         Conductor section         max         1.5         max         1.5           Flexi					
Short-time allowable current for 10s (IEC/EN60947-1)         A         400           Protection fuse         gG (IEC)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           Stort-time allowable current for 10s (IEC/EN60947-1)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           Stort-time allowable current for 10s (IEC/EN60947-1)         A         80           Breaking capacity (RMS value)         A         500         Breaking capacity at voltage           Breaking capacity at voltage         440V         A         400         500V         A         352           Resistance per pole (average value)         mΩ         0.8         Power dissipation per pole (average value)         mΩ         0.8           Tightening torque for terminals         min         Nm         4         max         Nm         5           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Max number of wires simultaneously connectable         Nr.         2         2 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Protection fuse         gG (IEC)         A         80           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         0.8           Power dissipation per pole (average value)         Ith         W         6.5           Tightening torque for terminals         min         Nm         4           max         Nm         5         min         lbin         2.95           max         Ibin         3.69         3.69         3.69         3.69           Tightening torque for coil terminal         min         Nm         0.8         3.69           Tightening torque for coil terminal         min         Nm         0.8         3.69           Tightening torque for coil terminal         min         Nm         0.8         3.69           Tightening torque for coil terminal         min         Nm         0.8         3.69           Conductor section         min         Nm         1         3.69           Max number of wires simultaneously connectable         Nr.	Short-time allowable of	Surropt for $10c$ (IEC/EN60947-1)	030 V		
gG (IEC)         A         80           Making capacity (RMS value)         A         500           Breaking capacity at voltage         440V         A         400           Solov         A         352         690V         A         312           Resistance per pole (average value)         mΩ         0.8         Power dissipation per pole (average value)         mΩ         0.8           Power dissipation per pole (average value)         ith         W         6.5         Itin         Nm         4           Tightening torque for terminals         min         Nm         4         max         Nm         5           Tightening torque for coil terminal         min         Nm         5.5         S				A	400
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       0.8         Power dissipation per pole (average value)       Ith       W       6.5         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       lbin       2.95         max       Ibin       2.95       max       Nm       1         Tightening torque for coil terminal       min       Nm       0.8       0.8         Tightening torque for coil terminal       min       Nm       5       min       lbin       2.95         Tightening torque for coil terminal       min       Nm       0.8       max       Nm       1         Max number of wires simultaneously connectable       Nr.       2       Conductor section       Nr.       2         Conductor section       max       max       mm²       1.5       max       mm²       35         Flexible c/w lug conductor section       min       mm²       35       5       5 <td>FIDIECIIDITIUSE</td> <td></td> <td></td> <td>۸</td> <td>90</td>	FIDIECIIDITIUSE			۸	90
Breaking capacity at voltage       440V       A       400         500V       A       352         690V       A       312         Resistance per pole (average value)         Power dissipation per pole (average value)       mΩ       0.8         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       lbin       2.95         Tightening torque for coil terminal       min       Nm       0.8         Tightening torque for coil terminal       min       Nm       0.8         Max number of wires simultaneously connectable       Nr.       2         Conductor section       AWG/Kcmil       max       1.5         Flexible w/o lug conductor section       min       mm²       1.5         Flexible c/w lug conductor section       min       mm²       1.5	Making consoits (DMS		gg (iec)		
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         lbin         2.95           max         Ibin         3.69         1         min         0.8           Tightening torque for coil terminal         min         Nm         4         max         Nm         5           Max number of wires simultaneously connectable         Nr.         2         2         2           Conductor section         AWG/Kcmil         max         1         mm²         1.5           max         mm²         3.5         1         3.5         3.5				A	500
500V         A         352           690V         A         312           Resistance per pole (average value)         mΩ         0.8           Power dissipation per pole (average value)         th         W         6.5           Tightening torque for terminals         min         Nm         4           max         Nm         5         min         Ibin         2.95           max         Ibin         3.69         1         min         0.8           Tightening torque for coil terminal         min         Nm         4         max         Nm         5           Tightening torque for coil terminal         min         Nm         0.8         max         1bin         3.69           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Max number of wires simultaneously connectable         Nr.         2         Conductor section         XWG/Kcmil         Z         E           Flexible w/o lug conductor section         min         mm²         1.5         max         mm²         3.5           Flexible c/w lug conductor section         min         mm²         3.5         E         E         E         E	breaking capacity at v	onage	44014	۸	400
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         2.95         max         Ibin         3.69           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Max number of wires simultaneously connectable         Nr.         2         Conductor section         Nr.         2           Conductor section         Max         min         mm²         1.5         max         mm²         35           Flexible w/o lug conductor section         min         mm²         1.5         max         mm²         35					
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       3.69         Tightening torque for coil terminal       min       Nm       0.8         Max number of coil terminal       min       Nm       0.8         Max number of wires simultaneously connectable       Nr.       2         Conductor section       AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5					
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       3.69         Tightening torque for coil terminal       min       Nm       0.8         max       Nm       1       min       Ibin       0.8         max       Nm       1       min       Ibin       0.8         max       Nm       1       min       Ibin       0.8         max       Ibin       0.74       0.74       0.74         Max number of wires simultaneously connectable       Nr.       2       0.74         Conductor section       Max       Nr.       2       0.74         Max number of wires simultaneously connectable       Nr.       2       0.74         Conductor section       max       2       0.74       0.74         Max       No lug conductor section       max       2       0.74         Flexible w/o lug conductor section       max       1.5       0.5       0.5         Flexible c/w lug conductor section       max       mm²			690V		
Ith       W       6.5         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       Ibin       2.95         max       Ibin       3.69       3.69         Tightening torque for coil terminal       min       Nm       0.8         max       Nm       1       min       Ibin       0.8         max       Ibin       0.8       max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2       Conductor section         AWG/Kcmil       max       2       Elexible w/o lug conductor section         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5       5				mΩ	0.8
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       1bin       0.8         max       Ibin       0.8       max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2       2         Conductor section       AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35       35	Power dissipation per	pole (average value)			
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       0.8         max       Nm       1       min       Ibin       0.8         max       Nm       1       min       Ibin       0.8         max       Ibin       0.8       max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2       Conductor section       max       2         AWG/Kcmil       max       2       Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5       35       Flexible c/w lug conductor section			Ith	VV	6.5
maxNm5minlbin2.95maxlbin3.69Tightening torque for coil terminalminNm0.8maxNm1maxmaxNm1maxlbin0.8maxlbin0.74Max number of wires simultaneously connectableNr.2Conductor sectionmax2Flexible w/o lug conductor sectionminmm²1.5maxmm²3535	Tightening torque for t	erminals			
min         Ibin         2.95           max         Ibin         3.69           Tightening torque for coil terminal         min         Nm         0.8           max         Nm         1         min         Ibin         0.8           max         Nm         1         min         Ibin         0.8           max         Ibin         0.8         max         Ibin         0.74           Max number of wires simultaneously connectable         Nr.         2         Conductor section         Nr.         2           Conductor section         max         max         2         Example         1.5           Flexible w/o lug conductor section         min         mm²         1.5           max         Flexible c/w lug conductor section         min         mm²         3.5					
maxIbin3.69Tightening torque for coil terminalminNm0.8maxNm1min10minIbin0.8max10Max number of wires simultaneously connectableNr.2Conductor sectionNr.2AWG/Kcmilmax2Flexible w/o lug conductor sectionminmm²1.5Flexible c/w lug conductor sectionminmm²35			max		
Tightening torque for coil terminal       min       Nm       0.8         max       Nm       1         min       Ibin       0.8         max       Ibin       0.8         max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2         Conductor section       Nr.       2         Flexible w/o lug conductor section       max       2         Flexible w/o lug conductor section       min       mm²         Flexible c/w lug conductor section       Flexible c/w lug conductor section			min		
min       Nm       0.8         max       Nm       1         min       Ibin       0.8         max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2         Conductor section       Nr.       2         AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section       1.5			max	lbin	3.69
max       Nm       1         min       lbin       0.8         max       lbin       0.74         Max number of wires simultaneously connectable       Nr.       2         Conductor section       Max       2         AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²         Imax       min       mm²         Flexible c/w lug conductor section       35	Tightening torque for a	coil terminal			
min       Ibin       0.8         max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2         Conductor section       AWG/Kcmil       max       2         Flexible w/o lug conductor section       Flexible w/o lug conductor section       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section			min		
max       Ibin       0.74         Max number of wires simultaneously connectable       Nr.       2         Conductor section       AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section					
Max number of wires simultaneously connectable       Nr.       2         Conductor section       AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       The section       The section			min		
Conductor section          AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section			max		
AWG/Kcmil max 2 Flexible w/o lug conductor section min mm <sup>2</sup> 1.5 max mm <sup>2</sup> 35 Flexible c/w lug conductor section		simultaneously connectable		Nr.	2
max     2       Flexible w/o lug conductor section     min     mm²     1.5       max     mm²     35	Conductor section				
Flexible w/o lug conductor section min mm <sup>2</sup> 1.5 max mm <sup>2</sup> 35 Flexible c/w lug conductor section		AWG/Kcmil			
min mm <sup>2</sup> 1.5 max mm <sup>2</sup> 35 Flexible c/w lug conductor section			max		2
max mm <sup>2</sup> 35 Flexible c/w lug conductor section		Flexible w/o lug conductor section			
Flexible c/w lug conductor section			min	mm²	1.5
-			max	mm²	35
min mm² 1.5		Flexible c/w lug conductor section			
			min	mm²	1.5

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 110VAC 50/60HZ

**BFK5000A110** 

mm² 35 max IP20 front Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan ±30° allowable Screw / DIN rail Fixing 35mm 1090 Weight g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 mechanical load 15000000 cycles EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz V 110 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up %Us 80 min max %Us 110 drop-out %Us 20 min %Us 55 max of 50/60Hz coil powered at 60Hz pick-up min %Us 85 %Us 110 max drop-out %Us 20 min 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 VA 195 in-rush 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

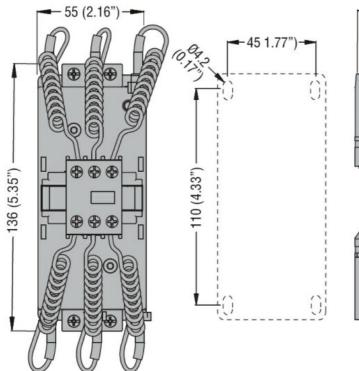
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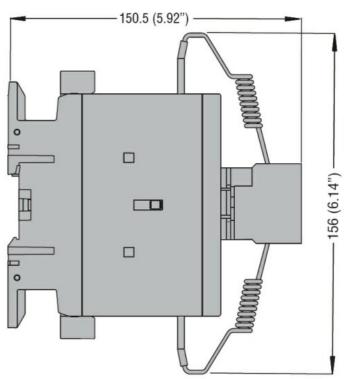


CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 110VAC 50/60HZ

			min	ms	12
			max	ms	28
		Opening NO			
		-1- 5 -	min	ms	8
			max	ms	22
	in DC			_	
	-	Closing NO			
		<b>0</b> -	min	ms	40
			max	ms	85
		Opening NO			
		1 0	min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	А	90
Ambient conditions					
Temperature					
	Operating temperatur	е			
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protect	ion				
Pollution degree					3
Dimonoiono [mm (in)]					

Dimensions [mm (in)]

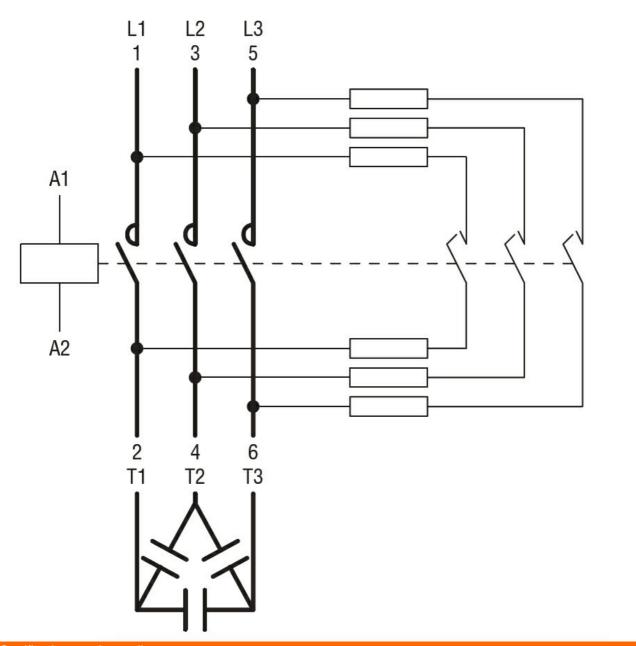






CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 110VAC 50/60HZ





## Certifications and compliance

Compl	

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	
ETIM classification		
		EC001079 -
ETIM 8.0		Capacitor
		contactor

BFK5000A110



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 50/60HZ



Product designation				Power contactor
Product type designat	ion			BFK50
Contact characteristics	3			
Number of poles			Nr.	3
Rated insulation voltage	ge Ui IEC/EN		V	690
Rated impulse withsta			kV	8
Operational frequency	· · ·			
		min	Hz	25
		max	Hz	400
IEC Conventional free	air thermal current lth	max	A	90
Rated operational pov				
		230V	kvar	22
		400V	kvar	40
		400V 440480V	kvar	40
		440480V 690V	kvar	46
Short time allowable a	Nurropt for 100 (IEC/EN60047 1)	090 V	A	40
	current for 10s (IEC/EN60947-1)		A	400
Protection fuse			•	00
		gG (IEC)	<u>A</u>	80
Making capacity (RMS			A	500
Breaking capacity at v	oltage			
		440V	A	400
		500V	A	352
		690V	A	312
Resistance per pole (a			mΩ	0.8
Power dissipation per	pole (average value)			
		Ith	W	6.5
Tightening torque for t	erminals			
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	lbin	3.69
Tightening torque for a	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.8
		max	Ibin	0.74
Max number of wires a	simultaneously connectable		Nr.	2
Conductor section	·			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ		
		min	mm²	1.5
		11111	111111	1.J

BFK5000A230

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 50/60HZ

**BFK5000A230** 

		max	mm²	35
Power terminal protect	ion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1090
Conductor section			U	
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data				
Performance level B10	Dd according to EN/ISO 13489-1			
		rated load	cycles	400000
		mechanical load	cycles	15000000
EMC compatibility			-	yes
AC coil operating				
Rated AC voltage at 50	D/60Hz		V	230
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	20
		max	%Us	55
AC average coil consu	•			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			405
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			040
		in-rush	VA	210
		holding	VA	15
Dissipation at holding :	≤20°C 50HZ		W	5
Max cycles frequency				2000
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			

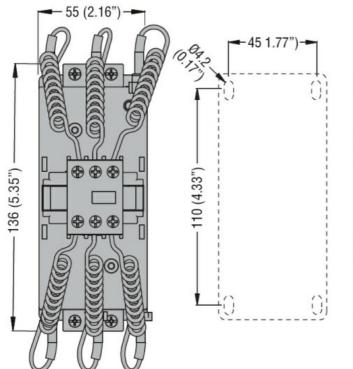
**Closing NO** 

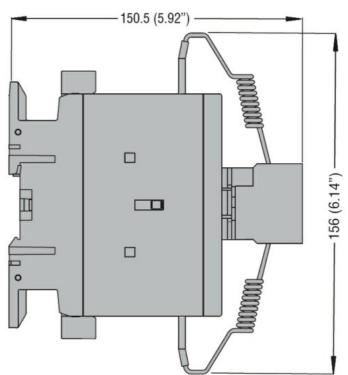


CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 50/60HZ

			min	ms	12
			max	ms	28
		Opening NO	тах	me	20
		opening No	min	ms	8
				ms	22
			max	1115	22
	in DC				
		Closing NO			10
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	А	90
Ambient conditions					
Temperature					
·	Operating temperatu	ire			
			min	°C	-50
			max	°C	70
	Storage temperature	)			
			min	°C	-60
			max	°Č	80
Max altitude				m	3000
Resistance & Protect	tion				
Pollution degree					3
Dimonoiono [mm (in)]					~

Dimensions [mm (in)]

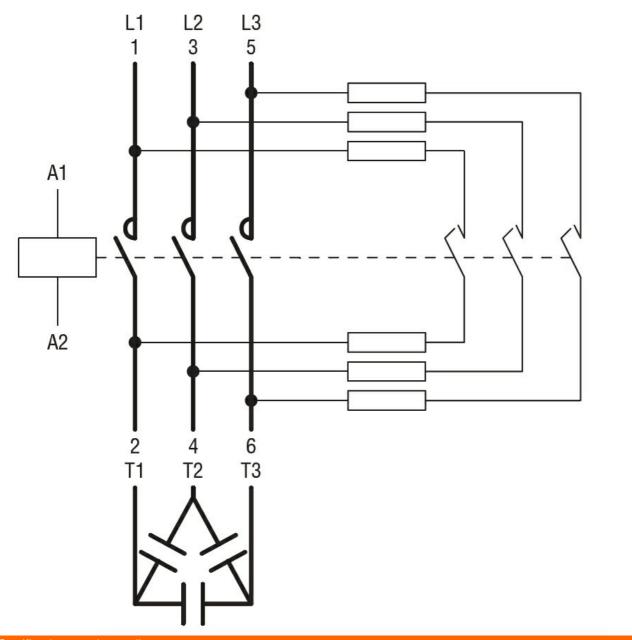






CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 50/60HZ





## Certifications and compliance

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Comp	nance
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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	Compliance		
IEC/EN/BS 60947-1           IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC           cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-1	
IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-4-1	
UL 60947-1           UL 60947-4-1           Certificates <u>CCC</u> cULus   ETIM classification ETIM 8.0 EC001079 - Capacitor		IEC/EN/BS 60947-1	
UL 60947-4-1 Certificates CCC CULus ETIM classification ETIM 8.0 ECO01079 - Capacitor		IEC/EN/BS 60947-4-1	
Certificates CCC cULus ETIM classification ETIM 8.0 ETIM 8.0 EC001079 - Capacitor		UL 60947-1	
CCC         cULus         ETIM classification         ETIM 8.0		UL 60947-4-1	
cULus       ETIM classification       EC001079 - Capacitor	Certificates		
ETIM classification EC001079 - ETIM 8.0 Capacitor		CCC	
EC001079 - ETIM 8.0 Capacitor		cULus	
ETIM 8.0 Capacitor	ETIM classification		
	ETIM 8.0		Capacitor

BFK5000A230



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 400VAC 50/60HZ



Product designation				Power contactor
Product type designa	ation			BFK50
Contact characteristic				
Number of poles			Nr.	3
Rated insulation volta	age Ui IEC/EN		V	690
Rated impulse withsta	and voltage Uimp		kV	8
Operational frequence	ÿ			
		min	Hz	25
		max	Hz	400
IEC Conventional free	e air thermal current Ith		А	90
Rated operational po	wer AC-6b (T≤40°C)			
		230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)		А	400
Protection fuse	· · · ·			
		gG (IEC)	А	80
Making capacity (RM	S value)	<b>.</b> . ,	А	500
Breaking capacity at				
	C C	440V	А	400
		500V	А	352
		690V	А	312
Resistance per pole	(average value)		mΩ	0.8
	r 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	lbin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	~	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	v			4 5

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mm²

min

1.5



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 400VAC 50/60HZ

**BFK5000A400** 

mm<sup>2</sup> 35 max IP20 front Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan ±30° allowable Screw / DIN rail Fixing 35mm 1090 Weight g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 mechanical load 15000000 cycles EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz V 400 AC operating voltage of 50/60Hz coil powered at 50Hz pick-up %Us 80 min max %Us 110 drop-out %Us 20 min %Us 55 max of 50/60Hz coil powered at 60Hz pick-up min %Us 85 %Us 110 max drop-out %Us 20 min 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 VA 195 in-rush 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

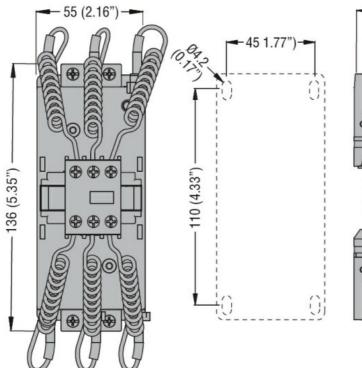
Closing NO

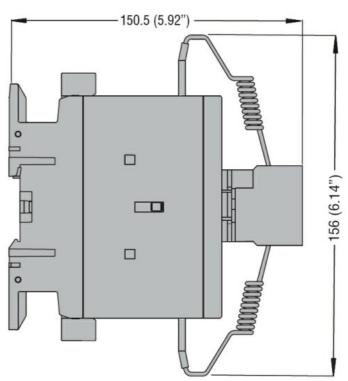


CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 400VAC 50/60HZ

			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	А	90
Ambient conditions					
Temperature					
	Operating temperatu	ire			
			min	°C	-50
			max	°C	70
	Storage temperature	9			
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protect	tion				
Pollution degree					3

Dimensions [mm (in)]

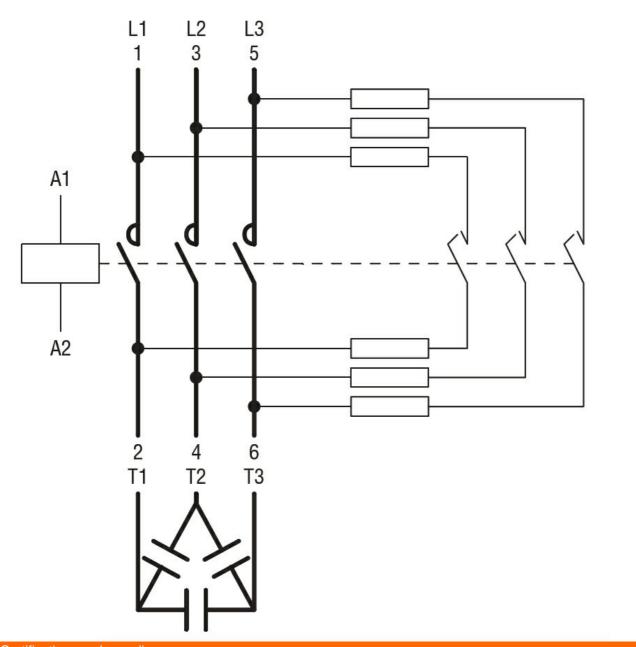






CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 400VAC 50/60HZ





# Certifications and compliance

Compl	liance
Comp	lance

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	Compliance		
IEC/EN/BS 60947-1           IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC           cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-1	
IEC/EN/BS 60947-4-1           UL 60947-1           UL 60947-4-1           Certificates           CCC cULus           ETIM classification           ETIM 8.0		CSA C22.2 n° 60947-4-1	
UL 60947-1           UL 60947-4-1           Certificates <u>CCC</u> cULus   ETIM classification ETIM 8.0 EC001079 - Capacitor		IEC/EN/BS 60947-1	
UL 60947-4-1 Certificates CCC CULus ETIM classification ETIM 8.0 ECO01079 - Capacitor		IEC/EN/BS 60947-4-1	
Certificates CCC cULus ETIM classification ETIM 8.0 ETIM 8.0 EC001079 - Capacitor		UL 60947-1	
CCC         cULus         ETIM classification         ETIM 8.0		UL 60947-4-1	
cULus       ETIM classification       EC001079 - Capacitor	Certificates		
ETIM classification EC001079 - ETIM 8.0 Capacitor		CCC	
EC001079 - ETIM 8.0 Capacitor		cULus	
ETIM 8.0 Capacitor	ETIM classification		
	ETIM 8.0		Capacitor

BFK5000A400



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 24VAC 60HZ



Product designation				Power contactor
Product type designat	tion			BFK50
Contact characteristic	S			
Number of poles			Nr.	3
Rated insulation volta	ge Ui IEC/EN		V	690
Rated impulse withsta	-		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	air thermal current Ith		А	90
Rated operational pov				
	( )	230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable of	current for 10s (IEC/EN60947-1)		A	400
Protection fuse				
		gG (IEC)	А	80
Making capacity (RMS	Svalue)	90 (120)	A	500
Breaking capacity at v				000
breaking capacity at v	onage	440V	А	400
		500V	A	352
		690V	A	312
Resistance per pole (a	averade value)	0007	mΩ	0.8
Power dissipation per			11152	0.0
i ower uissipation per	pole (average value)	lth	W	6.5
Tightening torque for t	torminals	101	vv	0.5
rightening torque for	terminals	min	Nm	4
		min		4
		max	Nm	5
		min	lbin Ibin	2.95
Tightoning to your for		max	lbin	3.69
Tightening torque for	coli terminal		Nhaa	0.0
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR,

COIL 24VAC 60HZ

BFK5000A02460

	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			) ( anti-al mlan
	normal allowable		Vertical plan ±30°
	allowable		Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section		0	
AWG/kcmil conductor section			
	max		2
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
AC coil operating		.,,	
Rated AC voltage at 60Hz		V	24
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up	min	%Us	80
		%Us %Us	80 110
drop out	max	7005	110
drop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C	Пах	/000	00
of 60Hz coil powered at 60Hz			
	in-rush	VA	210
	holding		15
Dissipation at holding ≤20°C 50Hz	3	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			
Closing NO	min	ms	40
	min max	ms ms	40 85
Closing NO Opening NO	max	ms	85

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ENERGY AND AUTOMATION

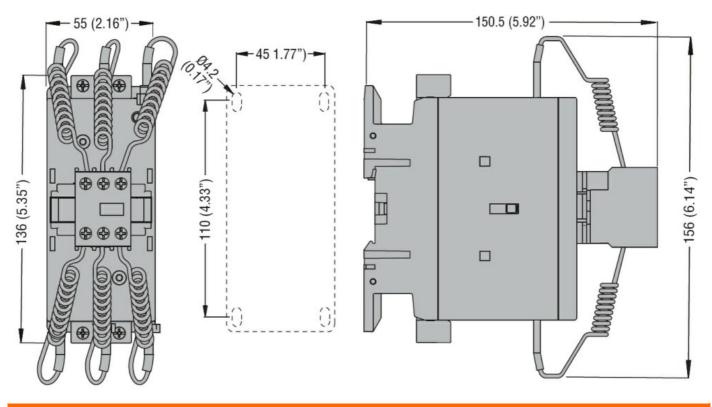
Dimensions [mm (in)]

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 24VAC 60HZ

BFK5000A02460

### General USE

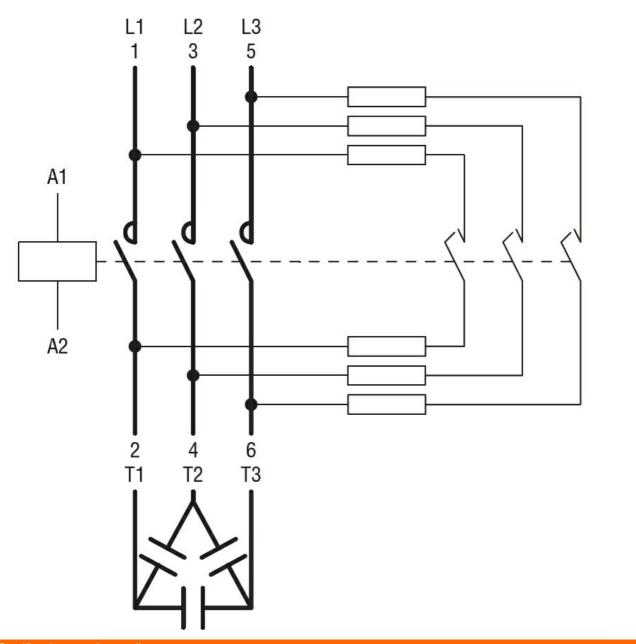
	Contactor			
		AC current	А	90
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protec	tion			
Pollution degree				3





CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 24VAC 60HZ





## Certifications and compliance

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Comp	nance
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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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 48VAC 60HZ



Product designation				Power contactor
Product type designat	tion			BFK50
Contact characteristic	S			
Number of poles			Nr.	3
Rated insulation volta	ge Ui IEC/EN		V	690
Rated impulse withsta	-		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	e air thermal current Ith		А	90
Rated operational pov	wer AC-6b (T≤40°C)			
		230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)		А	400
Protection fuse				
		gG (IEC)	А	80
Making capacity (RMS	S value)	<u> </u>	А	500
Breaking capacity at v				
5.1,		440V	А	400
		500V	A	352
		690V	A	312
Resistance per pole (	average value)		mΩ	0.8
Power dissipation per				
	P (	lth	W	6.5
Tightening torque for	terminals			0.0
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal	max		0.00
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				-
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section	max		
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ		
	LICKING OF THE CONCLUSION SECTION	min	mm²	1.5
		11111		1.0



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR,

COIL 48VAC 60HZ

BFK5000A04860

			max	mm²	35
Power terminal protect	tion according to IEC/	EN 60529			IP20 front
Mechanical features					
Operating position					
			normal allowable		Vertical plan ±30°
Fixing					Screw / DIN rail 35mm
Weight				g	1090
Conductor section				-	
	AWG/kcmil conducto	or section			
			max		2
Operations					
Mechanical life				cycles	15000000
Electrical life				cycles	400000
Safety related data					
Performance level B10	Dd according to EN/IS	O 13489-1			
			rated load	cycles	400000
			mechanical load	cycles	15000000
EMC compatibility					yes
AC coil operating					
Rated AC voltage at 60	)Hz			V	48
AC operating voltage					
	of 60Hz coil powered	d at 60Hz			
		pick-up			
			min	%Us	80
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
AC average coil consu					
	of 60Hz coil powered	d at 60Hz			
			in-rush	VA	210
			holding		15
Dissipation at holding	≤20°C 50Hz			W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			•
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			40
			min	ms	40
		Opening NO	max	ms	85
		Opening NO	<u> </u>		20
			min	ms	20
III to obvice lete			max	ms	55
UL technical data					

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ENERGY AND AUTOMATION

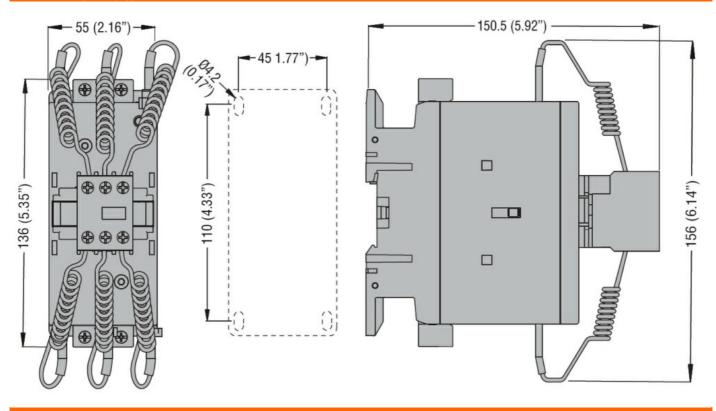
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 48VAC 60HZ

BFK5000A04860

#### General USE

	Contactor			
		AC current	А	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 & Protect	ion			
Pollution degree				3

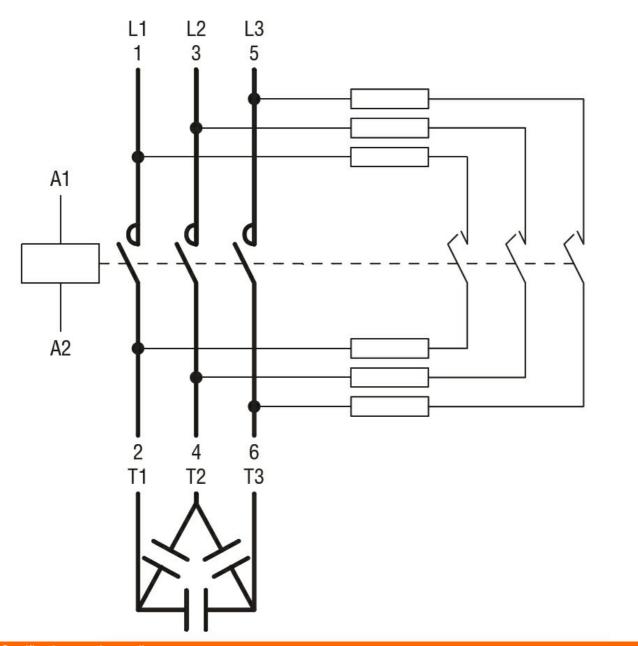
Dimensions [mm (in)]





CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 48VAC 60HZ





### Certifications and compliance

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Comp	nance
• • • • • •	

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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 120VAC 60HZ



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		А	90
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	22
	400V	kvar	40
	440480V	kvar	41
	690V	kvar	46
Short-time allowable current for 10s (IEC/EN60947-1)		А	400
Protection fuse			
	gG (IEC)	А	80
Making capacity (RMS value)	• • •	А	500
Breaking capacity at voltage			
	440V	А	400
	500V	А	352
	690V	А	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	lbin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		2
Flexible w/o lug conductor section			
Ğ	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section			
			4 5

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mm²

min

1.5



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT,

BFK5000A12060

INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 120VAC 60HZ max mm² 35 Power terminal protection according to IEC/EN 60529 IP20 front

Power terminal protection according to IEC/EN 60529	IP20 front	
Mechanical features		
Operating position		
	normal Vertical plar	n
	allowable ±30°	
Finis a	Screw / DIN	l rail
Fixing	35mm	
Weight	g 1090	
Conductor section		
AWG/kcmil conductor section		
	max 2	
Operations		
Mechanical life	cycles 1500000	
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	
AC coil operating		
Rated AC voltage at 60Hz	V 120	
AC operating voltage	· · · · · · · · · · · · · · · · · · ·	
of 60Hz coil powered at 60Hz		
pick-up		
pick-up	min %Us 80	
	max %Us 110	
drop-out	max 7003 110	
	min %Us 20	
	max %Us 55	
AC average coil consumption at 20°C	max 7003 00	
of 60Hz coil powered at 60Hz		
	in-rush VA 210	
	holding VA 15	
Dissipation at holding ≤20°C 50Hz		
	vv 3	
Max cycles frequency Mechanical operation	sudar/h 2000	
Operating times	cycles/h 3600	
Average time for Us control		
in AC		
Closing NC		
	min ms 12	
	max ms 28	
Opening No		
	min ms 8	
	max ms 22	
in DC		
Closing NC		
	min ms 40	
<b>_</b>	max ms 85	
Opening No		
	min ms 20	
	max ms 55	

UL technical data

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ENERGY AND AUTOMATION

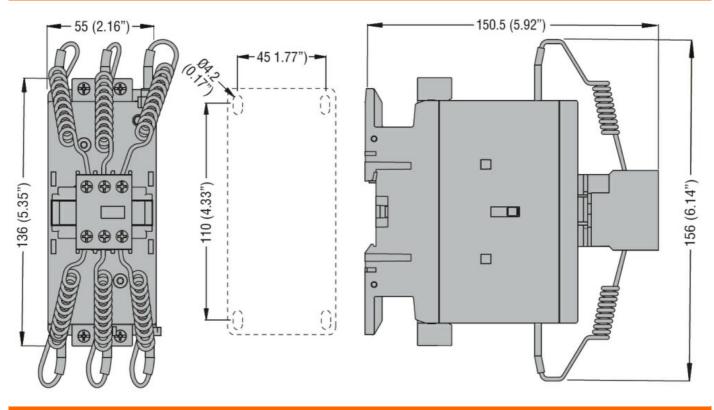
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 120VAC 60HZ

BFK5000A12060

#### General USE

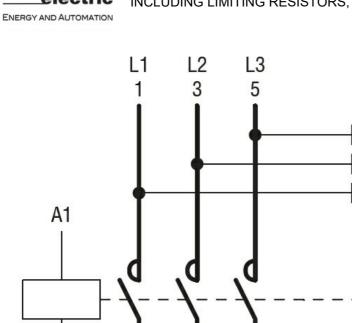
	Contactor			
		AC current	А	90
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3

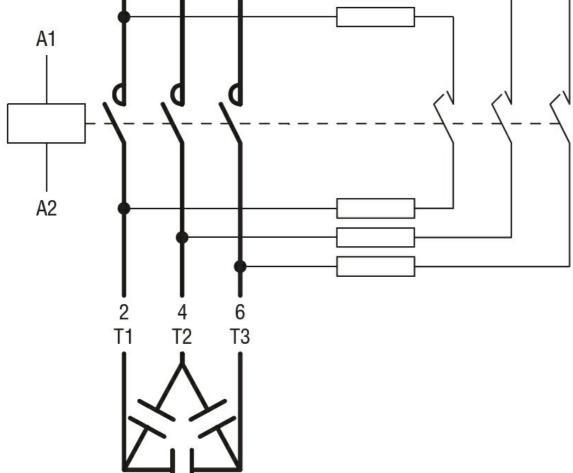
Dimensions [mm (in)]





CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 120VAC 60HZ





### Certifications and compliance

Comp	liance
Comp	nance

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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 220VAC 60HZ



Product designation				Power contactor
Product type designation	tion			BFK50
Contact characteristic	S			
Number of poles			Nr.	3
Rated insulation volta	ge Ui IEC/EN		V	690
Rated impulse withsta	and voltage Uimp		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	e air thermal current Ith		А	90
Rated operational pov				
	( )	230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)		A	400
Protection fuse				
		gG (IEC)	А	80
Making capacity (RMS	S value)	go (i20)	A	500
Breaking capacity at v				000
Dicaking capacity at v	onage	440V	А	400
		500V	A	352
		690V	A	312
Resistance per pole (	averade value)	030 V	mΩ	0.8
Power dissipation per	•		11152	0.0
rower uissipation per	pole (average value)	Ith	W	6.5
Tightoning torque for	torminala	101	VV	0.0
Tightening torque for	terminals		Nime	4
		min	Nm	4
		max	Nm	5
		min	lbin Ibin	2.95
Tishtesiaa teasuu fee		max	lbin	3.69
Tightening torque for	conterminal		Nime	0.0
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
<u> </u>		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			_
		max		2
	Flexible w/o lug conductor section		-	
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5

BFK5000A22060 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



Fixing

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT. INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR,

BFK5000A22060

COIL 220VAC 60HZ mm<sup>2</sup> 35 max IP20 front Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan ±30° allowable Screw / DIN rail 35mm Weight 1090 g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 mechanical load 15000000 cycles

EMC compatibility yes AC coil operating Rated AC voltage at 60Hz V 220 AC operating voltage of 60Hz coil powered at 60Hz pick-up %Us 80 min max %Us 110 drop-out %Us 20 min %Us 55 max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush VA 210 holding VA 15 W Dissipation at holding ≤20°C 50Hz 5 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 12 28 max ms **Opening NO** min ms 8 22 max ms in DC **Closing NO** 40 min ms max ms 85 Opening NO

UL technical data

BFK5000A22000 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

20

55

ms

ms

min

max

ENERGY AND AUTOMATION

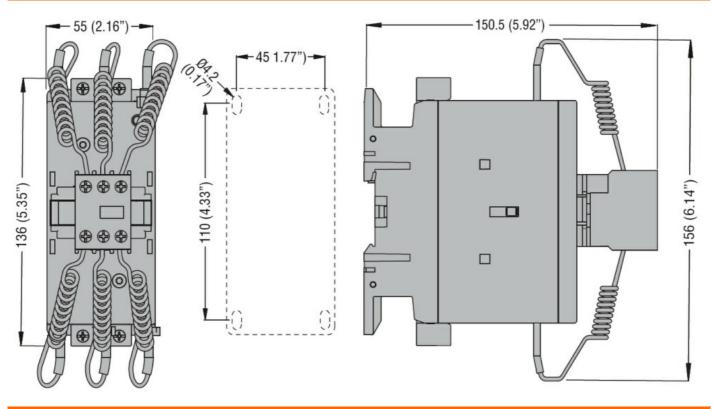
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 220VAC 60HZ

BFK5000A22060

#### General USE

	Contactor			
		AC current	А	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 & Protect	tion			
Pollution degree				3

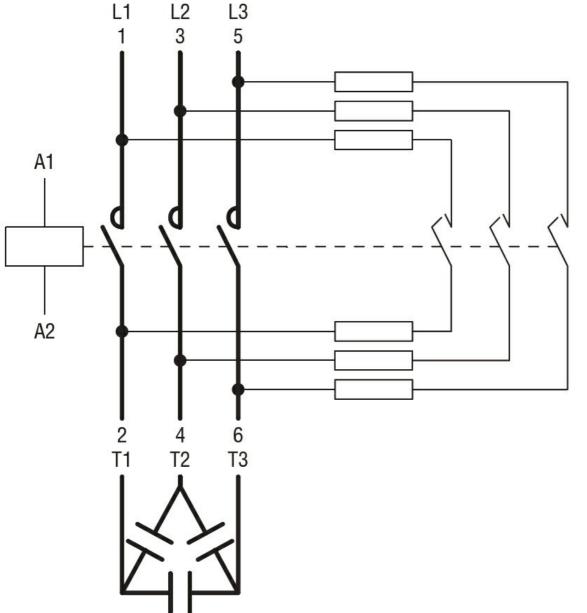
Dimensions [mm (in)]





CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 220VAC 60HZ





## Certifications and compliance

Comp	liance
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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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 60HZ



Product designation				Power contactor
Product type designation	ation			BFK50
Contact characteristi				
Number of poles			Nr.	3
Rated insulation volta	age Ui IEC/EN		V	690
Rated impulse withst			kV	8
Operational frequence	•			-
	- )	min	Hz	25
		max	Hz	400
IEC Conventional fre	e air thermal current Ith	тал	A	90
	ower AC-6b (T≤40°C)			
		230V	kvar	22
		400V	kvar	40
		440480V	kvar	40
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)	030 V	A	400
Protection fuse			~	400
FIDIECIIDITIUSE			٨	80
Making consoits (DM	C volue)	gG (IEC)	A	
Making capacity (RM			A	500
Breaking capacity at	voltage	4.40)/	٨	100
		440V	A	400
		500V	A	352
Desistant		690V	<u>A</u>	312
Resistance per pole			mΩ	0.8
Power dissipation pe	er 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	lbin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	U U			4 5

BFK5000A23060 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

mm²

min

1.5



Fixing

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR,

BFK5000A23060

COIL 230VAC 60HZ mm<sup>2</sup> 35 max Power terminal protection according to IEC/EN 60529 IP20 front Mechanical features Operating position normal Vertical plan allowable ±30° Screw / DIN rail 35mm Weight 1090 g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 cycles mechanical load 15000000 **EMC** compatibility yes AC coil operating Rated AC voltage at 60Hz V 230 AC operating voltage of 60Hz coil powered at 60Hz pick-up %Us 80 min max %Us 110

drop-out %Us 20 min %Us 55 max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush \/Δ 210

		in-rusn	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

ENERGY AND AUTOMATION

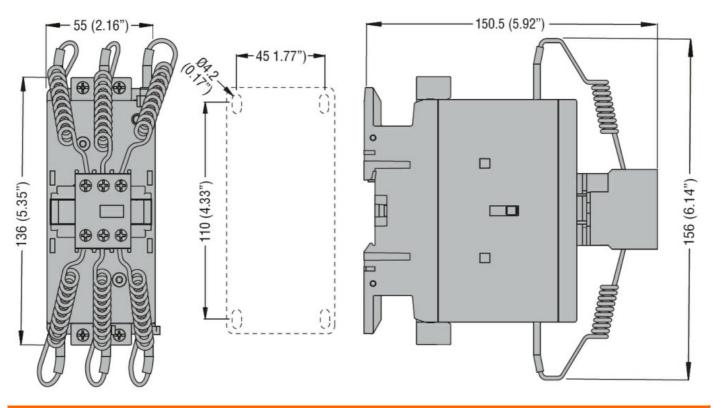
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 60HZ

BFK5000A23060

#### General USE

	Contactor			
		AC current	А	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 & Protect	tion			
Pollution degree				3

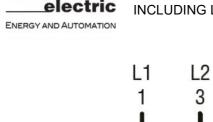
Dimensions [mm (in)]

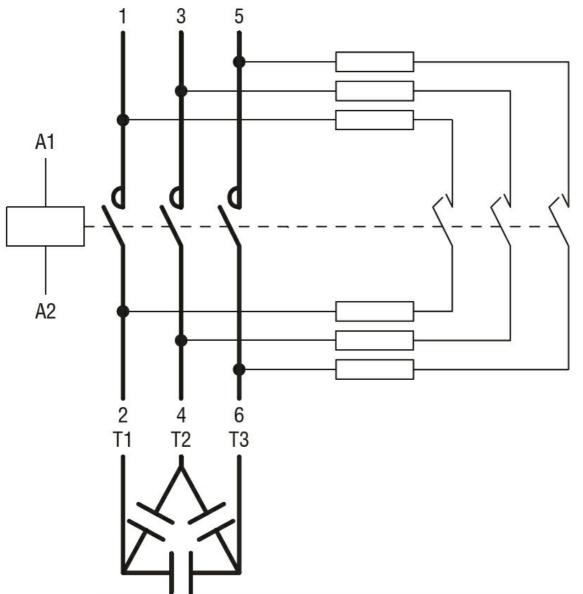


Wiring diagrams



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 230VAC 60HZ





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## Certifications and compliance

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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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 460VAC 60HZ



Product designation				Power contactor
Product type designation	tion			BFK50
Contact characteristic	S			
Number of poles			Nr.	3
Rated insulation volta	ge Ui IEC/EN		V	690
Rated impulse withsta	and voltage Uimp		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	e air thermal current Ith		А	90
Rated operational pov				
· · · · · · · · · · · · · · · · · · ·		230V	kvar	22
		400V	kvar	40
		440480V	kvar	41
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)		A	400
Protection fuse				
		gG (IEC)	А	80
Making capacity (RMS	S value)	go (120)	A	500
Breaking capacity at v				000
Dreaking capacity at v	onage	440V	А	400
		500V	A	352
		690V	A	312
Resistance per pole (	averade value)	030 V	mΩ	0.8
Power dissipation per	•		11152	0.0
rower uissipation per	pole (average value)	Ith	W	6.5
Tightoning targua for	torminala	101	VV	0.0
Tightening torque for	terminals		Nime	4
		min	Nm	4
		max	Nm	5
		min	lbin Ibin	2.95
Tishtesian termin fea		max	lbin	3.69
Tightening torque for	conterminal		Nime	0.0
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			_
		max		2
	Flexible w/o lug conductor section		-	
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5

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CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 460VAC 60HZ

BFK5000A46060

mm<sup>2</sup> 35 max IP20 front Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan ±30° allowable Screw / DIN rail Fixing 35mm Weight 1090 g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 mechanical load 15000000 cycles EMC compatibility yes AC coil operating Rated AC voltage at 60Hz V 460 AC operating voltage of 60Hz coil powered at 60Hz pick-up %Us 80 min max %Us 110 drop-out %Us 20 min %Us 55 max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush VA 210 holding VA 15 W Dissipation at holding ≤20°C 50Hz 5 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 12

in DC

**Opening NO** 

**Closing NO** 

Opening NO

28

8 22

40

85

20

55

ms

ms

ms

ms

ms

ms

ms

max

min

max

min

max

min

max

ENERGY AND AUTOMATION

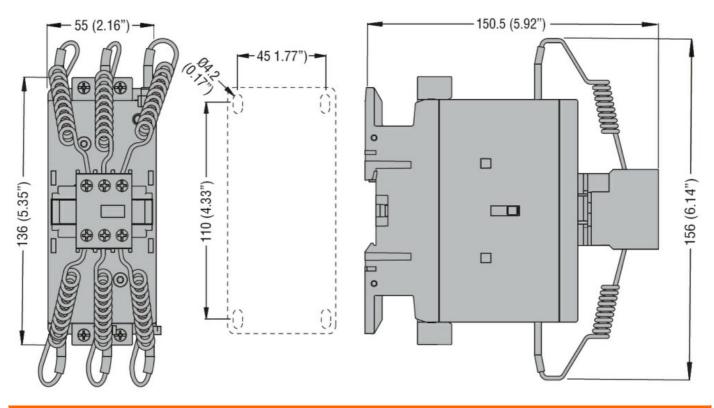
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 460VAC 60HZ

BFK5000A46060

### General USE

	Contactor			
		AC current	А	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 & Protect	ion			
Pollution degree				3

Dimensions [mm (in)]

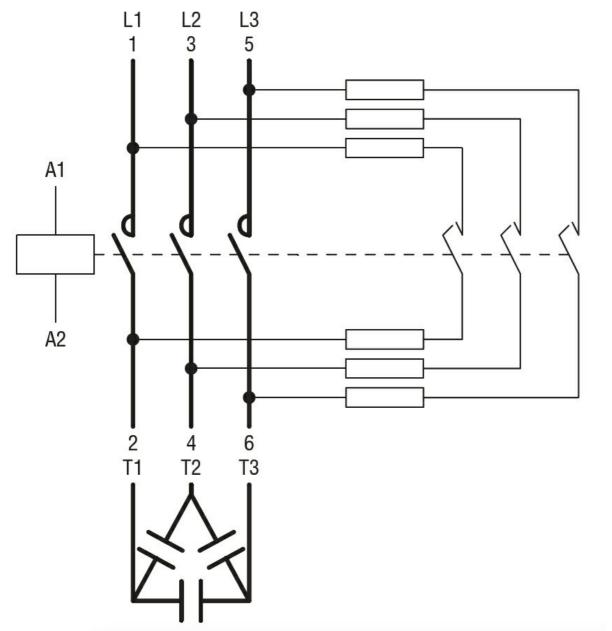


Wiring diagrams



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 460VAC 60HZ





### Certifications and compliance

Comp	liance
Comp	nanoc

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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 575VAC 60HZ



Product designation				Power contactor
Product type designation	ation			BFK50
Contact characteristi				
Number of poles			Nr.	3
Rated insulation volta	age Ui IEC/EN		V	690
Rated impulse withst			kV	8
Operational frequence	· · ·			-
	- )	min	Hz	25
		max	Hz	400
IEC Conventional fre	e air thermal current Ith	тал	A	90
	ower AC-6b (T≤40°C)			
		230V	kvar	22
		400V	kvar	40
		440480V	kvar	40
		690V	kvar	46
Short-time allowable	current for 10s (IEC/EN60947-1)	030 V	A	400
Protection fuse			~	400
FIDIECIIDITIUSE			٨	80
Making consoits (DM	C volue)	gG (IEC)	A	
Making capacity (RM			A	500
Breaking capacity at	voltage	4.40)/	٨	100
		440V	A	400
		500V	A	352
Desistant		690V	<u>A</u>	312
Resistance per pole			mΩ	0.8
Power dissipation pe	er 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	lbin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	U U			4 5

BFK5000A57560 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

mm²

min

1.5



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 575VAC 60HZ

BFK5000A57560

mm<sup>2</sup> 35 max IP20 front Power terminal protection according to IEC/EN 60529 Mechanical features Operating position normal Vertical plan ±30° allowable Screw / DIN rail Fixing 35mm Weight 1090 g Conductor section AWG/kcmil conductor section 2 max Operations Mechanical life 15000000 cycles Electrical life 400000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 400000 mechanical load 15000000 cycles EMC compatibility yes AC coil operating Rated AC voltage at 60Hz V 575 AC operating voltage of 60Hz coil powered at 60Hz pick-up %Us 80 min max %Us 110 drop-out %Us 20 min %Us 55 max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush VA 210 holding VA 15 W Dissipation at holding ≤20°C 50Hz 5 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 12 28 max ms

UL technical data

in DC

BFK5000A57560 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

**Opening NO** 

**Closing NO** 

Opening NO

min

max

min

max

min

max

ms

ms

ms

ms

ms

ms

8 22

40

85

20

55

ENERGY AND AUTOMATION

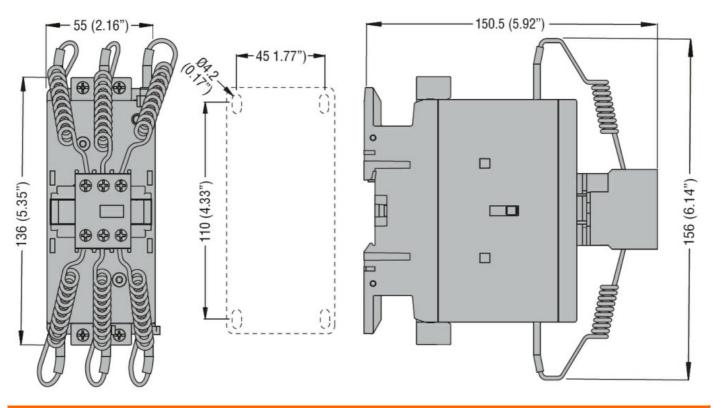
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 575VAC 60HZ

BFK5000A57560

#### General USE

	Contactor			
		AC current	А	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 & Protect	tion			
Pollution degree				3

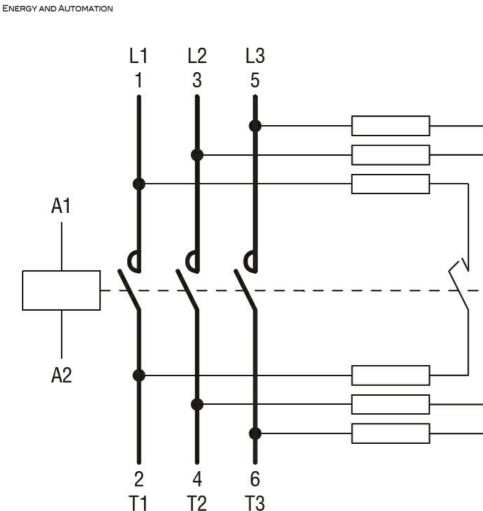
Dimensions [mm (in)]



Wiring diagrams



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 40KVAR, COIL 575VAC 60HZ



# Certifications and compliance

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Comp	nance
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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	
ETIM classification		
ETIM 8.0		EC001079 - Capacitor contactor