## BFK8000A02460



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



Product type designation         BFK80           Contact characteristics	Product designation				Power contactor
Contact characteristics         Nr.         3           Number of poles         Nr.         3           Rated insulation voltage Ui IEC/EN         V         690           Rated insulation voltage Uimp         kV         8           Operational frequency         min         Hz         25           IEC Conventional frequency         max         Hz         400           IEC Conventional free air thermal current Ith         A         115           Rated operational power AC-6b (Ts40°C)         230V         kvar         30           4000         kvar         56         690V         kvar         56           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         50           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         640         500V         A         625           Breaking capacity at voltage         440V         A         640         500V         A         625           Power dissipation per pole (average value)         mnQ         0.6         690V         A         65           Power dissipation per pole (average value)         min         Nm         5         max         15         <	-	ion			
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         15           IEC Conventional free air thermal current lth         A         115           Rated operational power AC-6b (T≤40°C)         230V         kvar         30           400/V         kvar         56         66           690V         kvar         56         66           690V         kvar         56         66           690V         kvar         56         66           690V         kvar         56         66           90V         kvar         56         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         640         500V         A         625           Breaking capacity at voltage         440V         A         640         500V         A         625           G90V         A         456         7.9         7.9         7.9         7.9					
Rated insulation voltage Ui IEC/EN         V         690           Rated impulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           max         Hz         400         115           EC Conventional free air thermal current lth         A         115           Rated operational power AC-6b (T≤40°C)         230V         kvar         30           400480V         kvar         56         690V         kvar         56           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         8000         Breaking capacity at voltage         440V         A         640           Protection fuse         gG (IEC)         A         825         690V         A         4256           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         min         Nm         4         max         Nm         5         min         Ibin         0.89         max         100         1.				Nr.	3
Rated impulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           max         HZ         400           IEC Conventional free air thermal current lth         A         115           Rated operational power AC-6b (T≤40°C)         230V         kvar         30           400V         kvar         50         440480V         kvar         56           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         640         690V         kvar         56           Protection fuse         gG (IEC)         A         125         440480V         A         640           Breaking capacity (RMS value)         A         640         500V         A         656           Breaking capacity at voltage         440V         A         640         500V         A         656           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         min         Nm         5         min           Tightening torque for coil terminal         min         Nm         5.69         11           Max number		ge Ui IEC/EN			
Operational frequency         min         Hz         25           max         Hz         400           IEC Conventional free air thermal current lth         A         115           Rated operational power AC-6b (T540°C)         230V         kvar         30           4400         kvar         50         440480V         kvar         56           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         690V         kvar         65           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         640         640           Protection fuse         gG (IEC)         A         125         440V         A         640           Breaking capacity (RMS value)         A         800         690V         A         645           Breaking capacity at voltage         440V         A         640         500V         A         65           Power dissipation per pole (average value)         mmΩ         0.6         Power dissipation per pole (average value)         min         Nm         4           Tightening torque for coil terminal         min         Nm         4         max         Nm         5         min         15         36         15         15				kV	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	· · · · · · · · · · · · · · · · · · ·	· · ·			
max         Hz         400           IEC Conventional free air thermal current lth         A         115           Rated operational power AC-6b (T540°C)         230V         kvar         30           440480V         kvar         56         690V         kvar         56           690V         kvar         56         690V         kvar         56           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         125           Making capacity (RMS value)         A         800         800           Breaking capacity at voltage         440V         A         640           Source approximate and the second			min	Hz	25
IEC Conventional free air thermal current Ith         A         115           Rated operational power AC-6b (T≤40°C)         230V         kvar         30           400V         kvar         50         400V         kvar         50           440480V         kvar         56         690V         kvar         65           Short-time allowable current for 10s (IEC/EN60947-1)         A         640         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         640         500V         A         640           Breaking capacity at voltage         440V         A         640         500V         A         456           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         Ith         W         7.9         Tightening torque for coil terminals         min         Nm         5         min         1bin         2.95         max         Nm         5         min         1bin         2.95         max         1bin         0.74         Max         Max         1bin         0.74         Max         15         min <td></td> <td></td> <td></td> <td></td> <td></td>					
$\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $	IEC Conventional free	air thermal current Ith			
$\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $					-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			230V	kvar	30
440480V         kvar         56           690V         kvar         65           Short-time allowable current for 10s (IEC/EN60947-1)         A         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         800         Breaking capacity at voltage         440480V         A         640           Breaking capacity at voltage         440.V         A         640         500V         A         656           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Tightening torque for terminals         min         Nm         4         max         Nm         5         min         10in         2.95         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5					
690V         kvar         65           Short-time allowable current for 10s (IEC/EN60947-1)         A         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         800         Breaking capacity at voltage         440V         A         640           Breaking capacity at voltage         440V         A         640         500V         A         625           Breaking capacity at voltage         140V         A         640         500V         A         625           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         Ith         W         7.9         Tightening torque for terminals         min         Nm         4           Tightening torque for coil terminal         min         Nm         4         max         Nm         5           Tightening torque for coil terminal         min         Nm         0.8         max         Ibin         0.8           Max number of wires simultaneously connectable         Nr.         2         Conductor section         74           Max number of wires simultaneously connectable         Nr. <td></td> <td></td> <td></td> <td></td> <td></td>					
Short-time allowable current for 10s (IEC/EN60947-1)         A         640           Protection fuse         gG (IEC)         A         125           Making capacity (RMS value)         A         800           Breaking capacity at voltage         440V         A         640           500V         A         625         690V         A         625           Resistance per pole (average value)         mΩ         0.6         0.6           Power dissipation per pole (average value)         Ith         W         7.9           Tightening torque for terminals         min         Nm         4           max         Nm         5         min         1bin         2.95           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1         min         1bin         0.8         max         Nm         1         min         1bin         0.74         Max number of wires simultaneously connectable         Nr.         2         Conductor section         74         Max         Mm         1         min         1.5         max         mm²         1.5         max         min         1.5         max         min         1.5         max         min <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
gG (IEC)         A         125           Making capacity (RMS value)         A         800           Breaking capacity at voltage         440V         A         640           500V         A         625         690V         A         456           Resistance per pole (average value)         mΩ         0.6         Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         Ith         W         7.9         Tightening torque for terminals         min         Nm         4           Tightening torque for coil terminal         min         Nm         2.95         max         Ibin         3.69           Tightening torque for coil terminal         min         Nm         0.8         max         Nm         1           Max number of wires simultaneously connectable         Nr.         2         Conductor section         2         Conductor section           AVWG/Kcmil         min         min         mm²         1.5         max         mm²         35           Flexible c/w lug conductor section         min         mm²         1.5         max         mm²         35	Short-time allowable of	current for 10s (IEC/EN60947-1)			
Making capacity (RMS value)       A       800         Breaking capacity at voltage       440V       A       640         Breaking capacity at voltage       690V       A       625         Besistance per pole (average value)       mΩ       0.6         Power dissipation per pole (average value)       m1       W       7.9         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       Ibin       2.95         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         Konductor section       Max       Max       2       Conductor section       min       mm²       1.5         Flexible w/o lug conductor section       min       min       mm²       1.5       max       min       max       1.5					
Making capacity (RMS value)       A       800         Breaking capacity at voltage       440V       A       640         Breaking capacity at voltage       690V       A       625         Besistance per pole (average value)       mΩ       0.6         Power dissipation per pole (average value)       m1       W       7.9         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       Ibin       2.95         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         Konductor section       Max       Max       2       Conductor section       min       mm²       1.5         Flexible w/o lug conductor section       min       min       mm²       1.5       max       min       max       1.5			gG (IEC)	А	125
Breaking capacity at voltage         440V         A         640           500V         A         625           690V         A         456           Resistance per pole (average value)           Power dissipation per pole (average value)         mΩ         0.6           Power dissipation per pole (average value)         Ith         W         7.9           Tightening torque for terminals         min         Nm         4           max         Nm         5         min           Ibin         2.95         max         1bin         2.95           Tightening torque for 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         35         5	Making capacity (RMS	Svalue)			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 1 7	Ũ	440V	А	640
Resistance per pole (average value)       mΩ       0.6         Power dissipation per pole (average value)       Ith       W       7.9         Tightening torque for terminals       min       Nm       4         max       Nm       5       min       Ibin       2.95         max       Ibin       3.69       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       0.74         Max number of wires simultaneously connectable       Nr.       2       Conductor section         AWG/Kcmil       max       2       2       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5       35			500V	Α	625
Power dissipation per pole (average value)          Ith       W       7.9         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       1bin       0.8         max       Ibin       0.74       0.74       0.74         Max number of wires simultaneously connectable       Nr.       2       0.74         Conductor section       Max       2       0.74         AWG/Kcmil       max       2       0.74         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5       0.5         Flexible c/w lug conductor section       min       mm²       1.5			690V	Α	456
Power dissipation per pole (average value)          Ith       W       7.9         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       1bin       0.8         max       Ibin       0.74       0.74       0.74         Max number of wires simultaneously connectable       Nr.       2       0.74         Conductor section       Max       2       0.74         AWG/Kcmil       max       2       0.74         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5       0.5         Flexible c/w lug conductor section       min       mm²       1.5	Resistance per pole (average value)			mΩ	0.6
Ith       W       7.9         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       10         Max number of wires simultaneously connectable       Nr.       2       2         Conductor section       MWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       35       35					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Ith	W	7.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Tightening torque for	erminals			
minIbin2.95 maxTightening torque for coil terminalminNm0.8 maxminNm1 min1 minMax number of wires simultaneously connectableNr.2Conductor sectionNr.2AWG/Kcmilmax2Flexible w/o lug conductor sectionminmm²flexible c/w lug conductor sectionminmm²			min	Nm	4
max       Ibin       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       Nr.       2         AWG/Kcmil       max       2         Flexible w/o lug conductor section       min       mm²       1.5         max       mm²       3.5         Flexible c/w lug conductor section       min       mm²       3.5			max	Nm	
Tightening torque for coil terminal       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       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section			min	Ibin	2.95
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         max       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section			max	Ibin	3.69
max       Nm       1         min       lbin       0.8         max       lbin       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       The max       35	Tightening torque for	coil terminal			
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       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section	-		min	Nm	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       min       mm²       1.5         max       mm²       35         Flexible c/w lug conductor section       Flexible c/w lug conductor section			max	Nm	1
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       min       mm²       35         Flexible c/w lug conductor section       The section       The section			min	Ibin	0.8
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			max	Ibin	0.74
AWG/Kcmil max 2 Flexible w/o lug conductor section $ \begin{array}{c c} min & mm^2 & 1.5 \\ max & mm^2 & 35 \\ \end{array} $ Flexible c/w lug conductor section	Max number of wires	simultaneously connectable		Nr.	2
max     2       Flexible w/o lug conductor section     min     mm²     1.5       max     mm²     35   Flexible c/w lug conductor section	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



CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT,

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INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 50KVAR, COIL 24VAC 60HZ mm2 25

	max	mm²	35
Power terminal protection 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		- <b>,</b>	
Performance level B10d according to EN/ISO 13489-1			
<b>3 1 1 1 1 1 1 1 1 1 1</b>	rated load	cycles	400000
	mechanical load	cycles	15000000
EMC compatibility		-,0.00	yes
AC coil operating			,
Rated AC voltage at 60Hz		V	24
AC operating voltage		v	21
of 60Hz coil powered at 60Hz			
pick-up			
pick-up	min	%Us	80
	max	%Us	110
drop-out	Пах	/000	110
	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	VA	15
Dissipation at holding ≤20°C 50Hz	Tiolaing	W	5
Max cycles frequency		~~~	0
Max of the inequality		cycles/h	3600
Operating times		Cyclc3/II	3000
Average time for Us control			
in AC			
Closing NO			
	min	ms	12
	max	ms	28
Opening NO	IIIdX	1113	20
	min	ms	8
		ms	o 22
in DC	max	1115	<i>LL</i>
Closing NO			
	min	ms	40
	max	ms	85
Opening NO	IIIdX	1113	00
	min	me	20
	min max	ms ms	20 55

BFK8000A02460 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

ENERGY AND AUTOMATION

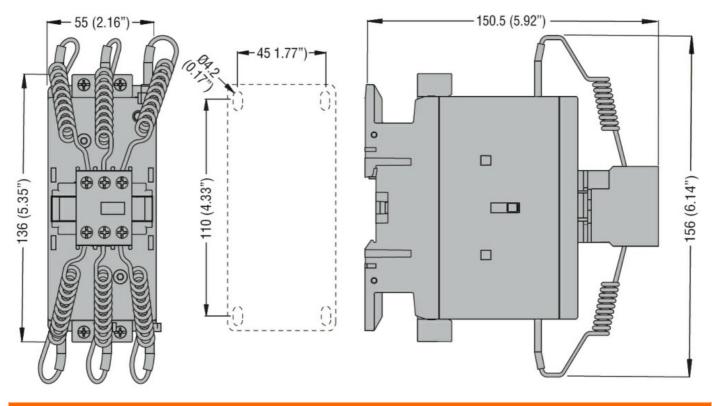
CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 50KVAR, COIL 24VAC 60HZ

BFK8000A02460

## General USE

Dimensions

	Contactor			
		AC current	А	115
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



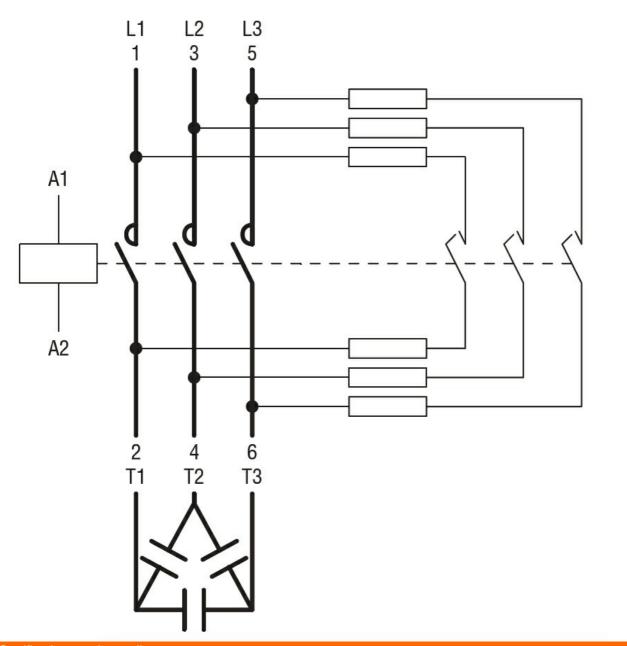
Wiring diagrams

BFK8000A02460



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