





Product designation			
The state of the s			Power contactor
Product type designation			BFK65
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			<del>-</del>
Sporational moduloroy	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	IIIdx	A	100
			100
Rated operational power AC-6b (T≤40°C)	0001/	la sa a	00
	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
3 1 7 3	440V	Α	520
	500V	Α	425
	690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
Towor discipation per pere (average value)	lth	W	8
Tightoning targue for terminals	IUI	V V	0
Tightening torque for terminals		Nina	4
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	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			
, ar on comm	max		2
Flexible w/o lug conductor section	IIIdA		
Flexible w/o lug colludciol section		mm²	1 5
	min	mm²	1.5
En all de la company	max	mm²	35
Flexible c/w lug conductor section	max min	mm²	1.5



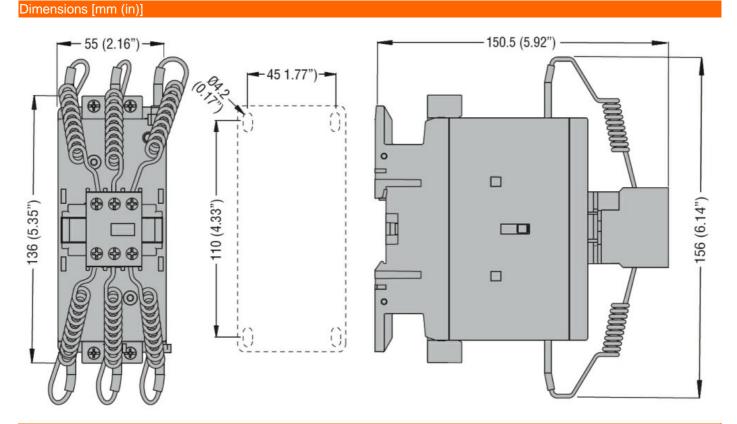


	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
- Maiaht			35mm 1090
Veight Conductor section		g	1090
AWG/kcmil conductor section			
AVVG/REITHI CONDUCTOR SECTION	max		2
Operations	IIIdX		2
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data		Oy 0103	400000
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	400000
	mechanical load	cycles	15000000
EMC compatibility		,	yes
AC coil operating			7
Rated AC voltage at 50/60Hz		V	24
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		0/11	
	min	%Us	85
dana and	max	%Us	110
drop-out		0/116	20
	min	%Us %Us	20 55
AC average coil consumption at 20°C	max	/oUS	JU
of 50/60Hz coil powered at 50Hz			
oi 30/30/12 coii powereu at 30/12	in-rush	VA	210
	holding	VA	15
of 50/60Hz coil powered at 60Hz	noising	***	· •
2. 23. 23. <u>2</u> 33. po. 3. 30. <u>12</u>	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz			
·	in-rush	VA	210
	holding	VA	15
Dissipation at holding ≤20°C 50Hz	<u> </u>	W	5
Max cycles frequency		_	
Mechanical operation		cycles/h	3600
Operating times			
verage time for Us control			

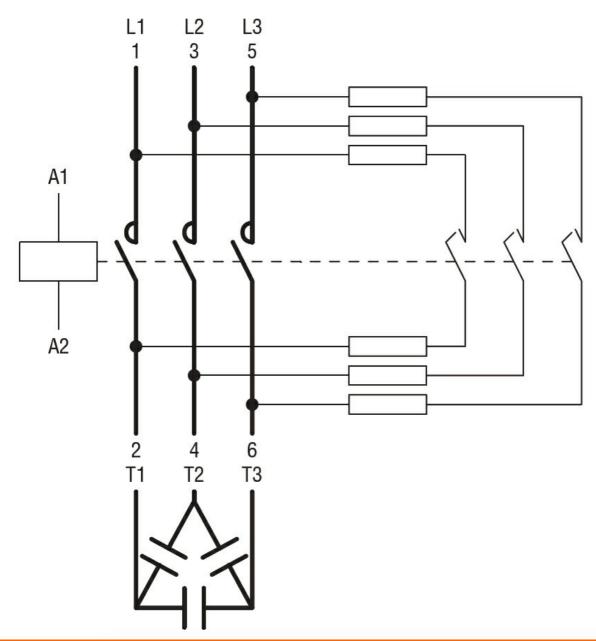
Closing NO



			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					
General USE					
	Contactor				
			AC current	Α	100
Ambient conditions					
Temperature					
	Operating temperature	•			
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection					
	)N				and the second s
Pollution degree	on				3







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

**ETIM 8.0** 







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Product type designation				BFK65
Contact characteristics				
Number of poles			Nr.	3
Rated insulation voltage l	Ji 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		Α	100
Rated operational power	AC-6b (T≤40°C)			
	,	230V	kvar	26
		400V	kvar	45
		440480V	kvar	50
		690V	kvar	56
Short-time allowable curr	ent for 10s (IEC/EN60947-1)		A	640
Protection fuse	011.101.100 (12.0, 2.1, 00.0 11.1)		- , ,	0.10
i iotodioni idoc		gG (IEC)	Α	100
Making capacity (RMS va	luo)	go (illo)	A	650
Breaking capacity (Kivis va	•		^	030
breaking capacity at voita	ige .	440\/	۸	E20
		440V	A	520
		500V	A	425
D		690V	A	376
Resistance per pole (ave			mΩ	0.8
Power dissipation per pol	e (average value)			_
		Ith	W	8
Tightening torque for tern	ninals			
		min	Nm	4
		max	Nm	5
		min	lbin	2.95
		max	lbin	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 sim	ultaneously connectable		Nr.	2
Conductor section	•			
	WG/Kcmil			
•	•	max		2
	lexible w/o lug conductor section			•
'	.c	min	mm²	1.5
		max	mm²	35
	lexible c/w lug conductor section	IIIdA	111111	
Г	TONIDIO O/W TUY COTTUUCIOI SECTION	min	mm²	1.5
		111111	111111	1.47





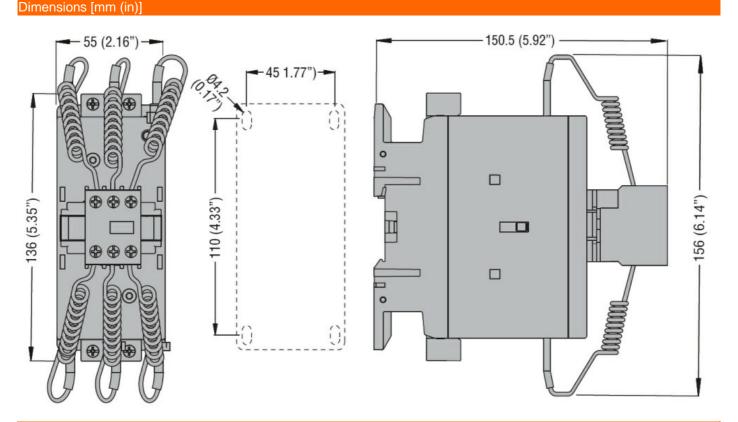
	max	mm²	35
on according to IEC/EN 60529			IP20 front
			Vertical plan
	allowable		±30°
			Screw / DIN rai
			35mm
		g	1090
AWG/kcmil conductor section			
	max		2
			4500000
		_	15000000
		cycles	400000
d according to FN/100 40400 4			
a according to EN/ISO 13489-1			400000
		-	400000
	mechanicai ioad	cycles	15000000
			yes
V001 I-		W	40
/6UHZ		V	48
of 50/001			
ріск-ир	min	0/ L lo	80
			110
drop out	IIIdX	70US	110
urop-out	min	%He	20
			55
of 50/60Hz coil powered at 60Hz	IIIdX	7003	
ριοκ αρ	min	%   s	85
			110
drop-out	max	7000	110
Grop out	min	%Us	20
			55
nption at 20°C			-
•			
,	in-rush	VA	210
	holding	VA	15
of 50/60Hz coil powered at 60Hz			
·	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz	<u> </u>		
•	in-rush	VA	210
	holding	VA	15
20°C 50Hz		W	5
		cycles/h	3600
	AWG/kcmil conductor section  d according to EN/ISO 13489-1  /60Hz  of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz pick-up  drop-out  mption at 20°C of 50/60Hz coil powered at 50Hz  of 50/60Hz coil powered at 60Hz  of 50/60Hz coil powered at 60Hz  of 60Hz coil powered at 60Hz	AWG/kcmil conductor section  max  d according to EN/ISO 13489-1  rated load mechanical load  //60Hz  of 50/60Hz coil powered at 50Hz pick-up  min max  drop-out  min max  of 50/60Hz coil powered at 60Hz pick-up  min max  drop-out  min max  drop-out  min max  drop-out  min min max  drop-out  min	AWG/kcmil conductor section

in AC

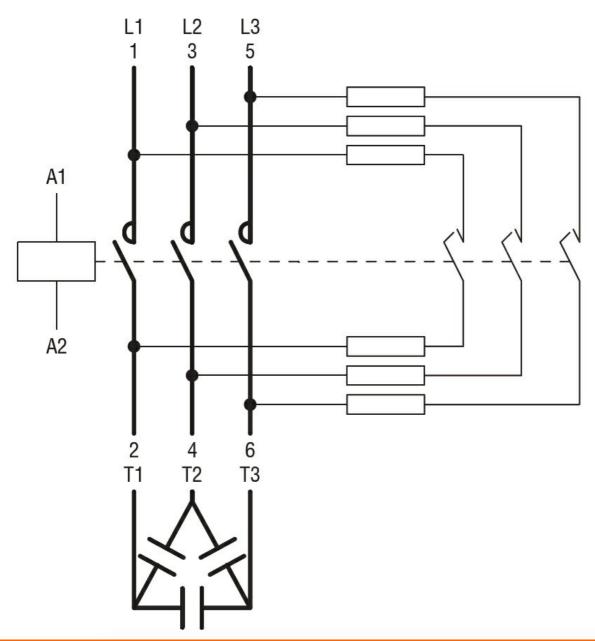
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		-1 - 3 -	min	ms	8
			max	ms	22
	in DC				
		Closing NO			
		3	min	ms	40
			max	ms	85
		Opening NO			
		, 0	min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	100
Ambient conditions					
Temperature					
	Operating temperature	)			
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Max altitude Resistance & Protecti	ion			m	3000
	ion			m	3000







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

**ETIM 8.0** 







Product designation				Power contactor
Product type designation				BFK65
Contact characteristics				
Number of poles			Nr.	3
Rated insulation voltage l	Ji 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		Α	100
Rated operational power	AC-6b (T≤40°C)			
	,	230V	kvar	26
		400V	kvar	45
		440480V	kvar	50
		690V	kvar	56
Short-time allowable curr	ent for 10s (IEC/EN60947-1)		A	640
Protection fuse	011.101.100 (12.0, 2.1, 00.0 11.1)		- , ,	0.10
i iotodioni idoc		gG (IEC)	Α	100
Making capacity (RMS va	luo)	go (illo)	A	650
Breaking capacity (Kivis va	•		^	030
breaking capacity at voita	ige .	440\/	۸	E20
		440V	A	520
		500V	A	425
D		690V	A	376
Resistance per pole (ave			mΩ	0.8
Power dissipation per pol	e (average value)			_
		Ith	W	8
Tightening torque for tern	ninals			
		min	Nm	4
		max	Nm	5
		min	lbin	2.95
		max	lbin	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 sim	ultaneously connectable		Nr.	2
Conductor section	•			
	WG/Kcmil			
•	•	max		2
	lexible w/o lug conductor section			•
'	.c	min	mm²	1.5
		max	mm²	35
	lexible c/w lug conductor section	IIIdA	111111	
Г	TONIDIO O/W TUY COTTUUCIOI SECTION	min	mm²	1.5
		111111	111111	1.47



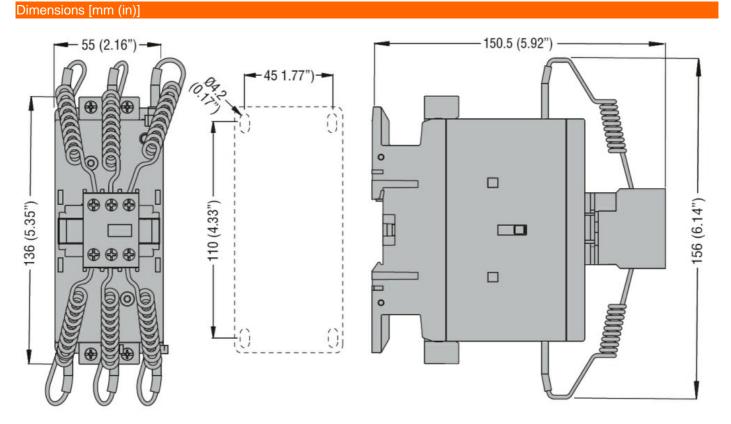


	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
- Maiaht		~	35mm 1090
Veight Conductor section		g	1090
AWG/kcmil conductor section			
AWG/KCITIII COTIQUETOR Section	max		2
Operations	IIIdx		2
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data		Oy 0100	400000
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	400000
	mechanical load	cycles	15000000
EMC compatibility		-,	yes
C coil operating			, and the second second
Rated AC voltage at 50/60Hz		V	110
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		0/11	
	min	%Us	85
dana aut	max	%Us	110
drop-out	i	0/116	20
	min	%Us %Us	20 55
AC average coil consumption at 20°C	max	/ <sub>0</sub> US	JU
of 50/60Hz coil powered at 50Hz			
01 30/00112 6011 powered at 30/12	in-rush	VA	210
	holding	VA	15
of 50/60Hz coil powered at 60Hz	noiding	***	· •
5. 55. 55. <u>5</u> 50. 500 50 50 12	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz			
·	in-rush	VA	210
	holding	VA	15
Dissipation at holding ≤20°C 50Hz	<u> </u>	W	5
Max cycles frequency		_	
Mechanical operation		cycles/h	3600
Operating times			
verage time for Us control			

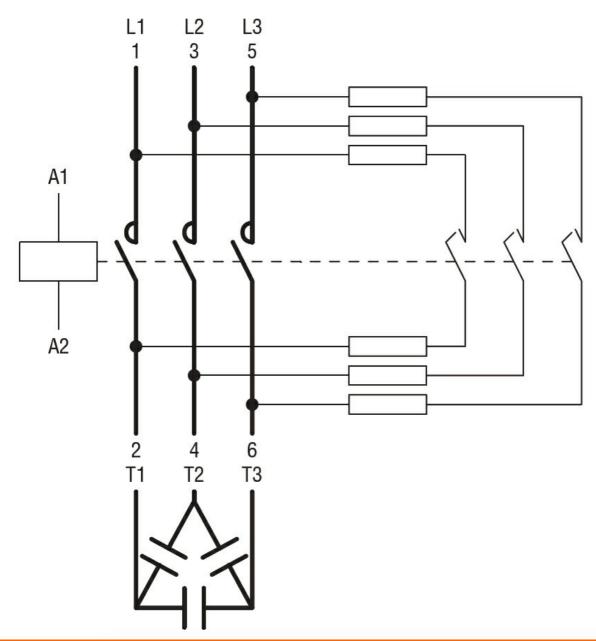
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		- p	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					
General USE	Contactor				
General USE	Contactor		AC current	A	100
General USE  Ambient conditions	Contactor		AC current	Α	100
	Contactor		AC current	Α	100
Ambient conditions	Contactor  Operating temperature	9	AC current	А	100
Ambient conditions		е	AC current	A °C	100 -50
Ambient conditions		е			
Ambient conditions		е	min	°C	-50
Ambient conditions	Operating temperature	е	min	°C	-50
Ambient conditions	Operating temperature	е	min max	°C °C	-50 70
Ambient conditions	Operating temperature	e	min max min	°C °C	-50 70 -60
Ambient conditions Temperature	Operating temperature  Storage temperature	9	min max min	°C °C °C	-50 70 -60 80







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

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ETIM classification

**ETIM 8.0** 





Product designation				Power contactor
Product type designation				BFK65
Contact characteristics				
Number of poles			Nr.	3
Rated insulation voltag			V	690
Rated impulse withstar	nd voltage Uimp		kV	8
Operational frequency				
		min	Hz	25
		max	Hz	400
IEC Conventional free	air thermal current Ith		Α	100
Rated operational pow	rer AC-6b (T≤40°C)			
		230V	kvar	26
		400V	kvar	45
		440480V	kvar	50
		690V	kvar	56
Short-time allowable co	urrent for 10s (IEC/EN60947-1)		Α	640
Protection fuse	,			_
		gG (IEC)	Α	100
Making capacity (RMS	value)	90 (120)	A	650
Breaking capacity at vo	•		- , ,	
Broaking capacity at ve	nago	440V	Α	520
		500V	A	425
		690V	A	376
Resistance per pole (a	verage value)	0001	mΩ	0.8
Power dissipation per				
r ower alcorpation per p	olo (avolago valao)	Ith	W	8
Tightening torque for te	orminale	iui	VV	0
riginterining torque for te	enninais	min	Nm	4
		min		
		max	Nm	5
		min	Ibin	2.95
T'-1 (' ( (	21 (	max	Ibin	3.69
Tightening torque for c	oii terminai			
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.8
		max	Ibin	0.74
	imultaneously 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





		max	mm²	35
	ion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
				35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			•
Omenations		max		2
Operations				4500000
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data	) d according to FN/ICO 40400 4			
Performance level B10	0d according to EN/ISO 13489-1		٠ ا	400000
		rated load	cycles	400000
EMO (1.11)		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating	N/COL I—		\/	000
Rated AC voltage at 50	J/60H2		V	230
AC operating voltage	of 50/0011- and a common day 5011-			
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
			%Us	110
	drop out	max	7005	110
	drop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	παλ	7003	
	pick-up			
	ριοκ αρ	min	%Us	85
		max	%Us	110
	drop-out	тах	7000	110
	Grop out	min	%Us	20
		max	%Us	55
AC average coil consu	mption at 20°C			-
J :::::::	of 50/60Hz coil powered at 50Hz			
	F =	in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
	·	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	<u> </u>		
	·	in-rush	VA	210
		holding	VA	15
Dissipation at holding :	≤20°C 50Hz	<u> </u>	W	5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co	entrol			

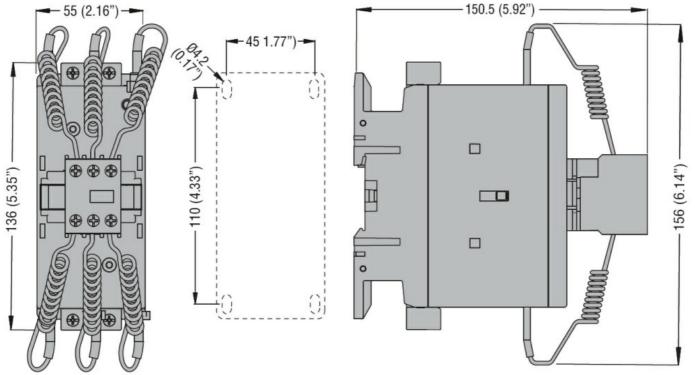
in AC

Closing NO



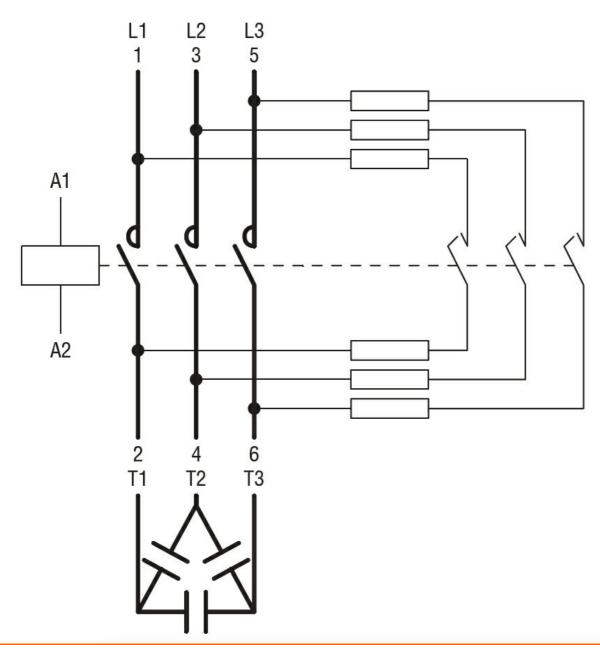
			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	100
Ambient conditions			AC current	Α	100
Ambient conditions Temperature			AC current	A	100
	Operating temperature	<b>;</b>	AC current	A	100
	Operating temperature	<b>;</b>	AC current	A °C	-50
	Operating temperature	÷			
	Operating temperature  Storage temperature	•	min	°C	-50
		<b>;</b>	min	°C	-50
Temperature			min max	°C °C	-50 70
		3	min max min	°C °C	-50 70 -60
Temperature	Storage temperature	•	min max min	°C °C °C	-50 70 -60 80

# Dimensions [mm (in)]



**ENERGY AND AUTOMATION** 

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 45KVAR, COIL 230VAC 50/60HZ



# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

**ETIM 8.0** 







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Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	100
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	Α	520
	500V	Α	425
	690V	Α	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal	-		
2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable	Пах	Nr.	2
Conductor section			<del>-</del>
AWG/Kcmil			
, o,	max		2
Flexible w/o lug conductor section	max		<del>-</del>
1 Ionibio W/o lag dolladotor doction	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section	παλ	111111	
i ionibio o/w lag corradotor section	min	mm²	1.5
	111111	111111	1.0





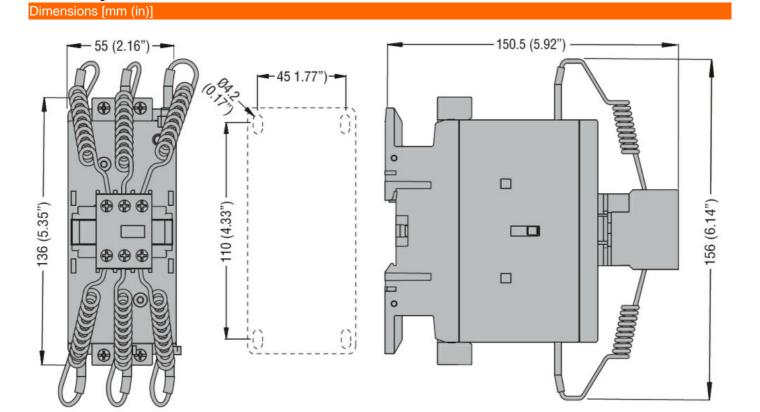
		max	mm²	35
	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
ixing				Screw / DIN rai
				35mm
Veight			g	1090
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
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
MC compatibility				yes
C coil operating				
Rated AC voltage at 50	0/60Hz		V	400
C 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	mption at 20°C			
J	of 50/60Hz coil powered at 50Hz			
	·	in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
	,	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
	, , , , , , , , , , , , , , , , , , ,	in-rush	VA	210
		holding	VA	15
Dissipation at holding :	≤20°C 50Hz	110.01119	W	5
Max cycles frequency			* V	
Mechanical operation			cycles/h	3600
perating times			Jy 0103/11	3000
verage time for Us co				

in AC

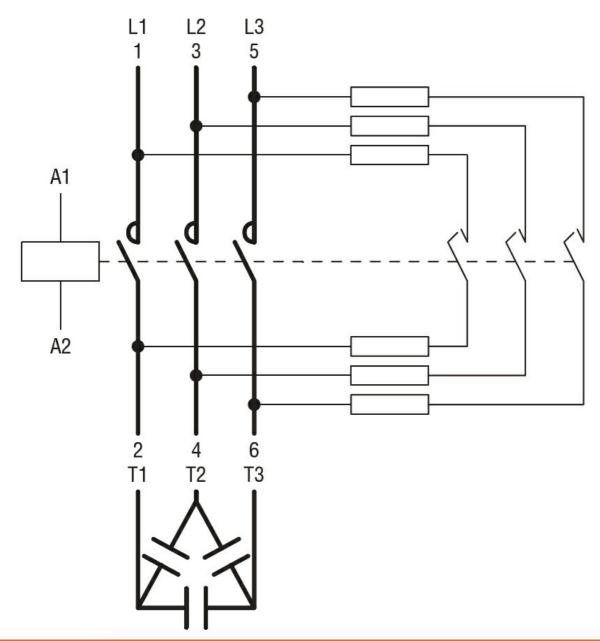
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		. 0	min	ms	8
			max	ms	22
	in DC				
		Closing NO			
		Ü	min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	100
Ambient conditions					
Temperature					
·	Operating temperature				
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
-					
Max altitude				m	3000
Max altitude  Resistance & Protection	n _			m	3000
Max altitude Resistance & Protection Pollution degree	on			m	3000







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

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ETIM classification

**ETIM 8.0** 





Product designation			Power contactor
Product type designation			BFK65
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		Α	100
Rated operational power AC-6b (T≤40°C)			
Taloa oporalional power 710 os (1=10 o)	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short time allowable current for 10e (IEC/EN60047.1)	090 V	A	640
Short-time allowable current for 10s (IEC/EN60947-1)		A	040
Protection fuse	.0 (150)		400
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	Α	520
	500V	Α	425
	690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	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	max		_
1 loxible W/o lag colladetel section	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section	IIIdX	111111	33
Flexible GW lug colludctor Section	min	mm²	1 5
	min	mm²	1.5



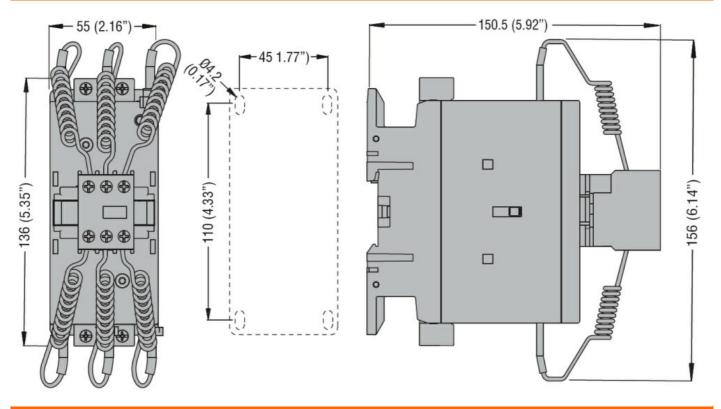
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan ±30°
	allowable		Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	ا - اا- منصب	ovele -	400000
	rated load mechanical load	cycles	400000 15000000
EMC compatibility	medianida idad	cycles	yes
AC coil operating			y 0.3
Rated AC voltage at 60Hz		V	24
AC operating voltage		<u> </u>	
of 60Hz coil powered at 60Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out	_		
	min	%Us	20
AC average coil consumption at 20°C	max	%Us	55
of 60Hz coil powered at 60Hz			
of our 12 con powered at our 12	in-rush	VA	210
	holding	VA	15
Dissipation at holding ≤20°C 50Hz	9	W	5
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control			
in AC			
Closing NO	-		4.0
	min	ms	12
Opening NO	max	ms	28
Opening NO	min	ms	8
	max	ms	22
in DC	Пах	1110	
Closing NO			
•	min	ms	40
	max	ms	85
Opening NO			
	min	ms	20
	max	ms	55
UL technical data			



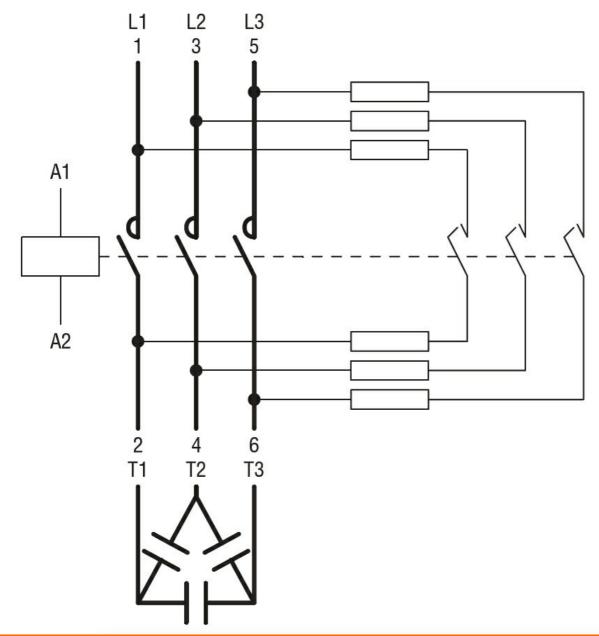
### General USE

Contactor

		AC current	Α	100
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)]				







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

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ETIM classification

**ETIM 8.0** 





Product designation			
The state of the s			Power contactor
Product type designation			BFK65
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			<del>-</del>
Sporational moduloroy	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	IIIdx	A	100
			100
Rated operational power AC-6b (T≤40°C)	0001/	la sa a	00
	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
3 1 7 3	440V	Α	520
	500V	Α	425
	690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
Towor discipation per pere (average value)	lth	W	8
Tightoning targue for terminals	IUI	V V	0
Tightening torque for terminals		Nina	4
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	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			
, ar on comm	max		2
Flexible w/o lug conductor section	IIIdA		
Flexible w/o lug colludciol section		mm²	1 5
	min	mm²	1.5
En all de la company	max	mm²	35
Flexible c/w lug conductor section	max min	mm²	1.5



	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing	diiowabio		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 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	48
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up	•	0/11-	0.0
	min	%Us	80
drop out	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C	max	7003	33
of 60Hz coil powered at 60Hz			
01 001 12 0011 powerod at 001 12	in-rush	VA	210
	holding	VA	15
Dissipation at holding ≤20°C 50Hz	<u></u>	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
in DO	max	ms	22
in DC			
Closing NO	min	ms	40
	max	ms	85
Opening NO	IIIdX	1113	00
Opening NO	min	ms	20
	max	ms	55
			-

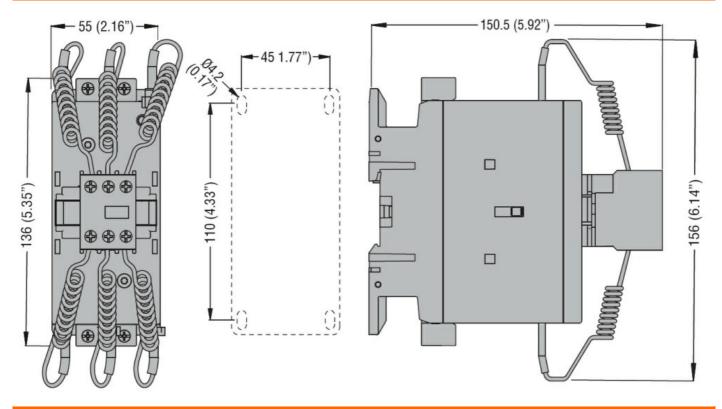




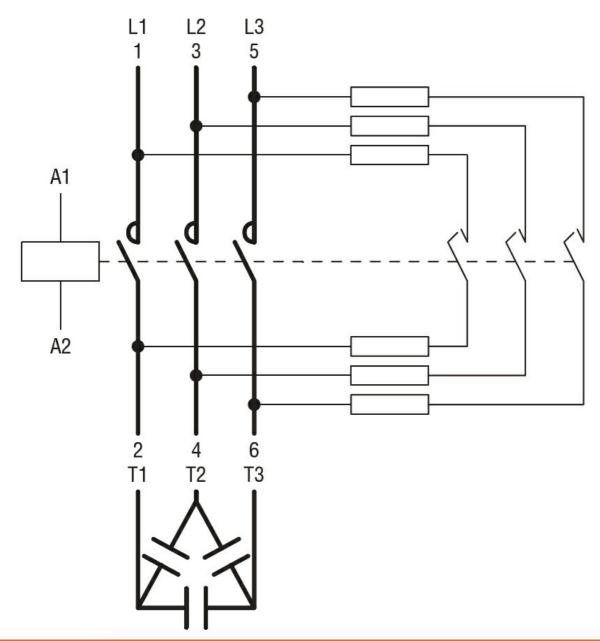
### General USE

Contactor

		AC current	Α	100
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)]				







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

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ETIM classification

**ETIM 8.0** 





Product designation				Power contactor
Product type designat				BFK65
Contact characteristic	S			
Number of poles			Nr.	3
Rated insulation voltage	-		V	690
Rated impulse withsta			kV	8
Operational frequency	/			
		min	Hz	25
		max	Hz	400
	air thermal current Ith		Α	100
Rated operational pov	ver AC-6b (T≤40°C)			
		230V	kvar	26
		400V	kvar	45
		440480V	kvar	50
-		690V	kvar	56
	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
		gG (IEC)	Α	100
Making capacity (RMS	S value)		Α	650
Breaking capacity at v	roltage			
		440V	Α	520
		500V	Α	425
		690V	Α	376
Resistance per pole (a	average value)		mΩ	0.8
Power dissipation per	pole (average value)			
		Ith	W	8
Tightening torque for t	terminals			
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	lbin	3.69
Tightening torque for o	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			
	-	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	-	min	mm²	1.5



	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			
Performance level B10d according to EN/ISO 13489-1	ا د دا اد حاد ا	a a l = =	400000
	rated load	cycles	400000
EMC compatibility	mechanical load	cycles	15000000
EMC compatibility AC coil operating			yes
Rated AC voltage at 60Hz		V	120
AC operating voltage		<u> </u>	120
of 60Hz coil powered at 60Hz			
pick-up			
· ·	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz	1	١./٨	040
	in-rush	VA	210
Dissipation at holding ≤20°C 50Hz	holding	VA W	15 5
Max cycles frequency		VV	3
Mechanical operation		cycles/h	3600
Operating times		<i>ay 610 6/11</i>	
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	me	40
	max	ms ms	85
Opening NO	IIIdX	1113	00
Opening NO	min	ms	20
	max	ms	55
UL technical data			

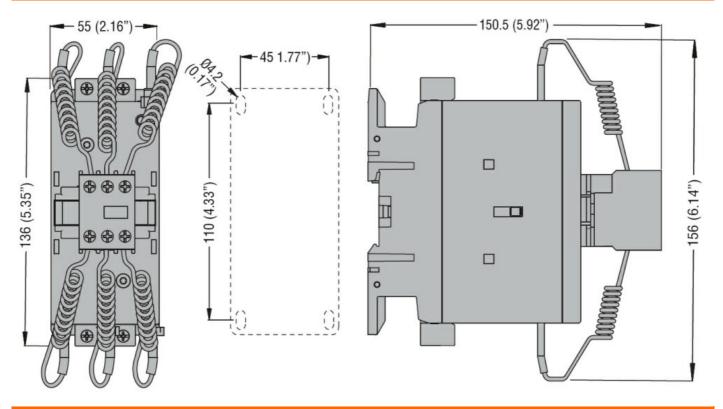




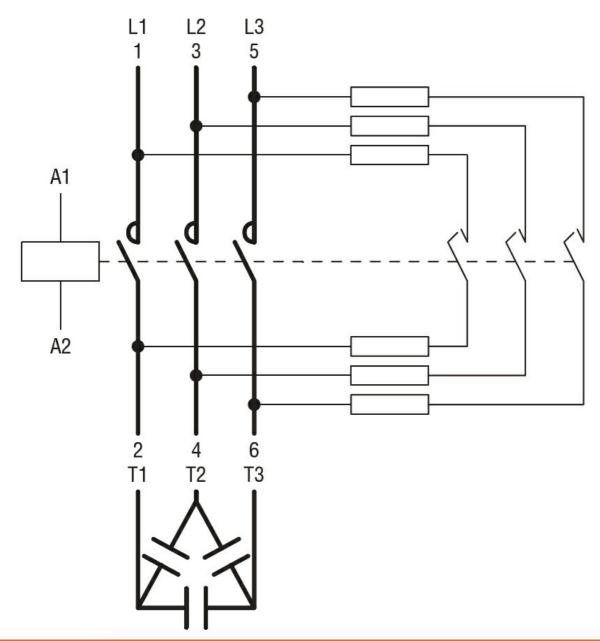
### General USE

Contactor

		AC current	Α	100
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	on			
Pollution degree				3
Dimensions [mm (in)]				







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

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ETIM classification

**ETIM 8.0** 





Product designation			Power contactor
Product type designation			BFK65
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		Α	100
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	Α	520
	500V	Α	425
	690V	Α	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	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	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
El III / I I I I	max	mm²	35
Flexible c/w lug conductor section	min	mm²	1.5



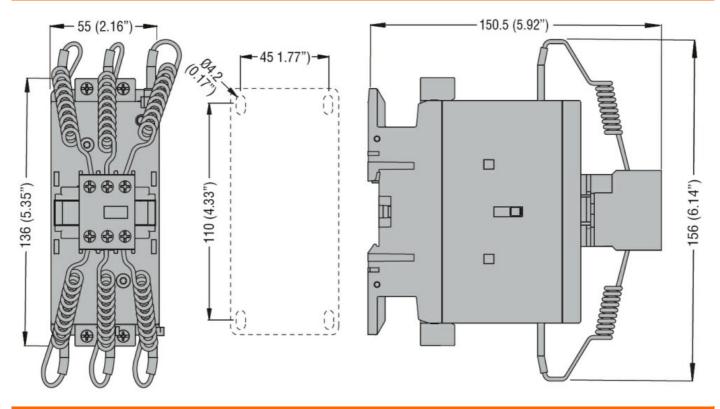
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30° Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1		a.,,,,,,,,,	400000
	rated load	cycles	400000
EMC compatibility	mechanical load	cycles	15000000
AC coil operating			yes
Rated AC voltage at 60Hz		V	220
AC operating voltage		•	
of 60Hz coil powered at 60Hz			
pick-up			
·	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz			040
	in-rush	VA	210
Dissipation at holding ≤20°C 50Hz	holding	VA W	15 5
Max cycles frequency		VV	3
Mechanical operation		cycles/h	3600
Operating times		<i><b>Gy G10 G</b>/11</i>	
Average time for Us control			
in AC			
Closing N	IO		
	min	ms	12
	max	ms	28
Opening			
	min	ms	8
	max	ms	22
in DC	10		
Closing N	iO min	me	40
	max	ms ms	85
Opening		1113	00
Spering	min	ms	20
	max	ms	55
UL technical data			



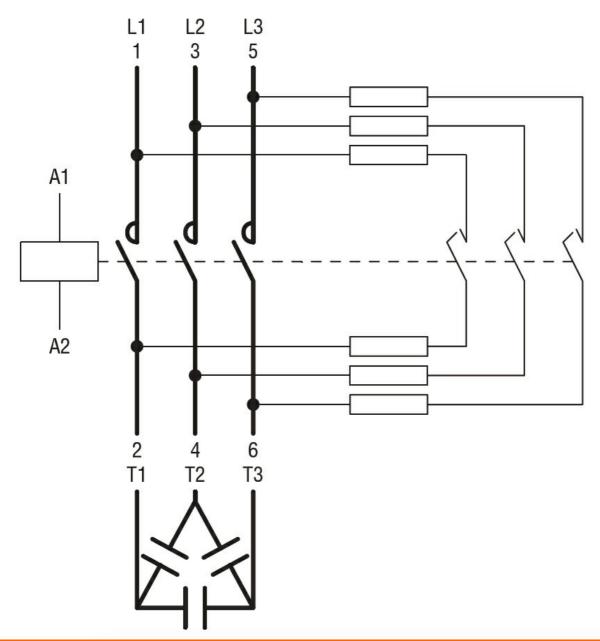
### General USE

Contactor

		AC current	Α	100
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)]				







# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

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ETIM classification

**ETIM 8.0** 





Product designation			Power contactor
Product type designation			BFK65
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
oporational modulotoy	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	IIIax	A	100
			100
Rated operational power AC-6b (T≤40°C)	0001/	la sa a	0.0
	230V	kvar	26
	400V	kvar	45
	440480V	kvar	50
	690V	kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	100
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	Α	520
	500V	Α	425
	690V	A	376
Resistance per pole (average value)	0001	mΩ	0.8
Power dissipation per pole (average value)		22	0.0
Tower dissipation per pole (average value)	lth	W	8
Tightoning targue for terminals	TUI	V V	0
Tightening torque for terminals		Nina	4
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	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			
7.11 <b>5</b> 7.101111	max		2
Flexible w/o lug conductor section	IIIdx		
FIEXIDIE W/O IUQ COHQUCIOI SECIION	m:-	mm²	1 5
J	min	mm²	1.5
v		· 2	25
	max	mm²	35
Flexible c/w lug conductor section		mm²	35 1.5



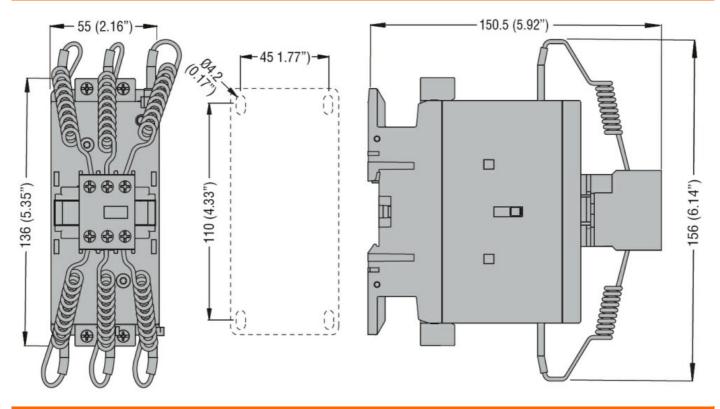
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30° Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load	ovolca	400000
	mechanical load	cycles cycles	1500000
EMC compatibility	medianical load	cycles	yes
AC coil operating			yes
Rated AC voltage at 60Hz		V	230
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out	_		
	min	%Us	20
AC average coil consumption at 20°C	max	%Us	55
of 60Hz coil powered at 60Hz			
or our 12 con powered at our 12	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			
	min	ms	12
Onening NO	max	ms	28
Opening NO	min	me	8
	max	ms ms	22
in DC	IIIdX	1113	
Closing NO			
	min	ms	40
	max	ms	85
Opening NO			
	min	ms	20
	max	ms	55
UL technical data			



### General USE

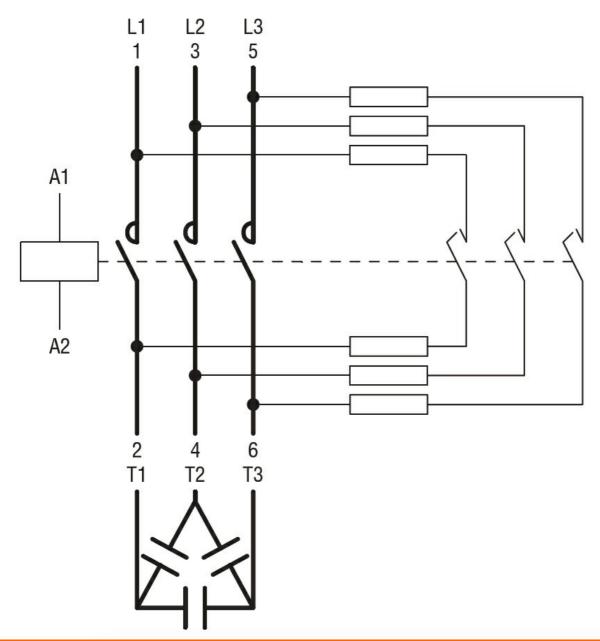
Contactor

		AC current	Α	100
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





# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

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ETIM classification

**ETIM 8.0** 

EC001079 -Capacitor contactor





Product type designation	Product designation				Power contactor
Number of poles					BFK65
Rated insulation voltage Ui IEC/EN   V   690     Rated impulse withstand voltage Uimp   KV   8     Operational frequency   min   Hz   25     max   Hz   400     EC Conventional free air thermal current lth   A   100     Rated operational power AC-6b (T≤40°C)   230V   kvar   26     400V   kvar   45     440480V   kvar   56     690V   A   650     Feaking capacity (RMS value)   A   650     Feaking capacity at voltage   May   May   May   May     Feaking capacity at voltage   May   May   May   May     Feaking capacity at voltage   May   May   May   May     Feaking torque for terminals   May   May   May     Fightening torque for terminals   May   May   May     Fightening torque for coil terminal   May   May   May     Fightening torque for vires simultaneously connectable   May   May   May     Flexible w/o lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w l					
Rated impulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           EC Conventional free air thermal current lth         A         100           Rated operational power AC-6b (T≤40°C)         230V         kvar         26           400 - 400V         kvar         56           400 - 400V         kvar         56           5bort-time allowable current for 10s (IEC/EN60947-1)         A         640           Protection fuse         gG (IEC)         A         100           Making capacity (RMS value)         A         650           Breaking capacity at voltage         440V         A         520           Breaking capacity at voltage         MΩ         425         560           Resistance per pole (average value)         mΩ         0.8         100         10					
Protection of the series o					690
Min	Rated impulse withstar	nd voltage Uimp		kV	8
EC Conventional free air thermal current lth	Operational frequency				
EC Conventional free air thermal current lth Rated operational power AC-6b (T≤40°C)   230V   kvar   26   400V   kvar   45   440480V   kvar   50   690V   kvar   56   56   56   56   56   56   56   5			min	Hz	25
Rated operational power AC-6b (T≤40°C)         230V kvar 45 400V kvar 45 440480V kvar 50 690V kvar 56           Short-time allowable current for 10s (IEC/EN60947-1)         A 640           Protection fuse         gG (IEC)         A 100           Making capacity (RMS value)         A 650           Breaking capacity at voltage         440V A 520 500V A 425 690V A 376           Resistance per pole (average value)         mΩ 0.8           Power dissipation per pole (average value)         lth W 8           Tightening torque for terminals         min Imax Nm 5 min 15 min 2.95 max 15 min 15 min 2.95 max 15 min 15			max	Hz	400
230V   kvar   26   4404 kwor   45   4404 kwor   45   4604 kwor   50   690V   kvar   56   690V	IEC Conventional free	air thermal current Ith		Α	100
A 00V   kvar   45   440480V   kvar   56   690V   A   640   600V	Rated operational pow	ver AC-6b (T≤40°C)			
A40480V   kvar   50   690V   kvar   56   690V		,	230V	kvar	26
A40480V   kvar   50   690V   kvar   56   690V   600			400V	kvar	
Short-time allowable current for 10s (IEC/EN60947-1)				kvar	
Short-time allowable current for 10s (IEC/EN60947-1)					
Protection fuse   gG (IEC)	Short-time allowable c	urrent for 10s (IEC/EN60947-1)			
Making capacity (RMS value)		anone for 100 (120/211000 17 1)			010
Making capacity (RMS value)	1 1010011011 1000		aG (IEC)	٨	100
Breaking capacity at voltage	Making capacity (PMS	valuo)	go (ILO)		
A 440V		•		^	030
Soov   A   425   690V   A   376	breaking capacity at vo	ладе	440)/	٨	F20
Resistance per pole (average value)   mΩ   0.8					
Resistance per pole (average value)   mΩ   0.8					
Power dissipation per pole (average value)	<del></del>		6907		
Tightening torque for terminals				mΩ	0.8
Tightening torque for terminals	Power dissipation per p	pole (average value)			
Min   Nm   4     max   Nm   5     min   Ibin   2.95     max   Ibin   3.69			Ith	W	8
Max   Nm   5   min   Ibin   2.95   max   Ibin   3.69	Tightening torque for to	erminals			
Min   Ibin   2.95   max   Ibin   3.69			min	Nm	4
Tightening torque for coil terminal			max	Nm	5
Tightening torque for coil terminal			min	lbin	2.95
Min   Nm   0.8   max   Nm   1   min   Ibin   0.8   max   Ibin   0.74			max	lbin	3.69
Max number of wires simultaneously connectable   Max number of wires simultaneously connectable   Nr.   2	Tightening torque for c	oil terminal			
min max         lbin lbin lbin lbin lbin lbin lbin lbin			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           Flexible c/w lug conductor section         Textible c/w lug conductor section			max	Nm	1
Max number of wires simultaneously connectable  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	Ibin	0.8
AWG/Kcmil			max	lbin	0.74
AWG/Kcmil	Max number of wires s	imultaneously connectable		Nr.	2
AWG/Kcmil    max   2		•			
max   2		AWG/Kcmil			
Flexible w/o lug conductor section  min mm² 1.5  max mm² 35  Flexible c/w lug conductor section			max		2
min mm² 1.5 max mm² 35  Flexible c/w lug conductor section		Flexible w/o lug conductor section			
			min	mm²	1.5
Flexible c/w lug conductor section					
——————————————————————————————————————		Flexible c/w lug conductor section	max	111111	
C.1 IIIII IIIII		i lexible of wild contactor section	min	mm²	1 5
			111111	111111	1.0



	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing	allowable		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 B10d according to EN/ISO 13489-1		_	
	rated load	cycles	400000
FMO	mechanical load	cycles	15000000
EMC compatibility AC coil operating			yes
Rated AC voltage at 60Hz		V	460
AC operating voltage		v	400
of 60Hz coil powered at 60Hz			
pick-up			
h.ssh	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz			
	in-rush	VA	210
Dissipation at holding ≤20°C 50Hz	holding	VA W	<u>15</u>
Max cycles frequency		VV	3
Mechanical operation		cycles/h	3600
Operating times		0,0100/11	0000
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	me	40
	max	ms ms	85
Opening NO	IIIax	1113	00
Opening NO	min	ms	20
	max	ms	55
UL technical data			

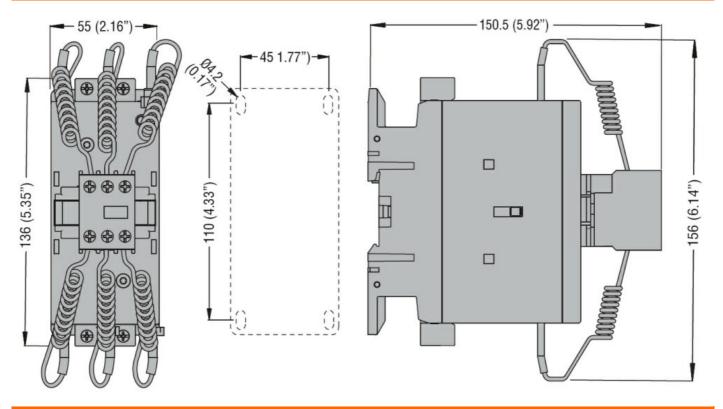




### General USE

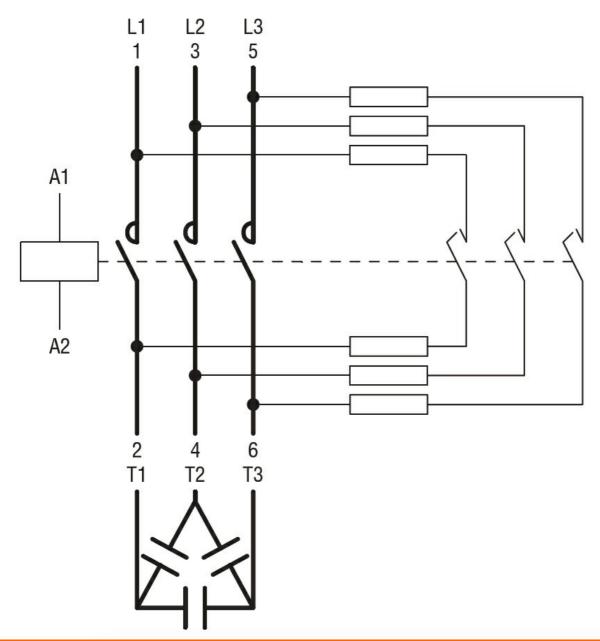
Contactor

		AC current	Α	100
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





# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

**ETIM 8.0** 

EC001079 -Capacitor contactor





Product type designation	Product designation				Power contactor
Number of poles					BFK65
Rated insulation voltage Ui IEC/EN   V   690     Rated impulse withstand voltage Uimp   KV   8     Operational frequency   min   Hz   25     max   Hz   400     EC Conventional free air thermal current lth   A   100     Rated operational power AC-6b (T≤40°C)   230V   kvar   26     400V   kvar   45     440480V   kvar   56     690V   A   650     Feaking capacity (RMS value)   A   650     Feaking capacity at voltage   May   May   May   May     Feaking capacity at voltage   May   May   May   May     Feaking capacity at voltage   May   May   May   May     Feaking torque for terminals   May   May   May     Fightening torque for terminals   May   May   May     Fightening torque for coil terminal   May   May   May     Fightening torque for vires simultaneously connectable   May   May   May     Flexible w/o lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w lug conductor section   May   May     Flexible c/w l					
Rated impulse withstand voltage Uimp         kV         8           Operational frequency         min         Hz         25           EC Conventional free air thermal current lth         A         100           Rated operational power AC-6b (T≤40°C)         230V         kvar         26           400 - 400V         kvar         56           400 - 400V         kvar         56           5bort-time allowable current for 10s (IEC/EN60947-1)         A         640           Protection fuse         gG (IEC)         A         100           Making capacity (RMS value)         A         650           Breaking capacity at voltage         440V         A         520           Breaking capacity at voltage         MΩ         425         560           Resistance per pole (average value)         mΩ         0.8         100         10					
Protection of the series o					690
Min	Rated impulse withstar	nd voltage Uimp		kV	8
EC Conventional free air thermal current lth	Operational frequency				
EC Conventional free air thermal current lth Rated operational power AC-6b (T≤40°C)   230V   kvar   26   400V   kvar   45   440480V   kvar   50   690V   kvar   56   56   56   56   56   56   56   5			min	Hz	25
Rated operational power AC-6b (T≤40°C)         230V kvar 45 400V kvar 45 440480V kvar 50 690V kvar 56           Short-time allowable current for 10s (IEC/EN60947-1)         A 640           Protection fuse         gG (IEC)         A 100           Making capacity (RMS value)         A 650           Breaking capacity at voltage         440V A 520 500V A 425 690V A 376           Resistance per pole (average value)         mΩ 0.8           Power dissipation per pole (average value)         lth W 8           Tightening torque for terminals         min Imax Nm 5 min 15 min 2.95 max 15 min 15 min 2.95 max 15 min 15			max	Hz	400
230V   kvar   26   4404 kwor   45   4404 kwor   45   4604 kwor   50   690V   kvar   56   690V	IEC Conventional free	air thermal current Ith		Α	100
A 00V   kvar   45   440480V   kvar   56   690V   A   640   600V	Rated operational pow	ver AC-6b (T≤40°C)			
A40480V   kvar   50   690V   kvar   56   690V		,	230V	kvar	26
A40480V   kvar   50   690V   kvar   56   690V   600			400V	kvar	
Short-time allowable current for 10s (IEC/EN60947-1)				kvar	
Short-time allowable current for 10s (IEC/EN60947-1)					
Protection fuse   gG (IEC)	Short-time allowable c	urrent for 10s (IEC/EN60947-1)			
Making capacity (RMS value)		anone for 100 (120/211000 17 1)			010
Making capacity (RMS value)	1 1010011011 1000		aG (IEC)	٨	100
Breaking capacity at voltage	Making capacity (PMS	valuo)	go (ILO)		
A 440V		•		^	030
Soov   A   425   690V   A   376	breaking capacity at vo	ладе	440)/	٨	F20
Resistance per pole (average value)   mΩ   0.8					
Resistance per pole (average value)   mΩ   0.8					
Power dissipation per pole (average value)	<del></del>		6907		
Tightening torque for terminals				mΩ	0.8
Tightening torque for terminals	Power dissipation per p	pole (average value)			
Min   Nm   4     max   Nm   5     min   Ibin   2.95     max   Ibin   3.69			Ith	W	8
Max   Nm   5   min   Ibin   2.95   max   Ibin   3.69	Tightening torque for to	erminals			
Min   Ibin   2.95   max   Ibin   3.69			min	Nm	4
Tightening torque for coil terminal			max	Nm	5
Tightening torque for coil terminal			min	lbin	2.95
Min   Nm   0.8   max   Nm   1   min   Ibin   0.8   max   Ibin   0.74			max	lbin	3.69
Max number of wires simultaneously connectable   Max number of wires simultaneously connectable   Nr.   2	Tightening torque for c	oil terminal			
min max         lbin lbin lbin lbin lbin lbin lbin lbin			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           Flexible c/w lug conductor section         Textible c/w lug conductor section			max	Nm	1
Max number of wires simultaneously connectable  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	Ibin	0.8
AWG/Kcmil			max	lbin	0.74
AWG/Kcmil	Max number of wires s	imultaneously connectable		Nr.	2
AWG/Kcmil    max   2		•			
max   2		AWG/Kcmil			
Flexible w/o lug conductor section  min mm² 1.5  max mm² 35  Flexible c/w lug conductor section			max		2
min mm² 1.5 max mm² 35  Flexible c/w lug conductor section		Flexible w/o lug conductor section			
			min	mm²	1.5
Flexible c/w lug conductor section					
——————————————————————————————————————		Flexible c/w lug conductor section	max	111111	
C.1 IIIII IIIII		i lexible of wild contactor section	min	mm²	1 5
			111111	111111	1.0



	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30° Screw / DIN rail
Fixing			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 B10d according to EN/ISO 13489-1			400000
	rated load	cycles	400000
EMC compatibility	mechanical load	cycles	15000000
EMC compatibility AC coil operating			yes
Rated AC voltage at 60Hz		V	575
AC operating voltage		<u>v</u>	0,0
of 60Hz coil powered at 60Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
-	max	%Us	55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz	2 1	١./٨	040
	in-rush	VA	210
Dissipation at holding ≤20°C 50Hz	holding	VA W	<u>15</u>
Max cycles frequency		VV	3
Mechanical operation		cycles/h	3600
Operating times		0,0100/11	
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		ma	40
	min	ms ms	
Opening NO	max	ms	85
Opening NO	min	ms	20
	max	ms	55
UL technical data			

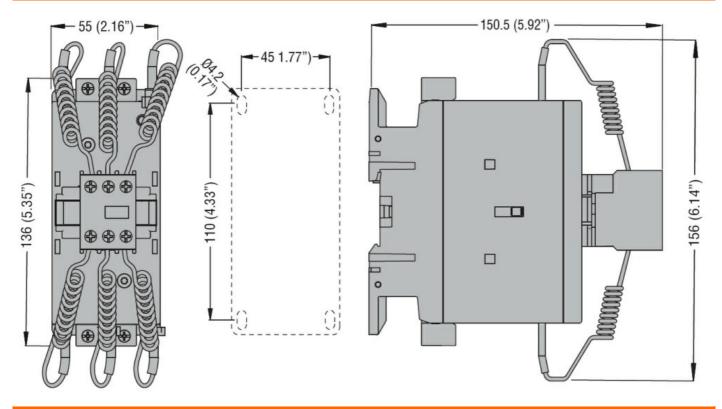




### General USE

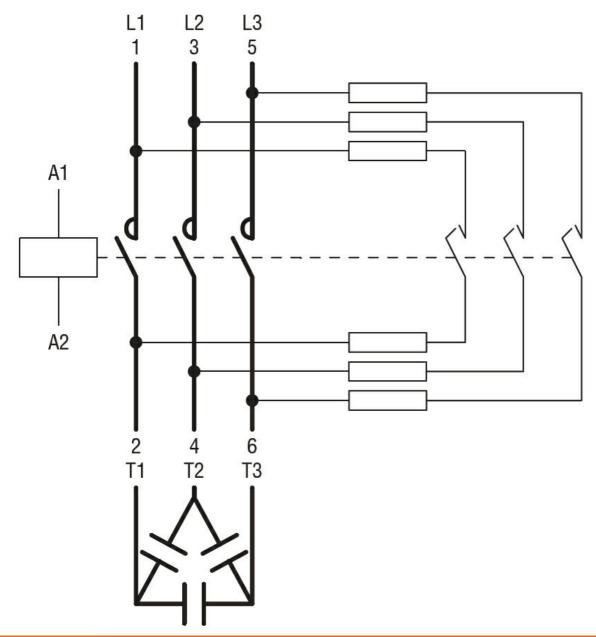
Contactor

		AC current	Α	100
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





# Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

**ETIM 8.0** 

EC001079 -Capacitor contactor