



Product designation				Power contactor
Product type designat				BFK80
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		A	115
Rated operational pov	wer AC-6b (T≤40°C)			
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
-		690V	kvar	65
	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
		gG (IEC)	Α	125
Making capacity (RMS	S value)		Α	800
Breaking capacity at v	roltage			
		440V	Α	640
		500V	Α	625
		690V	Α	456
Resistance per pole (a			mΩ	0.6
Power dissipation per	pole (average value)			
		Ith	W	7.9
Tightening torque for t	terminals			
		min	Nm	4
		max	Nm	5
		min	lbin	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





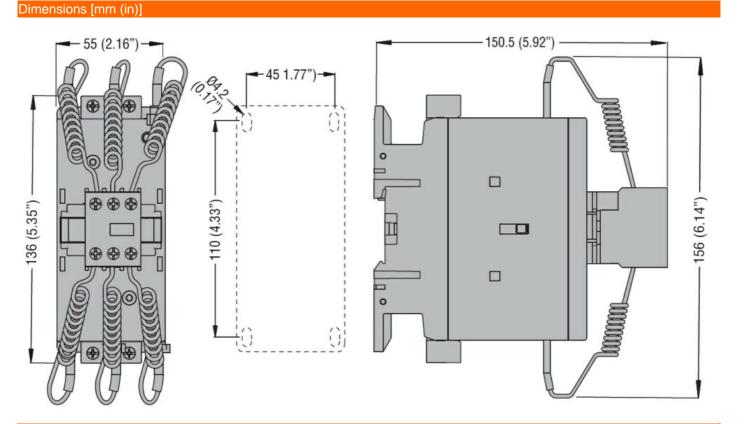
	max	mm²	35
ower terminal protection according to IEC/EN 60529 lechanical features			IP20 front
perating position			
perating position	normal		Vertical plan
	allowable		±30°
			Screw / DIN rail
ixing			35mm
/eight		g	1090
onductor section			
AWG/kcmil conductor section			
	max		2
perations			
lechanical life		cycles	15000000
lectrical life		cycles	400000
afety related data			
erformance level B10d according to EN/ISO 13489-1			
	rated load	cycles	400000
	mechanical load	cycles	15000000
MC compatibility			yes
C coil operating		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0.4
ated AC voltage at 50/60Hz		V	24
C operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	80
		%Us	110
drop-out	max	/005	110
drop-out	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz	тах	7000	
pick-up			
pion up	min	%Us	85
	max	%Us	110
drop-out			
·	min	%Us	20
	max	%Us	55
C 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			
	in-rush	VA	195
	holding	VA	13
of 60Hz coil powered at 60Hz			
	in-rush	VA	210
	holding	VA	15
issipation at holding ≤20°C 50Hz		W	5
lax cycles frequency			
lechanical operation		cycles/h	3600
perating times			

in AC

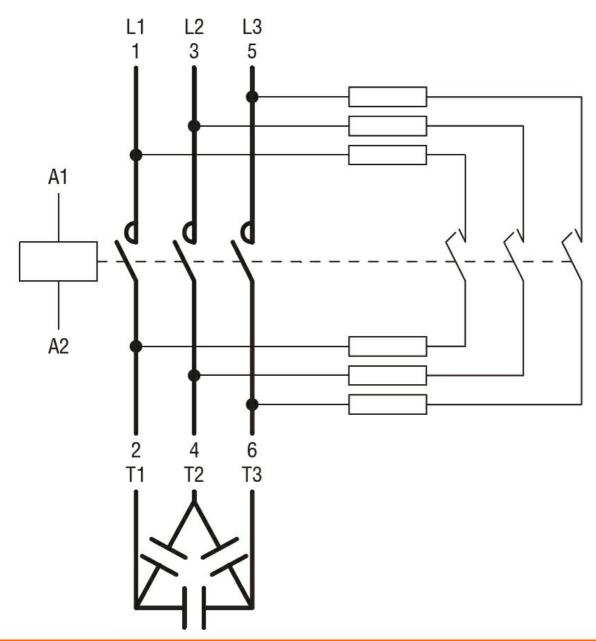
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		1 0	min	ms	8
			max	ms	22
	in DC				
		Closing NO			
		3 -	min	ms	40
			max	ms	85
		Opening NO			
		-	min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	115
Ambient conditions					
Temperature					
	Operating temperature	<u> </u>			
	operating temperature		min	°C	-50
			max	°C	70
	Storage temperature				
	2.0.ago tomporataro		min	°C	-60
			max	°C	80
Max altitude			ТТСХ	m	3000
Resistance & Protection	nn -				
Pollution degree	J11				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





Product designation			Power contactor
Product type designation			BFK80
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	115
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	30
	400V	kvar	50
	440480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			_
	440V	Α	640
	500V	Α	625
	690V	Α	456
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	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			
	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section			
	min	mm²	1.5





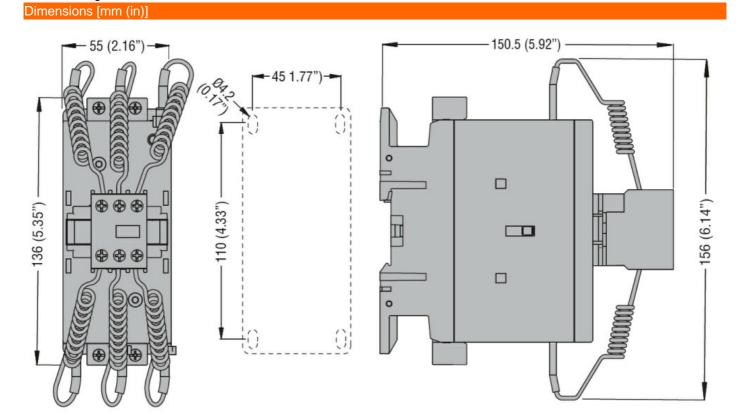
		max	mm²	35
	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
				35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			0
Du anatiana		max		2
Operations				4500000
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data	2 Lancas Para ta FN//00 40400 4			
errormance level B10	0d according to EN/ISO 13489-1	ا بالمانية	_,	400000
		rated load	cycles	400000
TMO CL TEC		mechanical load	cycles	15000000
MC compatibility				yes
C coil operating	0/0011		\ /	4.0
Rated AC voltage at 50	U/6UHZ		V	48
C operating voltage	(50/0011 "			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/116	0.0
		min	%Us	80
	draw aut	max	%Us	110
	drop-out	min	%Us	20
		min	%Us %Us	20 55
	of 50/60Hz coil powered at 60Hz	max	7005	55
	•			
	pick-up	min	%Us	85
		max	%Us	110
	drop-out	IIIdx	/003	110
	drop-out	min	%Us	20
		max	%Us	55
AC average coil consu	umption at 20°C	Παλ	/003	
to average con consu	of 50/60Hz coil powered at 50Hz			
	51 567661 12 6611 powered at 501 12	in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz	Holding	٧, ١	. •
	5. 55/55/12 55/1 porrolled at 60/12	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	noiding	*/ 1	. •
	5. 55. 12 55 portorod at 501 12	in-rush	VA	210
		holding	VA	15
Dissipation at holding :	≤20°C 50Hz	noiding	W	5
Max cycles frequency			v v	
Mechanical operation			cycles/h	3600
Operating times			Jy 5105/11	3000
verage time for Us co				

in AC

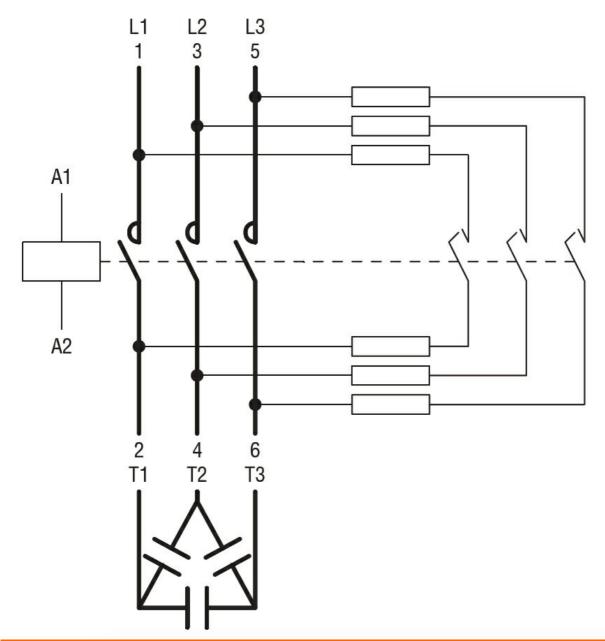
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		, ,	min	ms	8
			max	ms	22
	in DC				
		Closing NO			
		· ·	min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	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 & Protection	on				
Pollution degree					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

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ETIM classification

ETIM 8.0







Product designation				Power contactor
Product type designat				BFK80
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		A	115
Rated operational pov	wer AC-6b (T≤40°C)			
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
-		690V	kvar	65
	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
		gG (IEC)	Α	125
Making capacity (RMS	S value)		Α	800
Breaking capacity at v	roltage			
		440V	Α	640
		500V	Α	625
		690V	Α	456
Resistance per pole (a			mΩ	0.6
Power dissipation per	pole (average value)			
		Ith	W	7.9
Tightening torque for t	terminals			
		min	Nm	4
		max	Nm	5
		min	lbin	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



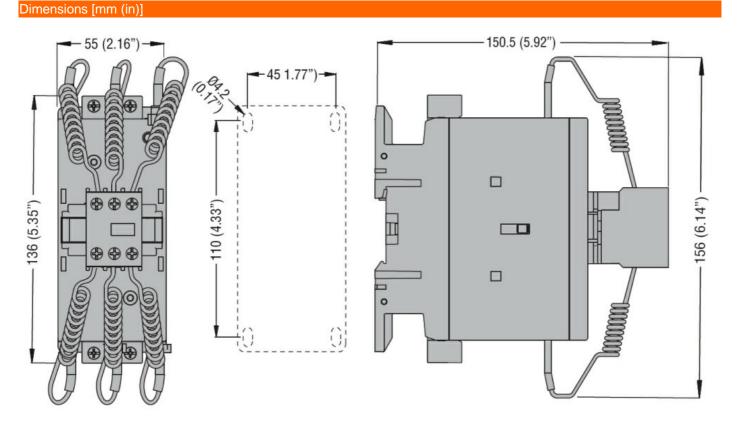


	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
- Maiaht		~	35mm 1090
Veight Conductor section		g	1090
AWG/kcmil conductor section			
AWG/KCITIII COTIQUETOR Section	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	/ ₀ 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

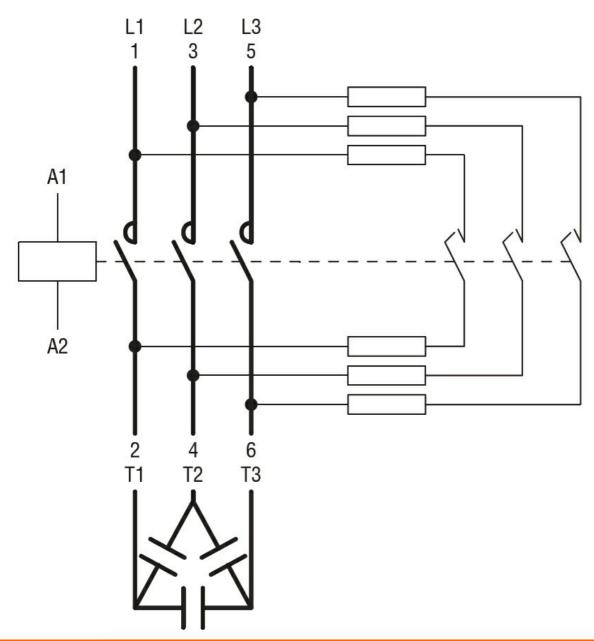


			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
		•	min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	115
Ambient conditions					
Temperature					
	Operating temperature				
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	on				
Pollution degree					3



ENERGY AND AUTOMATION

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





Product designation				Power contactor
Product type designation				BFK80
Contact characteristics				
Number of poles			Nr.	3
Rated insulation voltag	e Ui IEC/EN		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	115
Rated operational pow	rer AC-6b (T≤40°C)			_
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
		690V	kvar	65
Short-time allowable co	urrent for 10s (IEC/EN60947-1)		Α	640
Protection fuse	· · · · · · · · · · · · · · · · · · ·			
		gG (IEC)	Α	125
Making capacity (RMS	value)	• • • • • • • • • • • • • • • • • • • •	Α	800
Breaking capacity at vo	•			_
0 , ,		440V	Α	640
		500V	Α	625
		690V	Α	456
Resistance per pole (a	verage value)		mΩ	0.6
Power dissipation per p				
		Ith	W	7.9
Tightening torque for te	erminals			
		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for co	oil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires s	imultaneously connectable		Nr.	2
Conductor section	aaa.a.a.a.a.a.a.a.a.a.a.a.a.a.			
	AWG/Kcmil			
	, <u>6,</u>	max		2
	Flexible w/o lug conductor section	max		
	. Ionibio Wo lag obliquotol obottoli	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	IIIAX		
	I TONIDIE O/W TUG COTTUNCTOT SECTION	min	mm²	1.5
		111111		





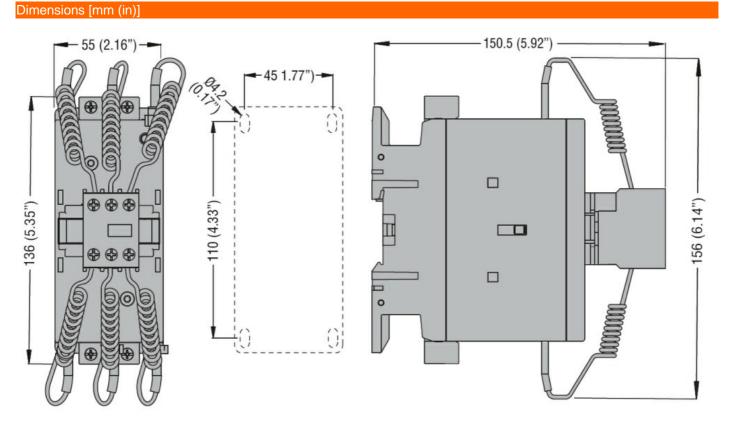
		max	mm²	35
	ion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
				35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			•
Omenations		max		2
Operations				4500000
Mechanical 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

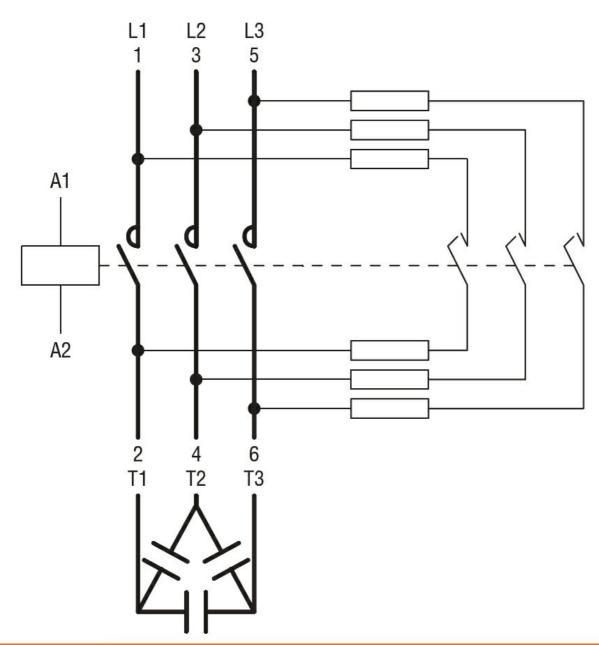
Closing NO



			min	ms	12
			max	ms	28
		Opening NO			
		1 0	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	115
			/ to duriont		
Ambient conditions			710 current		
Ambient conditions Temperature			710 ourrent		
	Operating temperature		710 danent		
	Operating temperature)	min	°C	-50
	Operating temperature	÷			
	Operating temperature Storage temperature)	min	°C	-50
			min	°C	-50
		•	min max	°C °C	-50 70
)	min max min	°C °C	-50 70 -60
Temperature	Storage temperature)	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

cULus

ETIM classification

ETIM 8.0





Product designation				Power contactor
Product type designate				BFK80
Contact characteristic	S Comment of the Comm			
Number of poles			Nr.	3
Rated insulation volta	-		V	690
Rated impulse withsta	and voltage Uimp		kV	8
Operational frequency	y			
		min	Hz	25
		max	Hz	400
IEC Conventional free	e air thermal current Ith		Α	115
Rated operational pov	wer AC-6b (T≤40°C)			
	,	230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
		690V	kvar	65
Short-time allowable	current for 10s (IEC/EN60947-1)		A	640
Protection fuse	04.1011.101.100 (12.6,21.1000 11.1)			
i iotodioni iuse		gG (IEC)	Α	125
Making capacity (RMS	2 valuo)	go (ILO)		800
				000
Breaking capacity at v	voltage	440)/	۸	0.40
		440V	A	640
		500V	A	625
		690V	A	456
Resistance per pole (mΩ	0.6
Power dissipation per	pole (average value)			
		Ith	W	7.9
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	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		
	Toxible W/o lag colladeter 350tion	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	IIIdX	111111	
	LIEVINIE CAM INT COLLUTION 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°
Fixing				Screw / DIN rai
				35mm
Weight			g	1090
Conductor section				
	AWG/kcmil conductor section			0
Omenations		max		2
Operations				4500000
Mechanical life			cycles	15000000
Electrical life			cycles	400000
Safety related data	2d according to FN//20 40400 4			
Performance level B10	od according to EN/ISO 13489-1		_,	400000
		rated load	cycles	400000
EMO (9. 99)		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating	0/0011=		V	400
Rated AC voltage at 50	J/6UHZ		V	400
AC operating voltage	-t 50/001			
	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	IIIdx	7003	
	pick-up			
	ρίοι αρ	min	%Us	85
		max	%Us	110
	drop-out	max	7000	110
	arop out	min	%Us	20
		max	%Us	55
AC average coil consu	Imption 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		W	5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co	ontrol			

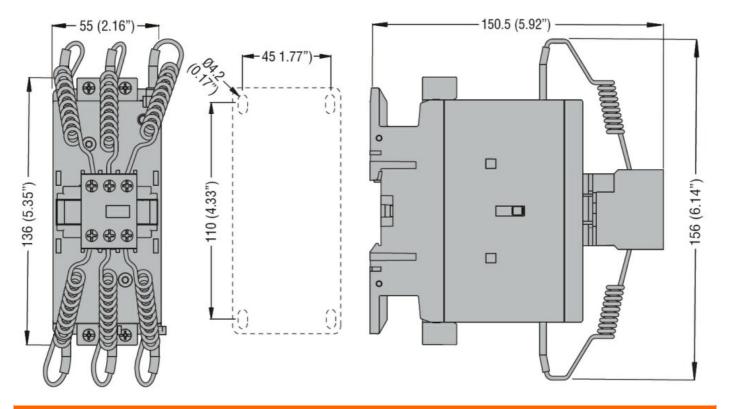
in AC

Closing NO

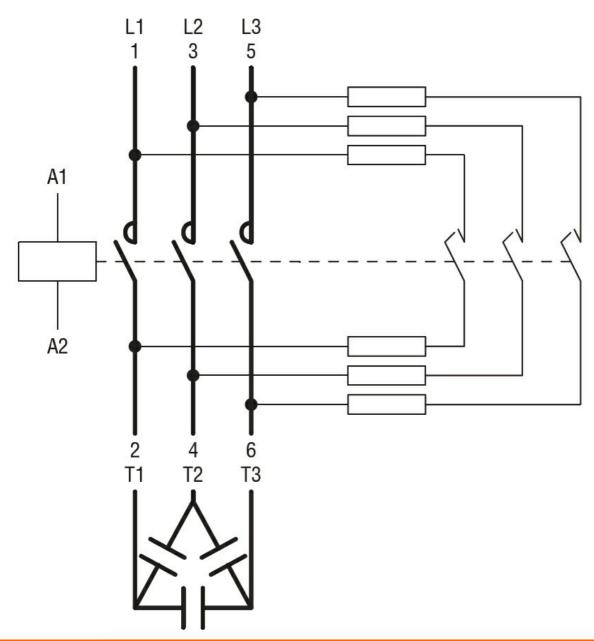


			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
General USE					
	Contactor				
			AC current	Α	115
Ambient conditions					
Temperature					
	Operating temperature				
			min	°C	-50
			max	°C	70
	Storage temperature				
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	on .				

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 designation			BFK80
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	115
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	30
	400V	kvar	50
	440480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			_
	440V	Α	640
	500V	Α	625
	690V	Α	456
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	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			
	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section			
	min	mm²	1.5



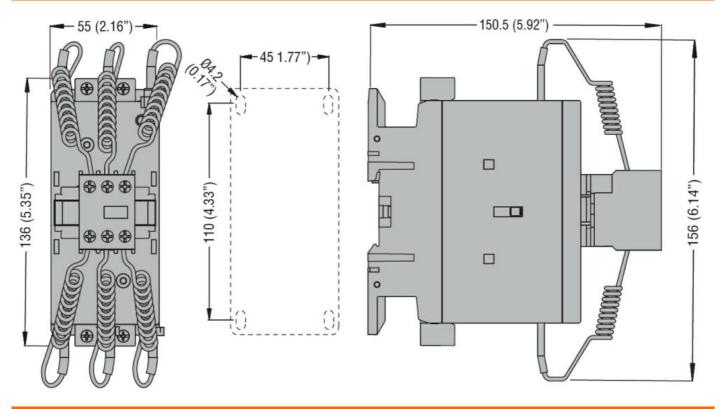
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan ±30°
	allowable		Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	ا حالت 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			



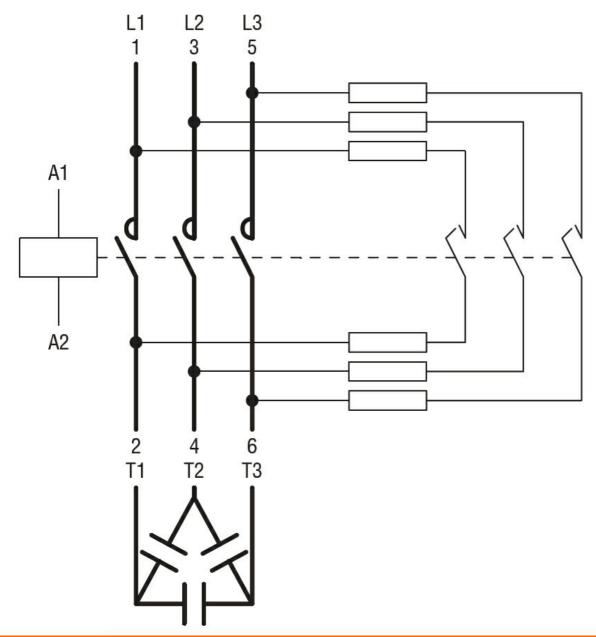
General USE

Contactor

		AC current	Α	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
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

cULus

ETIM classification

ETIM 8.0





Product designation			Power contactor
Product type designation			BFK80
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	115
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	30
	400V	kvar	50
	440480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	Α	456
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	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			
	max		2
Flexible w/o lug conductor section		•	4.5
	min	mm²	1.5
FI 11 / 1 2 2	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 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
			-

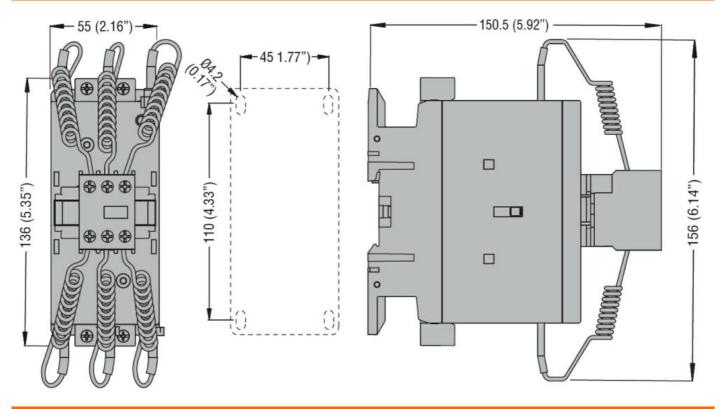




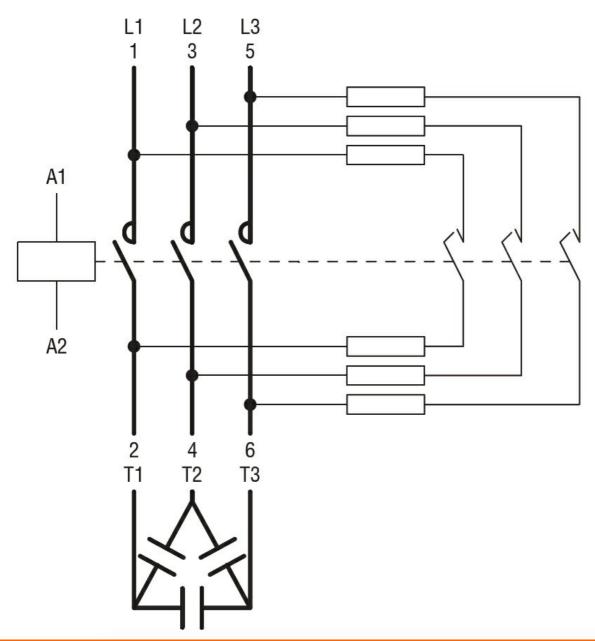
General USE

Contactor

		AC current	Α	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
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

cULus

ETIM classification

ETIM 8.0





Product designation				Power contactor
Product type designat				BFK80
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	115
Rated operational pov	ver AC-6b (T≤40°C)			
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
		690V	kvar	65
	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
_		gG (IEC)	A	125
Making capacity (RMS			Α	800
Breaking capacity at v	roltage			
		440V	Α	640
		500V	Α	625
		690V	A	456
Resistance per pole (a			mΩ	0.6
Power dissipation per	pole (average value)			
_		Ith	W	7.9
Tightening torque for t	terminals			
		min	Nm	4
		max	Nm	5
		min	lbin	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
	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	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			

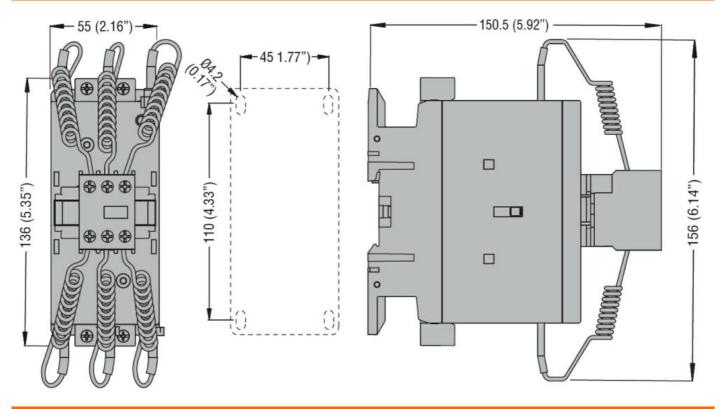




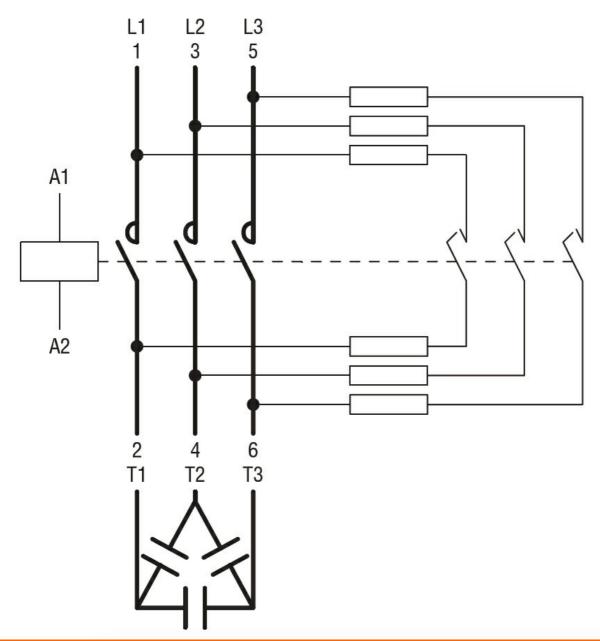
General USE

Contactor

		AC current	Α	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
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

cULus

ETIM classification

ETIM 8.0





Product designation			Power contactor
Product type designation			BFK80
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	115
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	30
	400V	kvar	50
	440480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	A	456
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	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
Management of colors almost to a constant	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			0
Elevible w/e lue conductor costica	max		2
Flexible w/o lug conductor section	mai-a	mm²	1 E
	min	mm²	1.5
Elevible of white conductor costion	max	mm²	35
Flexible c/w lug conductor section	min	mm²	1.5



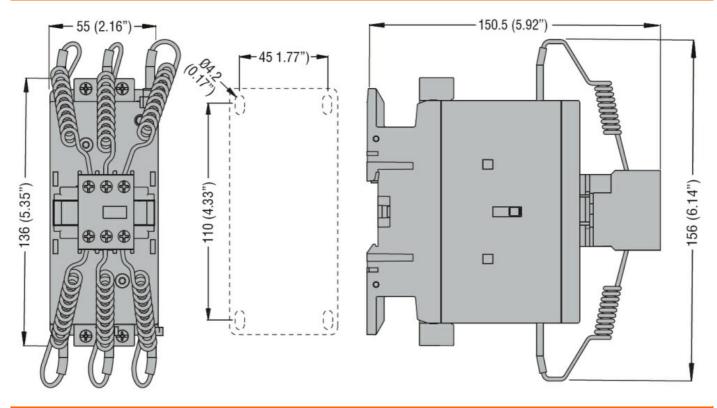
·			max	mm²	35
Power terminal protect	ion according to IEC/E	N 60529			IP20 front
Mechanical features					
Operating position			normal allowable		Vertical plan ±30°
Fixing			dilowdole		Screw / DIN rail 35mm
Weight				g	1090
Conductor section					
	AWG/kcmil conducto	or section	max		2
Operations					
Mechanical life				cycles	15000000
Electrical life				cycles	400000
Safety related data					
Performance level B10	d according to EN/ISO	O 13489-1			
			rated load	cycles	400000
=110			mechanical load	cycles	15000000
EMC compatibility					yes
AC coil operating	N. I.—			\ /	000
Rated AC voltage at 60 AC operating voltage	JHZ			V	220
AC operating voltage	of 60Hz coil noworos	Lat 60Uz			
	of 60Hz coil powered	pick-up			
		ρισκ-αρ	min	%Us	80
			max	%Us	110
		drop-out		,,,,,	
		•	min	%Us	20
			max	%Us	55
AC average coil consu	mption at 20°C				
	of 60Hz coil powered	l at 60Hz			
			in-rush	VA	210
			holding	VA	15
Dissipation at holding ≤	≦20°C 50Hz			W	5
Max cycles frequency				1 //	0000
Mechanical operation				cycles/h	3600
Operating times Average time for Us co	entrol				
Average time for US Co	in AC				
	III AO	Closing NO			
		0.00.119 140	min	ms	12
			max	ms	28
		Opening NO		_	
		. •	min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
		0 1 1/2	max	ms	85
		Opening NO			0.0
			min	ms	20
UL technical data			max	ms	55
OL technicardata					



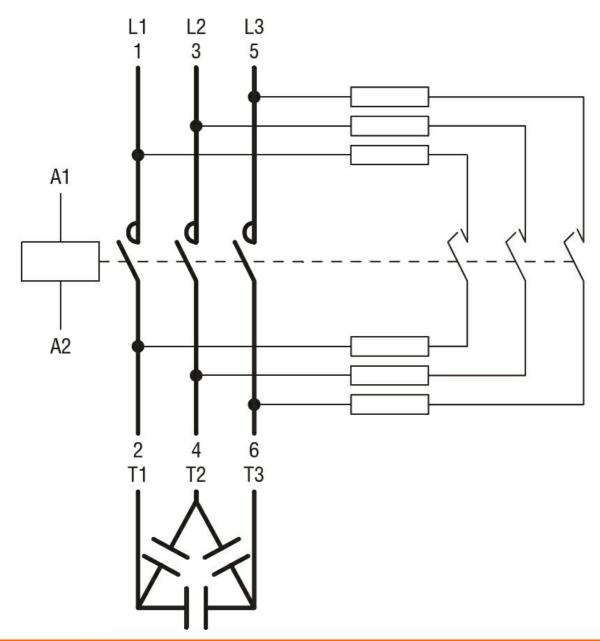
General USE

Contactor

		AC current	Α	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	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

cULus

ETIM classification

ETIM 8.0





Product designation				Power contactor
Product type designat				BFK80
Contact characteristics	S			-
Number of poles			Nr.	3
Rated insulation voltage			V	690
Rated impulse withsta	•		kV	8
Operational frequency	1			
		min	Hz	25
		max	Hz	400
IEC Conventional free			Α	115
Rated operational pov	ver AC-6b (T≤40°C)			
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
		690V	kvar	65
Short-time allowable of	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
		gG (IEC)	Α	125
Making capacity (RMS	s value)		Α	800
Breaking capacity at v	oltage			
		440V	Α	640
		500V	Α	625
		690V	Α	456
Resistance per pole (a	average value)		mΩ	0.6
Power dissipation per	pole (average value)			
		Ith	W	7.9
Tightening torque for t	erminals			
		min	Nm	4
		max	Nm	5
		min	lbin	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



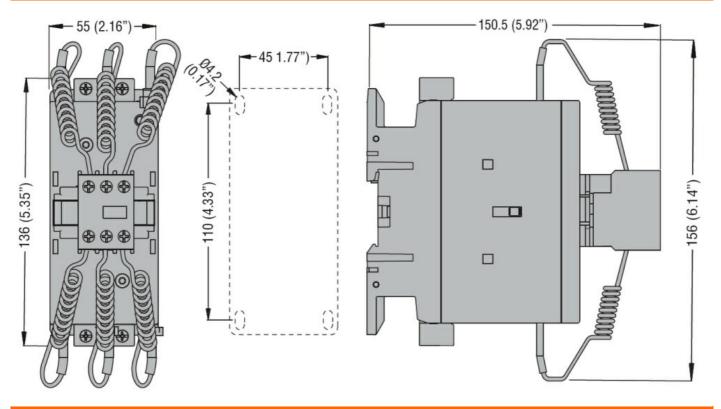
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30° Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	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

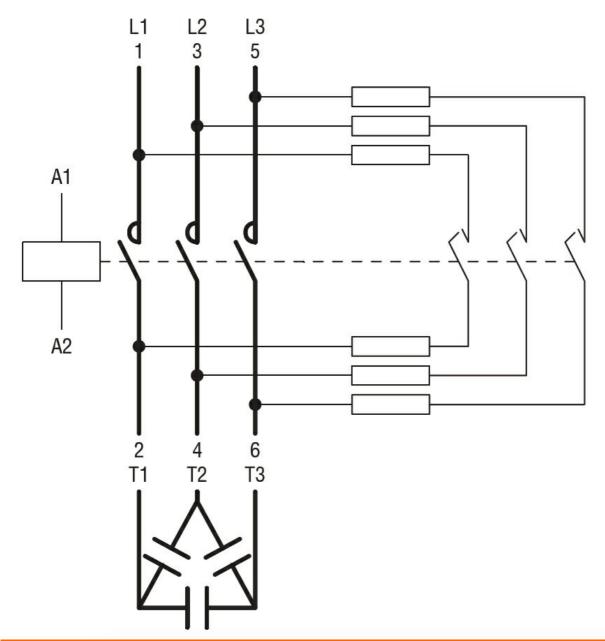
Contactor

		AC current	Α	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
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 designation			Power contactor
Product type designation			BFK80
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	115
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	30
	400V	kvar	50
	440480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	A	456
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	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
Managed and Consider Research assessed to	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			0
Flavible w/s has an distance stick	max		2
Flexible w/o lug conductor section		na :== 2	1 E
	min	mm²	1.5
Florible of the conductor continu	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 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
· DO	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			

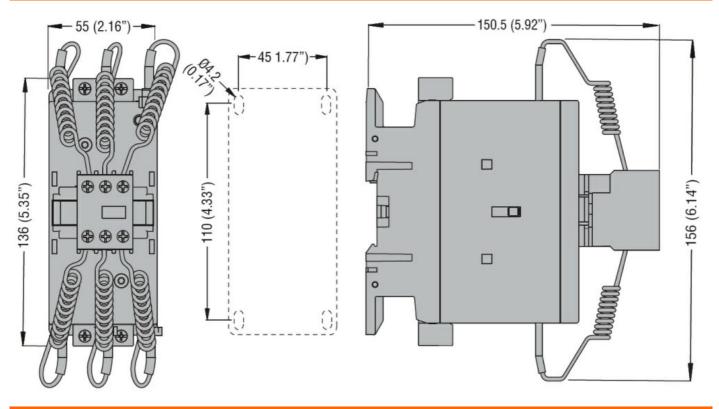




General USE

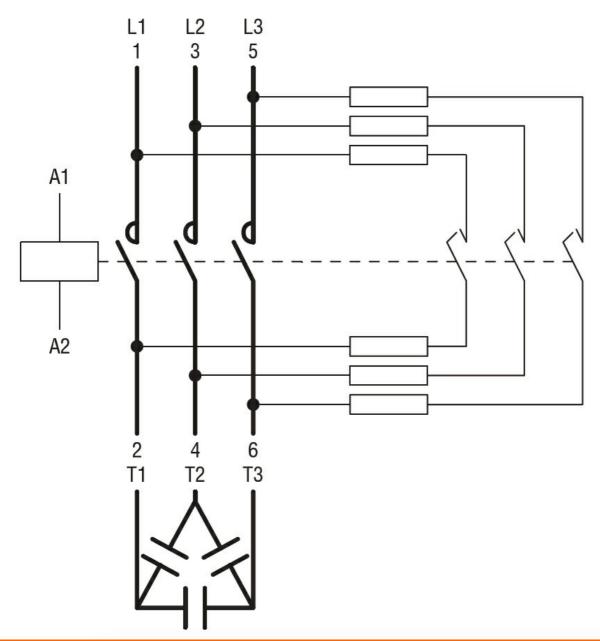
Contactor

		AC current	Α	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	tion			
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

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ETIM classification

ETIM 8.0

EC001079 -Capacitor contactor





Product designation				Power contactor
Product type designat				BFK80
Contact characteristics	S			-
Number of poles			Nr.	3
Rated insulation voltage			V	690
Rated impulse withsta	•		kV	8
Operational frequency	1			
		min	Hz	25
		max	Hz	400
IEC Conventional free			Α	115
Rated operational pov	ver AC-6b (T≤40°C)			
		230V	kvar	30
		400V	kvar	50
		440480V	kvar	56
		690V	kvar	65
Short-time allowable of	current for 10s (IEC/EN60947-1)		Α	640
Protection fuse				
		gG (IEC)	Α	125
Making capacity (RMS	s value)		Α	800
Breaking capacity at v	oltage			
		440V	Α	640
		500V	Α	625
		690V	Α	456
Resistance per pole (a	average value)		mΩ	0.6
Power dissipation per	pole (average value)			
		Ith	W	7.9
Tightening torque for t	erminals			
		min	Nm	4
		max	Nm	5
		min	lbin	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



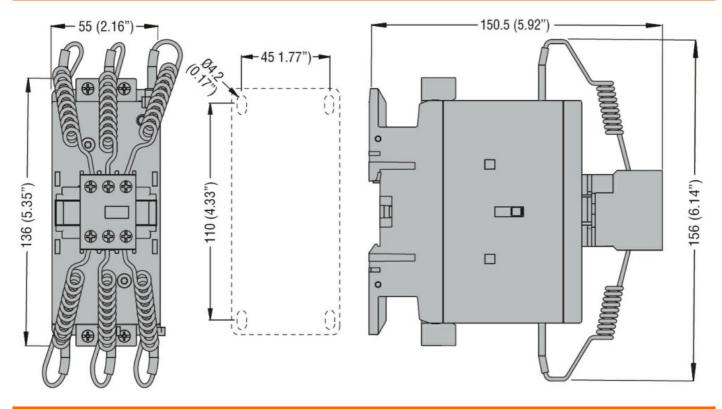
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30° Screw / DIN rail
Fixing			35mm
Weight		g	1090
Conductor section			
AWG/kcmil conductor section			
	max		2
Operations			
Mechanical life		cycles	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

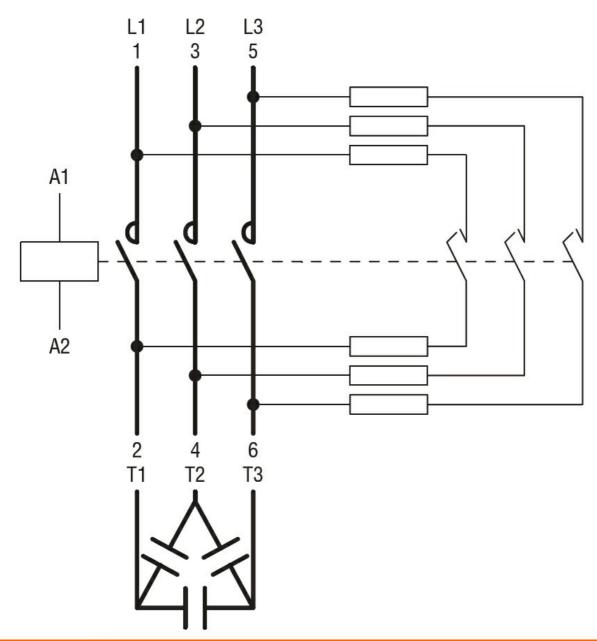
Contactor

		AC current	Α	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
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

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Certificates

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ETIM classification

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EC001079 -Capacitor contactor