



Product designation	Power contactor		
Product type designation	BFK80		
<b>Contact characteristics</b>			
Number of poles	Nr.	3	
Rated insulation voltage $U_i$ IEC/EN	V	690	
Rated impulse withstand voltage $U_{imp}$	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $I_{th}$	A	115	
Rated operational power AC-6b ( $T \leq 40^\circ C$ )	230V	kvar	30
	400V	kvar	50
	440...480V	kvar	56
	690V	kvar	65
Short-time allowable current for 10s (IEC/EN60947-1)	A	640	
Protection fuse	gG (IEC)	A	125
	Making capacity (RMS value)	A	800
Breaking capacity at voltage	440V	A	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)	$m\Omega$	0.6	
Power dissipation per pole (average value)	$I_{th}$	W	7.9
	Tightening torque for terminals	min	Nm
	max	Nm	5
	min	$I_{bin}$	2.95
	max	$I_{bin}$	3.69
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	$I_{bin}$	0.8
	max	$I_{bin}$	0.74
Max number of wires simultaneously connectable	Nr.	2	
Conductor section	AWG/Kcmil	max	2
	Flexible w/o lug conductor section	min	$mm^2$
		max	$mm^2$
Flexible c/w lug conductor section	min	$mm^2$	1.5

		max	mm <sup>2</sup>	35
Power terminal protection according to IEC/EN 60529				IP20 front
<b>Mechanical features</b>				
Operating position		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1090
Conductor section	AWG/kcmil conductor section	max		2
<b>Operations</b>				
Mechanical life			cycles	15000000
Electrical life			cycles	400000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles	400000
			cycles	15000000
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 60Hz			V	460
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	in-rush holding	VA	210
			VA	15
Dissipation at holding ≤20°C 50Hz			W	5
<b>Max cycles frequency</b>				
Mechanical operation			cycles/h	3600
<b>Operating times</b>				
Average time for Us control	in AC			
	Closing NO	min	ms	12
		max	ms	28
	Opening NO	min	ms	8
		max	ms	22
	in DC			
	Closing NO	min	ms	40
		max	ms	85
	Opening NO	min	ms	20
		max	ms	55
<b>UL technical data</b>				

General USE

Contactor

AC current A 115

Ambient conditions

Temperature

Operating temperature

min °C -50  
max °C 70

Storage temperature

min °C -60  
max °C 80

Max altitude

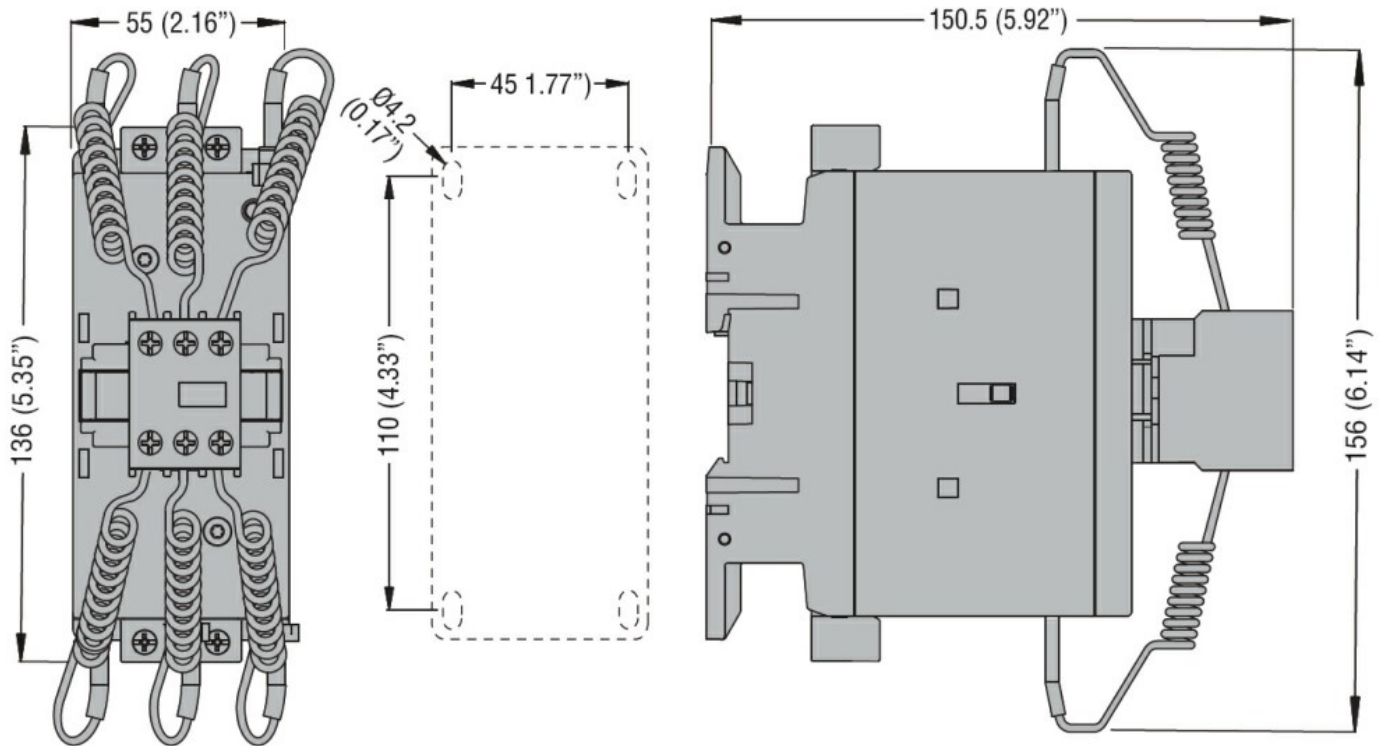
m 3000

Resistance & Protection

Pollution degree

3

Dimensions



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