



Product designation				Power contactor
Product type designation				BFK80
Contact characteristics				
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	
		A	800	
Making capacity (RMS value)				800
Breaking capacity at voltage	440V	A	640	
	500V	A	625	
	690V	A	456	
Resistance per pole (average value)		m Ω	0.6	
Power dissipation per pole (average value)		lth	W	7.9
		min	Nm	4
Tightening torque for terminals		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
		min	Nm	0.8
Tightening torque for coil terminal		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
		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	mm ²	1.5
		max	mm ²	35
Flexible c/w lug conductor section	min	mm ²	1.5	

		max	mm ²	35
Power terminal protection according to IEC/EN 60529				
IP20 front				
Mechanical features				
Operating position				
		normal allowable		Vertical plan ±30°
Fixing				
Screw / DIN rail 35mm				
Weight				
			g	1090
Conductor section				
	AWG/kcmil 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 mechanical load	cycles cycles	400000 15000000
EMC compatibility				
yes				
AC coil operating				
Rated AC voltage at 50/60Hz				
			V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		pick-up	min %Us	80
			max %Us	110
		drop-out	min %Us	20
			max %Us	55
	of 50/60Hz coil powered at 60Hz			
		pick-up	min %Us	85
			max %Us	110
		drop-out	min %Us	20
			max %Us	55
AC average coil 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
Dissipation at holding ≤20°C 50Hz				
			W	5
Max cycles frequency				
Mechanical operation				
			cycles/h	3600
Operating times				
Average time for Us control				
	in AC			
	Closing NO			

		min	ms	12
		max	ms	28
	Opening NO			
		min	ms	8
		max	ms	22
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	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 A 115

Ambient conditions

Temperature

Operating temperature

min °C -50
max °C 70

Storage temperature

min °C -60
max °C 80

Max altitude

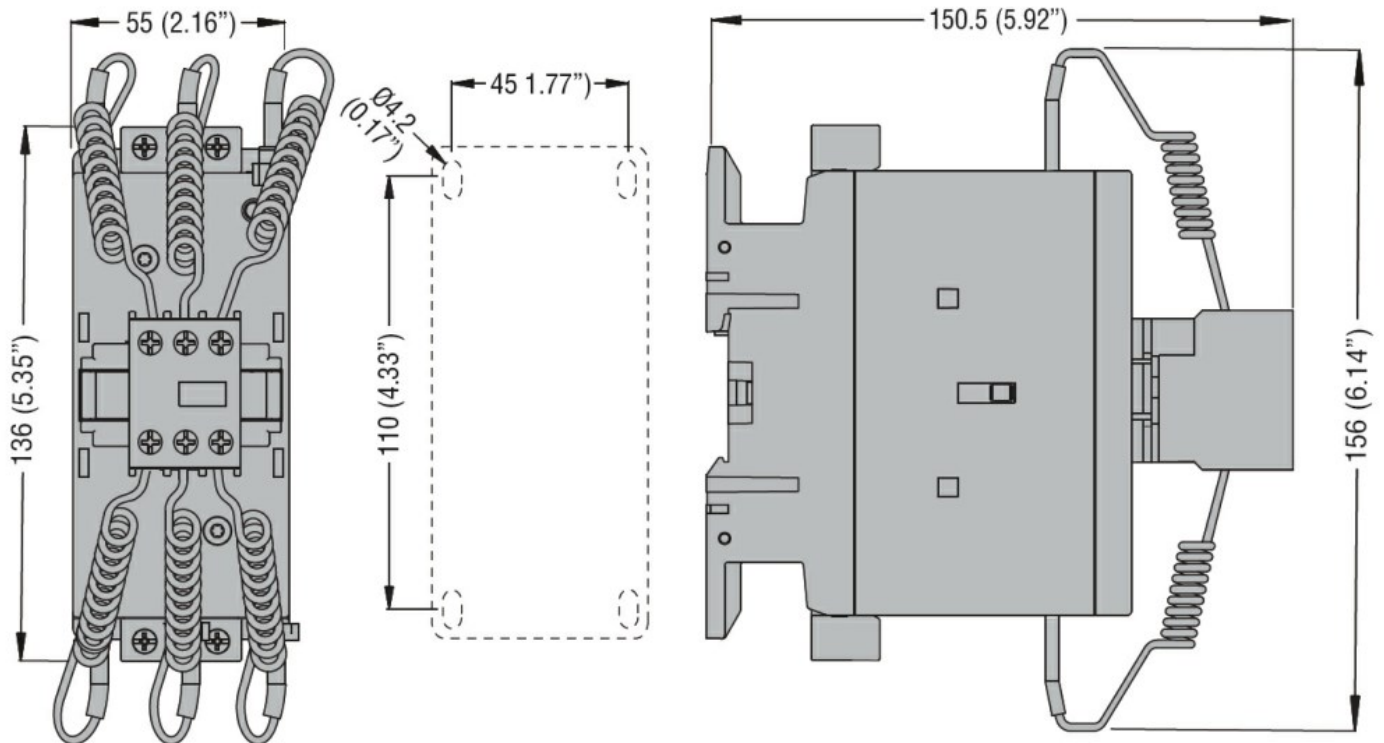
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Resistance & Protection

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