



Product designation				Power contactor
Product type designation				BFK94
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	34	
	400V	kvar	60	
	440...480V	kvar	75	
	690V	kvar	80	
Short-time allowable current for 10s (IEC/EN60947-1)	A			640
Protection fuse	gG (IEC)	A	125	
		A	950	
Making capacity (RMS value)				950
Breaking capacity at voltage	440V	A	760	
	500V	A	660	
	690V	A	475	
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	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	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
<hr/>				
	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

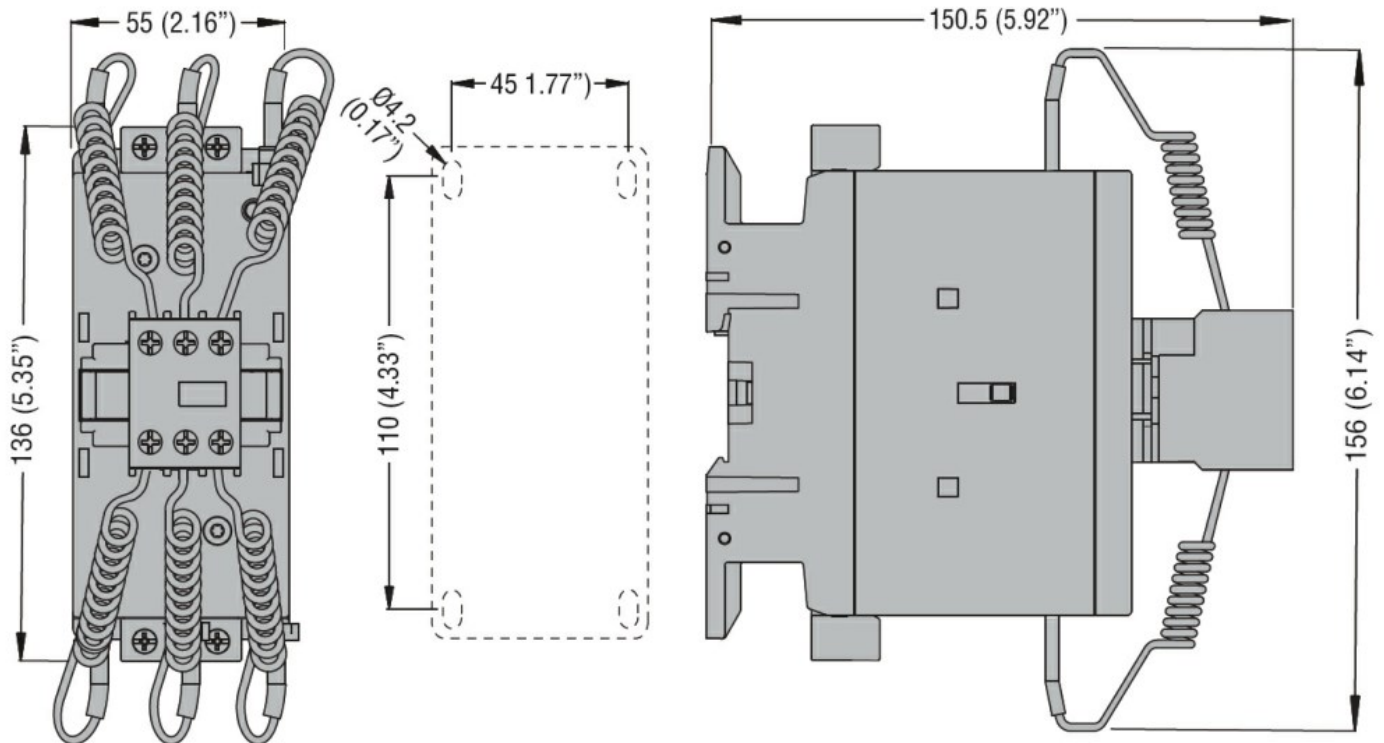
m 3000

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

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor