



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	
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	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	cycles	400000
		mechanical load	cycles	15000000
EMC compatibility				
				yes
AC coil operating				
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
<hr/>				
of 50/60Hz coil powered at 60Hz				
pick-up		min	%Us	85
		max	%Us	110
drop-out		min	%Us	20
		max	%Us	55
<hr/>				
AC average coil consumption at 20°C				
of 50/60Hz coil powered at 50Hz				
		in-rush	VA	210
		holding	VA	15
<hr/>				
of 50/60Hz coil powered at 60Hz				
		in-rush	VA	195
		holding	VA	13
<hr/>				
of 60Hz coil powered at 60Hz				
		in-rush	VA	210
		holding	VA	15
<hr/>				
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

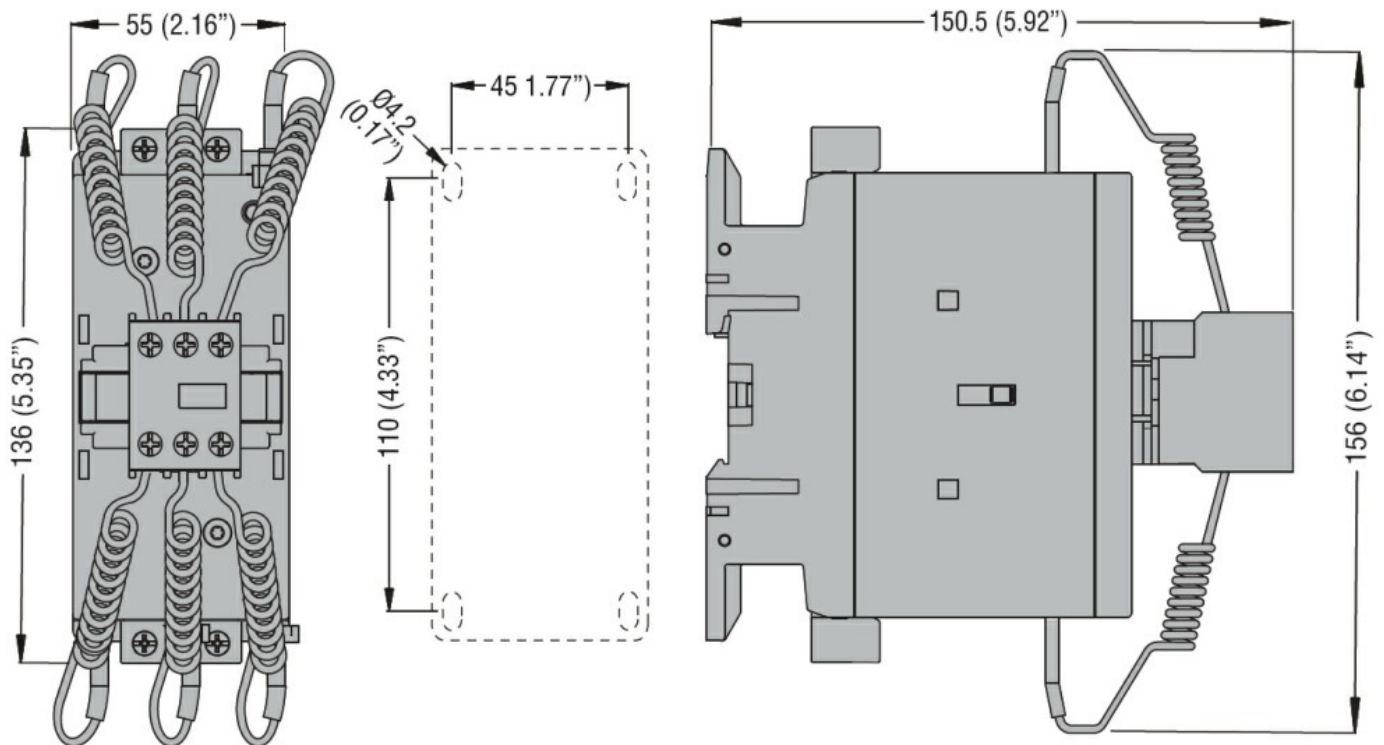
m 3000

Resistance & Protection

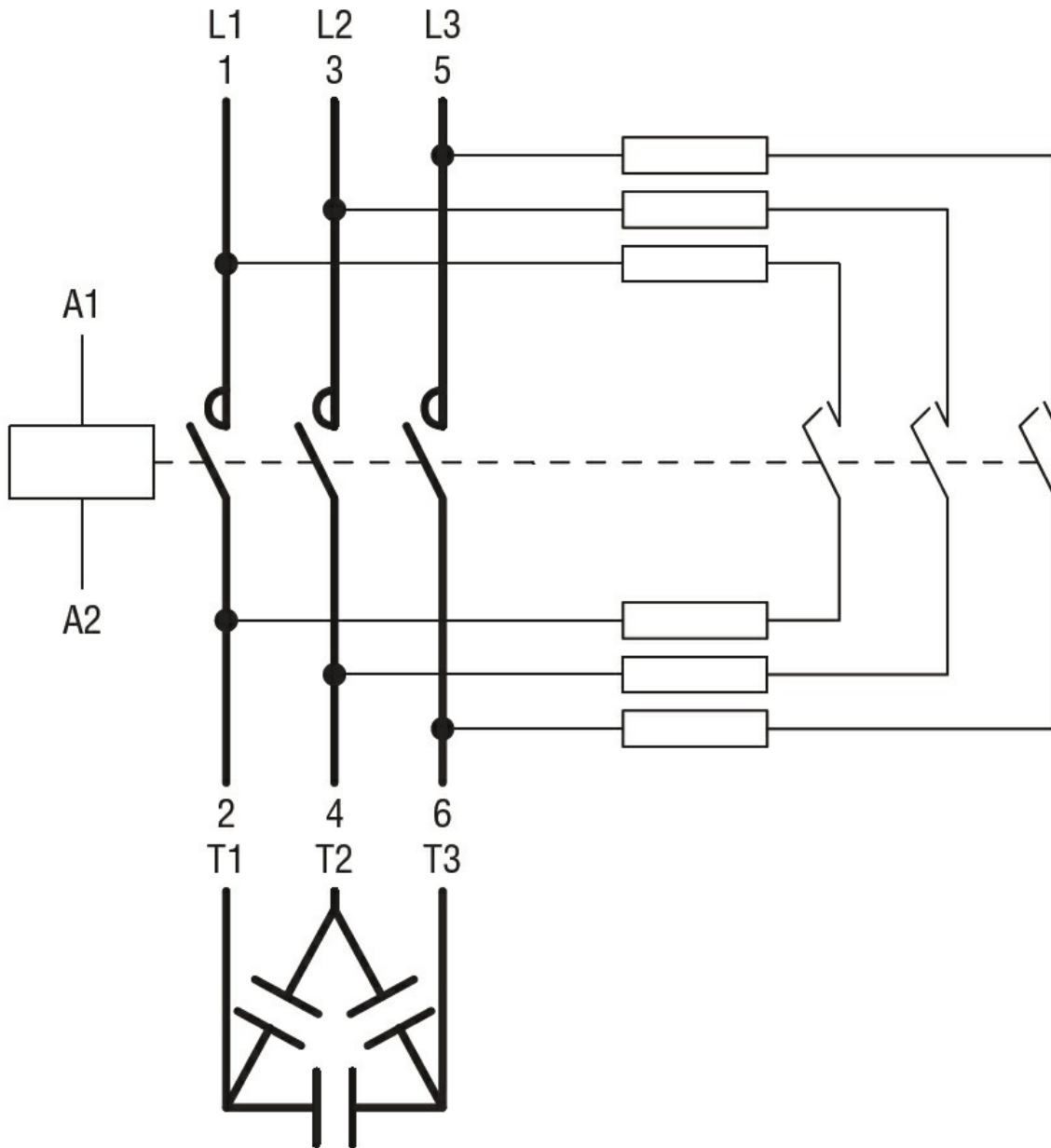
Pollution degree

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