



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)			
Breaking capacity at voltage	440V	A	760
	500V	A	660
	690V	A	475
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	4
	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	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	400
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 holding	VA VA	210 15
	of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	195 13
	of 60Hz coil powered at 60Hz	in-rush holding	VA VA	210 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

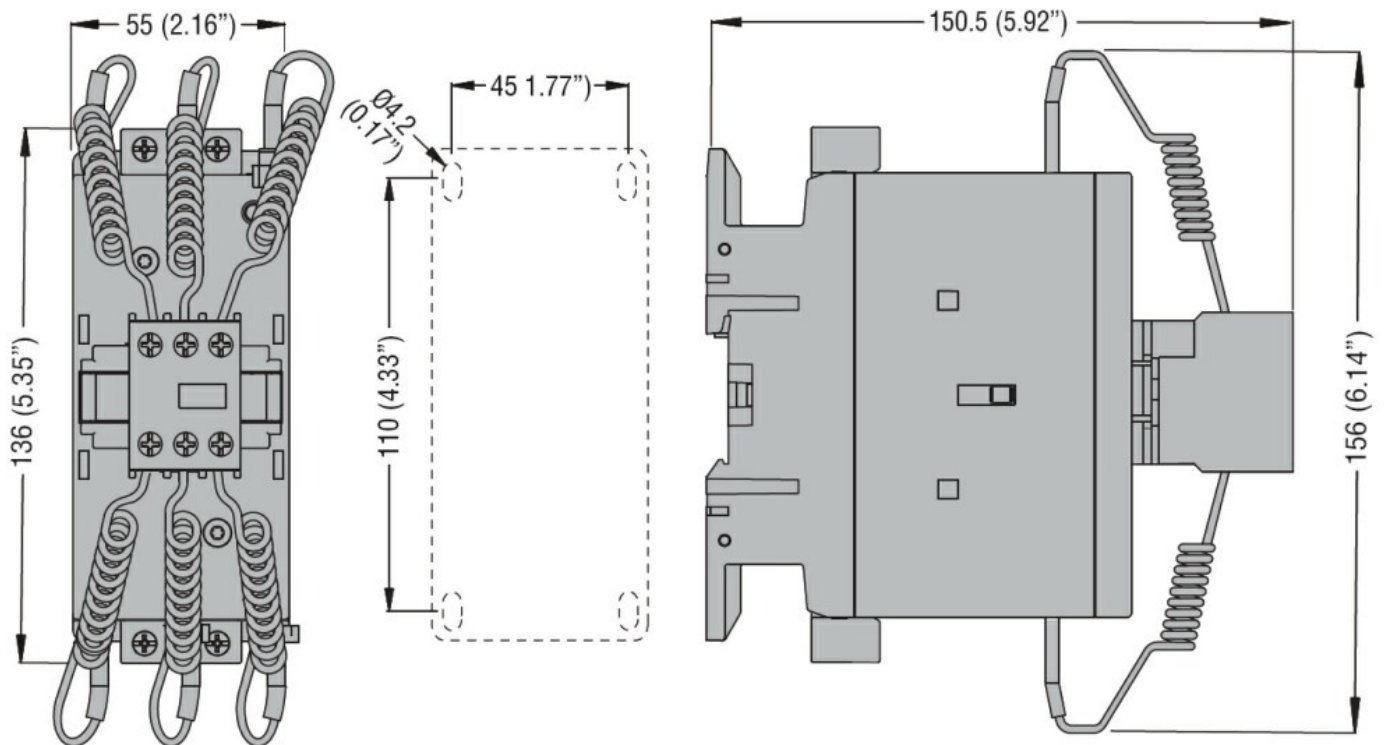
m 3000

Resistance & Protection

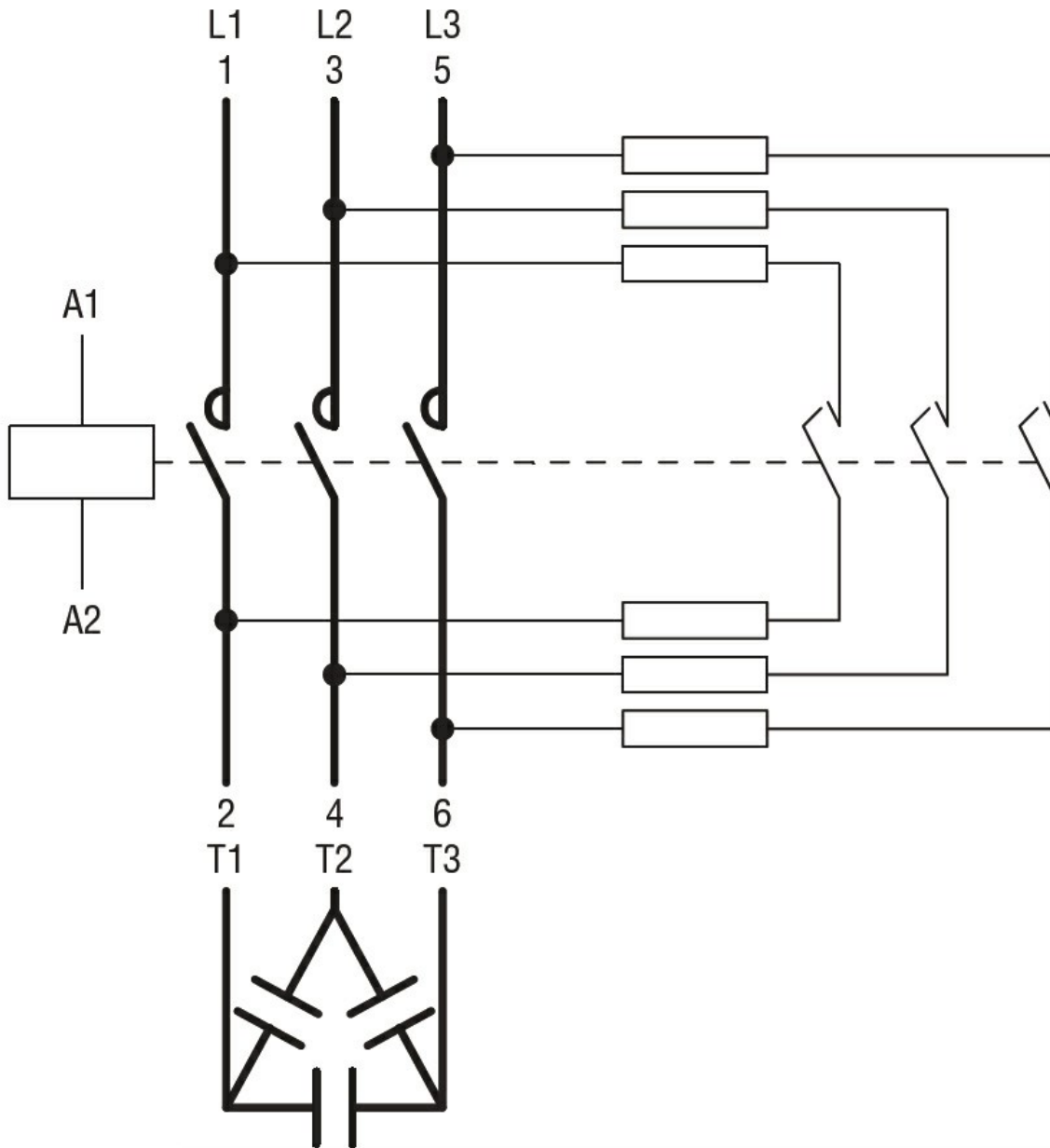
Pollution degree

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