



Product designation			Power contactor
Product type designation			BFK80
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	115	
Rated operational power AC-6b (T≤40°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)		A	800
Breaking capacity at voltage	440V	A	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)	m?	0.6	
Power dissipation per pole (average value)	Ith	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	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section	min	mm²	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 60Hz			V	48
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	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
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

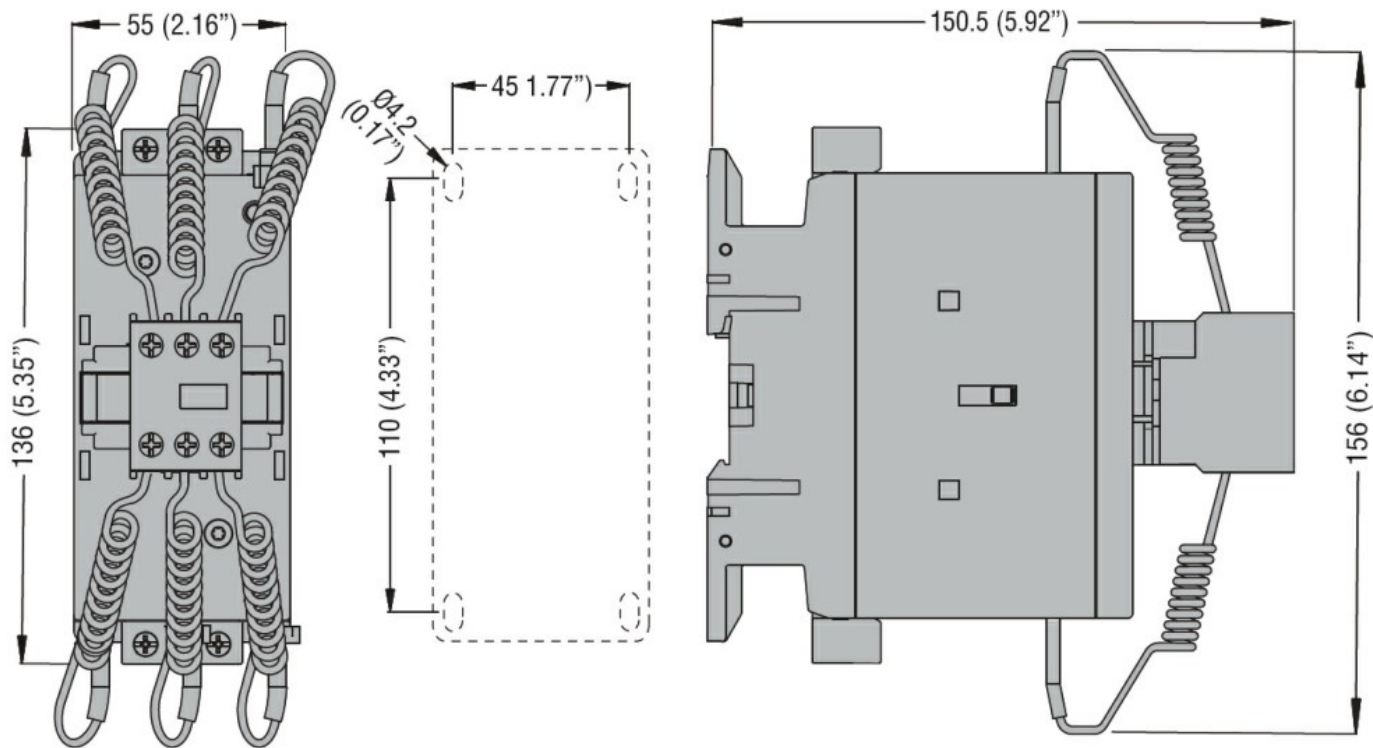
m 3000

Resistance & Protection

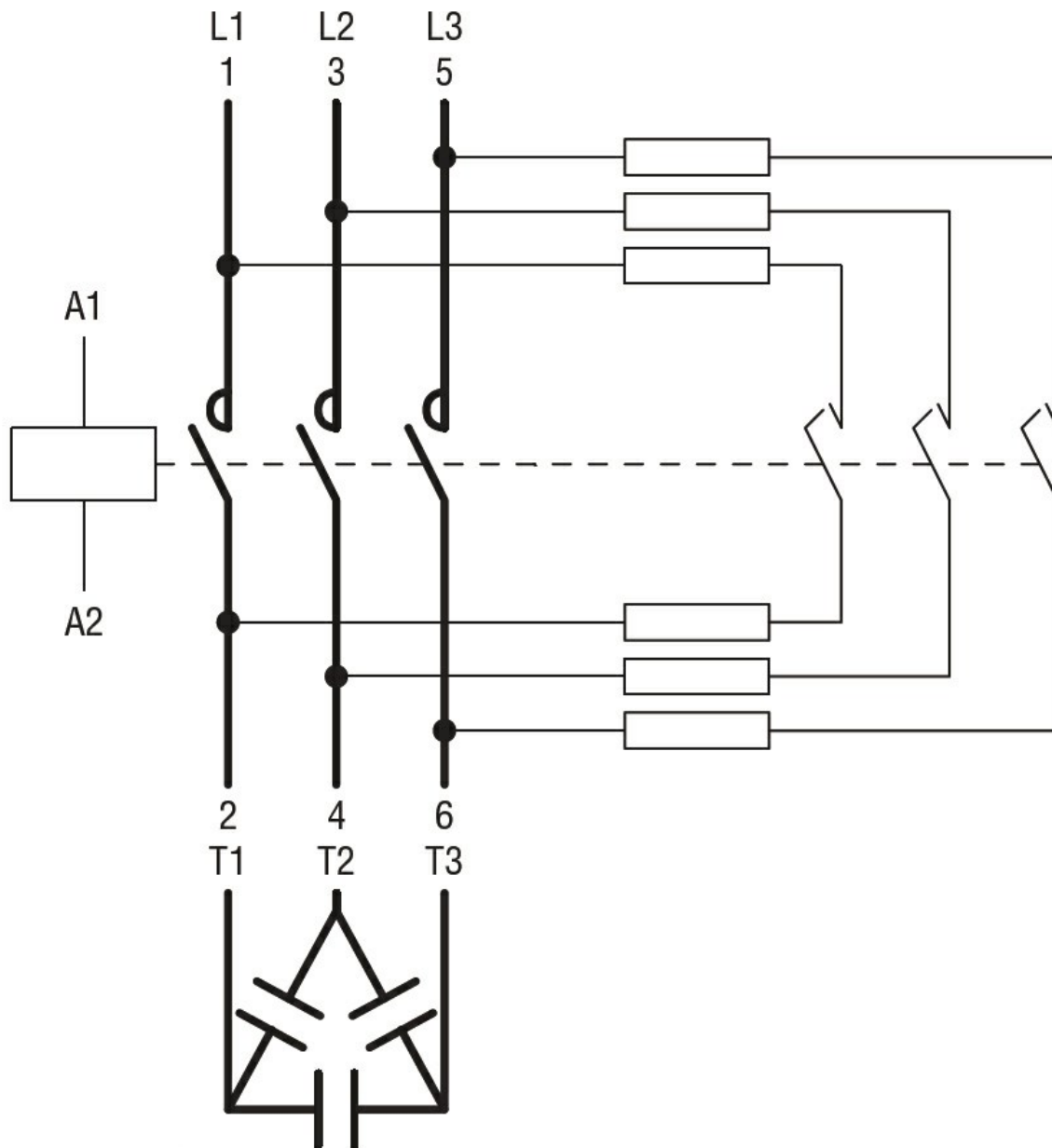
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor