



Product designation
Product type designation

Power contactor
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
Making capacity (RMS value)		A	800
Breaking capacity at voltage			
	440V	A	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)		mΩ	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 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 max	%Us %Us	80 110
drop-out		min max	%Us %Us	20 55
of 50/60Hz coil powered at 60Hz pick-up		min max	%Us %Us	85 110
drop-out		min max	%Us %Us	20 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		

in DC	Opening NO	min	ms	12
		max	ms	28
		min	ms	8
		max	ms	22
	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

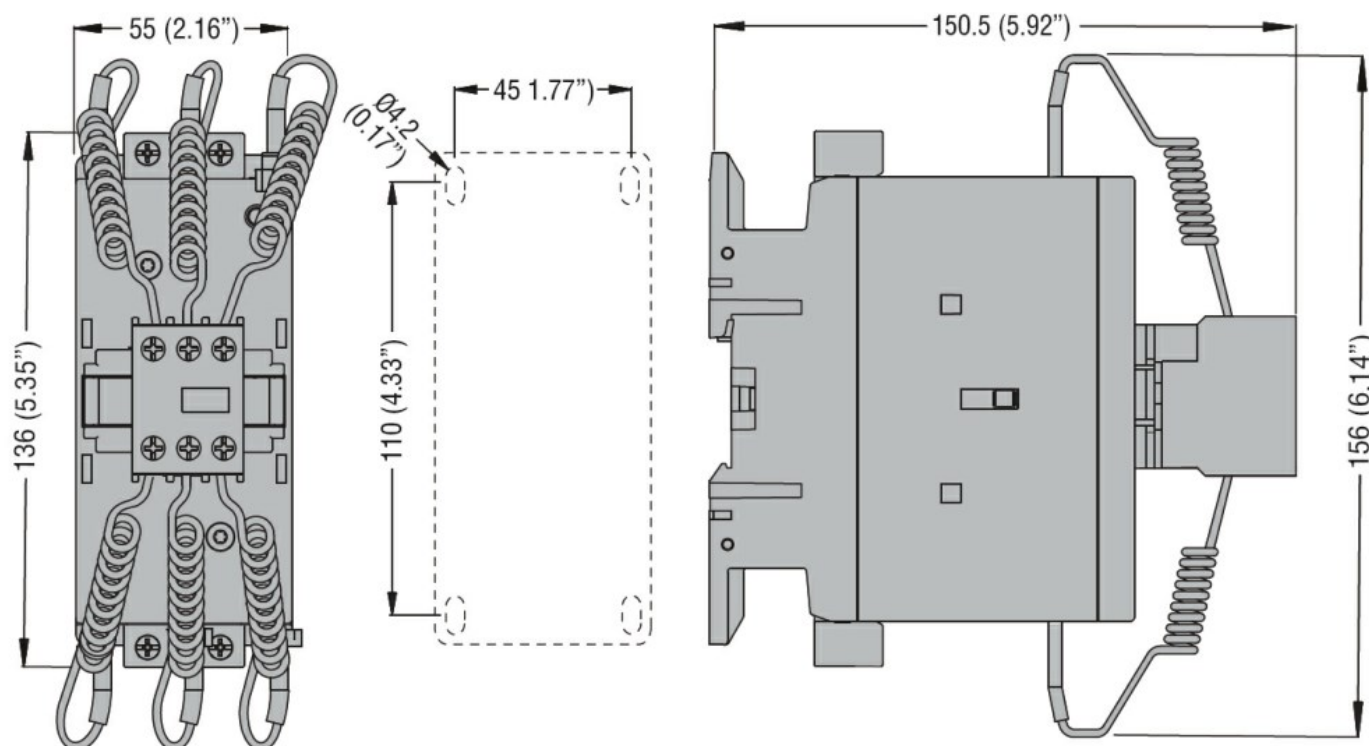
m 3000

Resistance & Protection

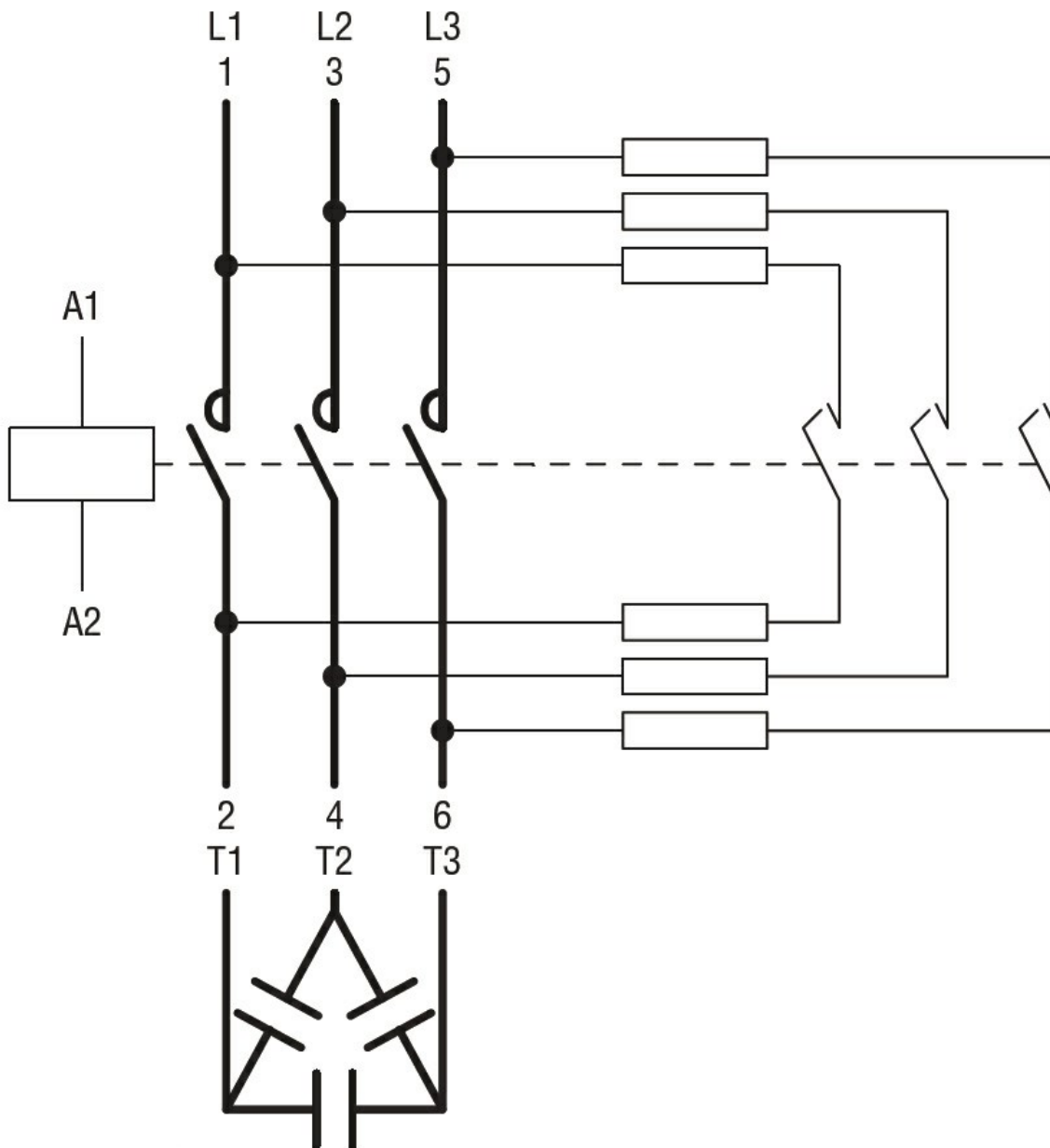
Pollution degree

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

Certificates

CCC
cULus

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor