



Product designation			Power contactor
Product type designation			BFK38
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	56
Rated operational power AC-6b (T≤40°C)			
	230V	kvar	17
	400V	kvar	30
	440...480V	kvar	33
	690V	kvar	36
Short-time allowable current for 10s (IEC/EN60947-1)		A	320
Protection fuse			
	gG (IEC)	A	63
Making capacity (RMS value)		A	380
Breaking capacity at voltage			
	440V	A	304
	500V	A	240
	690V	A	192
Resistance per pole (average value)		mΩ	2
Power dissipation per pole (average value)			
	Ith	W	6
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	Ibin	1.8
	max	Ibin	2.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		6
Flexible w/o lug conductor section			
	min	mm²	2.5
	max	mm²	16
Flexible c/w lug conductor section			
	min	mm²	1

		max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section		min	mm <sup>2</sup>	1
		max	mm <sup>2</sup>	10
Power terminal protection according to IEC/EN 60529				IP20 when properly wired
Mechanical features				
Operating position		normal allowable	Vertical plan ±30°	
Fixing		Screw / DIN rail 35mm		
Weight			g	400
Conductor section		AWG/kcmil conductor section		
		max	6	
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1400000
Safety related data				
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	cycles	400000
			cycles	20000000
EMC compatibility		yes		
AC coil operating				
Rated AC voltage at 50/60Hz			V	400
AC operating voltage		of 50/60Hz coil powered at 50Hz		
		min	%Us	80
		max	%Us	110
		drop-out		
		min	%Us	20
		max	%Us	55
		of 50/60Hz coil powered at 60Hz		
		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	75
		holding	VA	9
		of 50/60Hz coil powered at 60Hz		
		in-rush	VA	70
		holding	VA	7
		of 60Hz coil powered at 60Hz		
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤20°C 50Hz			W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600

## Operating times

Average time for Us control  
in AC

Closing NO

min	ms	8
max	ms	24

Opening NO

min	ms	5
max	ms	15

Closing NC

min	ms	9
max	ms	20

## UL technical data

General USE

Contactor

AC current	A	56
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## Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

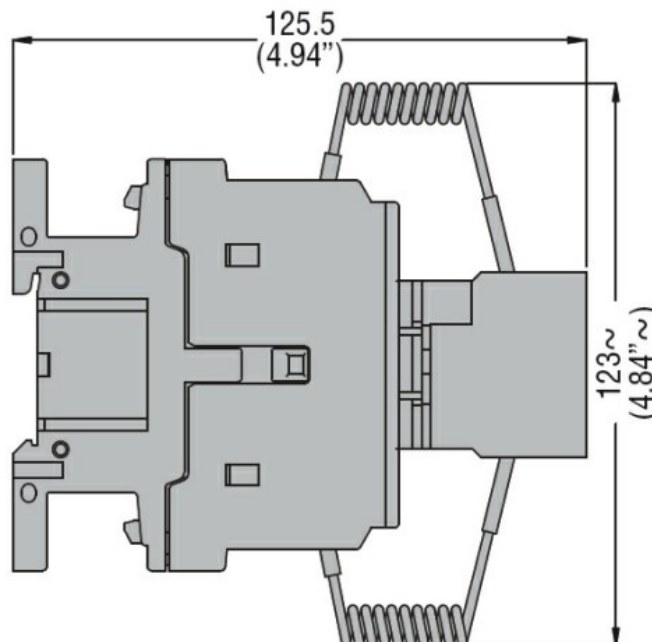
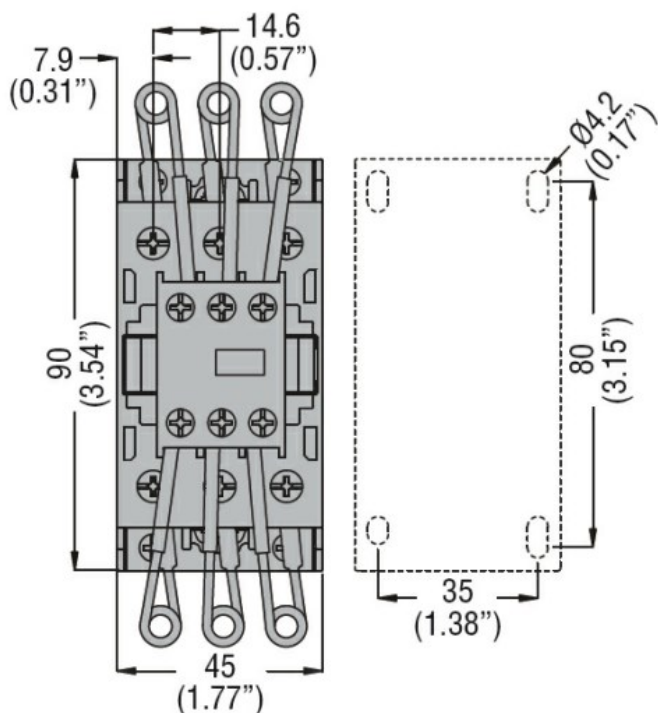
m	3000
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## Resistance & Protection

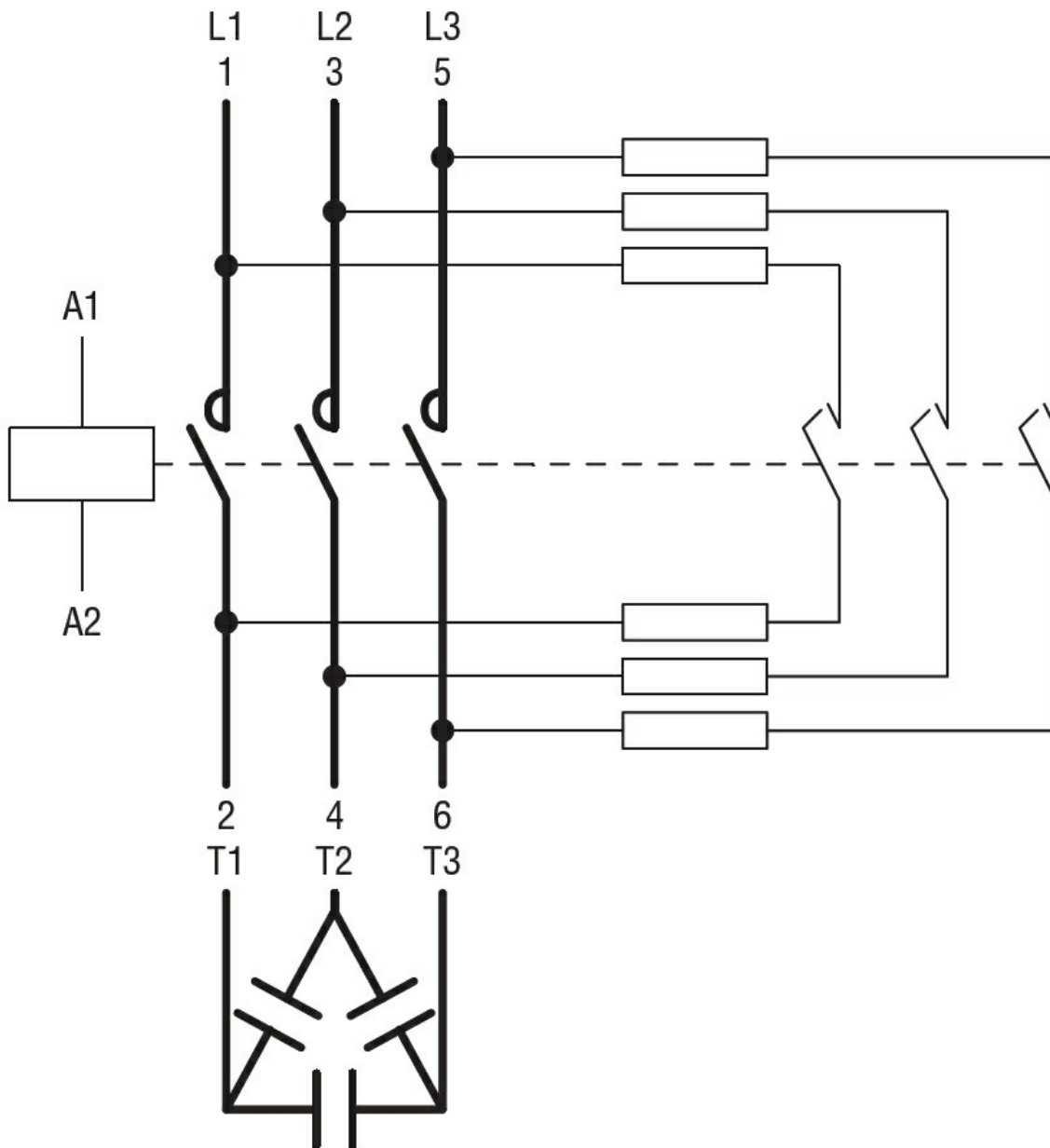
Pollution degree

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  
EAC

## ETIM classification

ETIM 8.0

EC001079 -  
Capacitor  
contactor