



Product designation	Power contactor		
Product type designation	BFK38		
<b>Contact characteristics</b>			
Number of poles	Nr.	3	
Rated insulation voltage $U_i$ IEC/EN	V	690	
Rated impulse withstand voltage $U_{imp}$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $I_{th}$	A	56	
Rated operational power AC-6b ( $T \leq 40^\circ C$ )	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)	m $\Omega$	2	
Power dissipation per pole (average value)	$I_{th}$	W	6
	Tightening torque for terminals	min	Nm
max		Nm	3
min		lbin	1.8
max		lbin	2.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
Max number of wires simultaneously connectable	Nr.	2	
Conductor section	AWG/Kcmil	max	6
	Flexible w/o lug conductor section	min	mm <sup>2</sup> 2.5
max		mm <sup>2</sup> 16	
Flexible c/w lug conductor section	min	mm <sup>2</sup> 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
<b>Mechanical features</b>				
Operating position				
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	400
Conductor section				
AWG/kcmil conductor section				
		max		6
<b>Operations</b>				
Mechanical life			cycles	20000000
Electrical life			cycles	1400000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1				
		rated load	cycles	400000
		mechanical load	cycles	20000000
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz			V	24
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	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
<b>Max cycles frequency</b>				
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

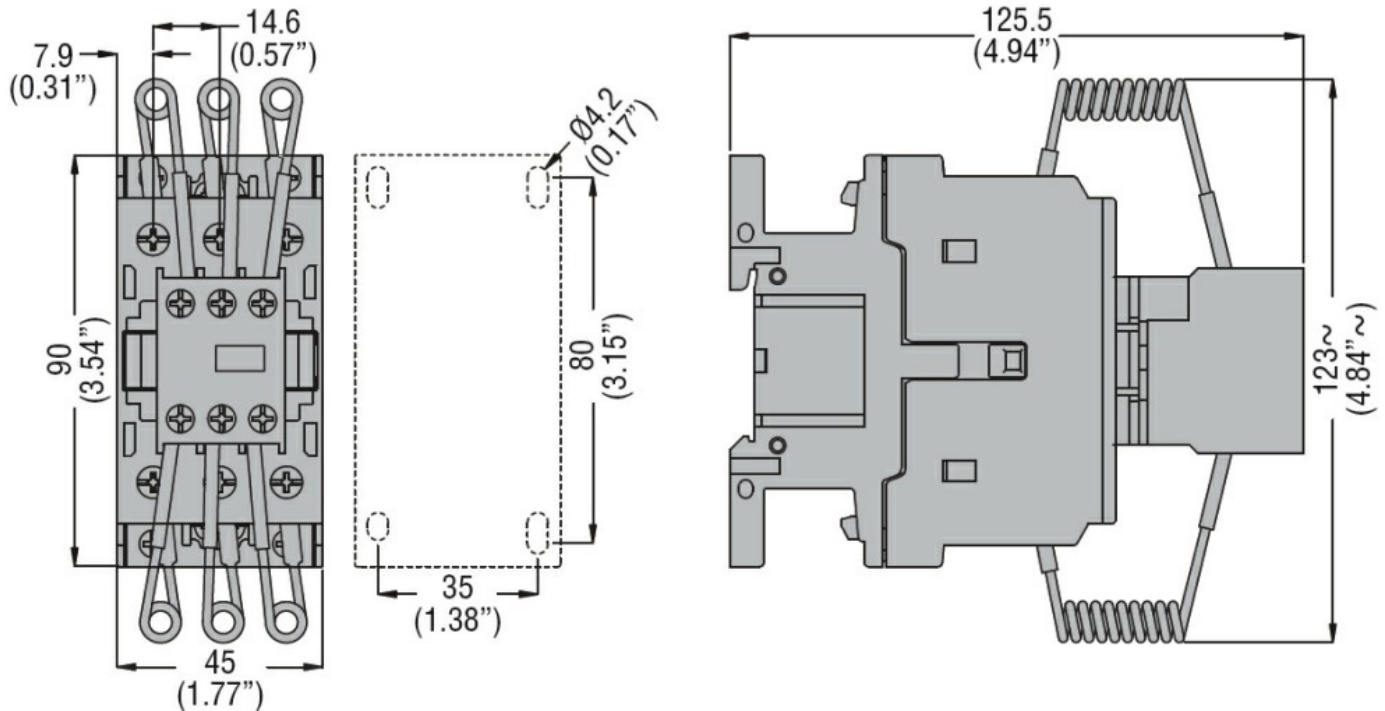
m	3000
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**Resistance & Protection**

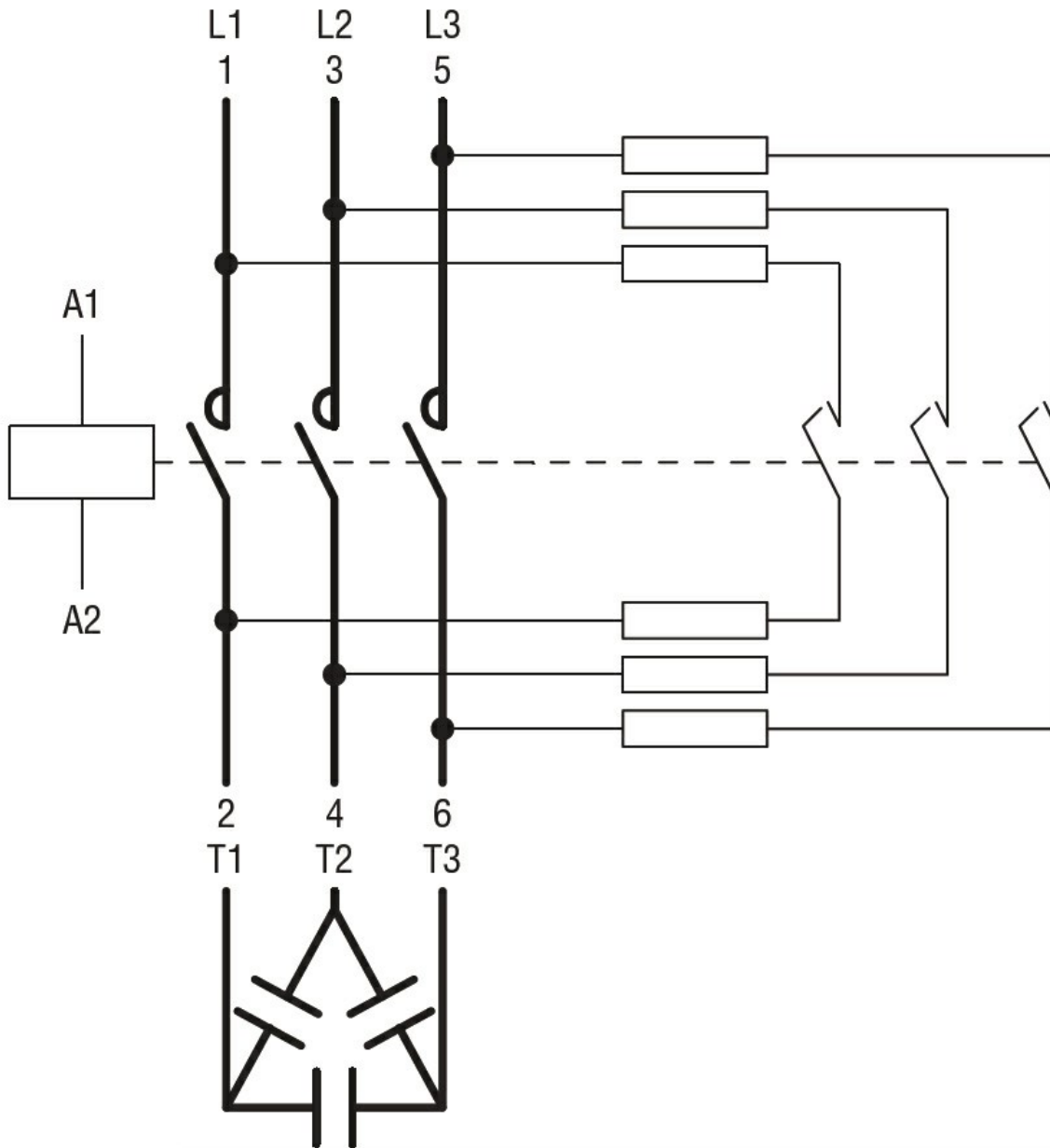
Pollution degree

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