



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)		m?	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 ²	10
Flexible with insulated spade lug conductor section			
	min	mm ²	1
	max	mm ²	10
Power terminal protection according to IEC/EN 60529			IP20 when 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	cycles	400000
	mechanical load	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			
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
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
------------	---	----

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

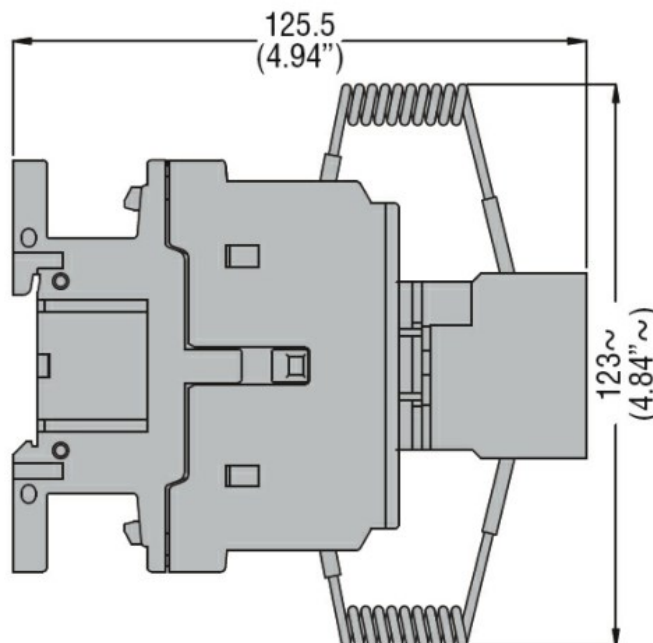
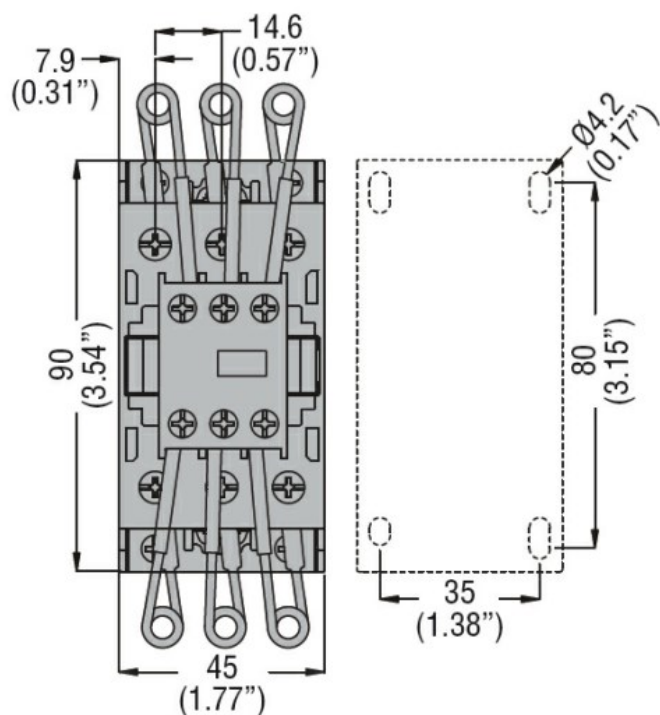
m	3000
---	------

Resistance & Protection

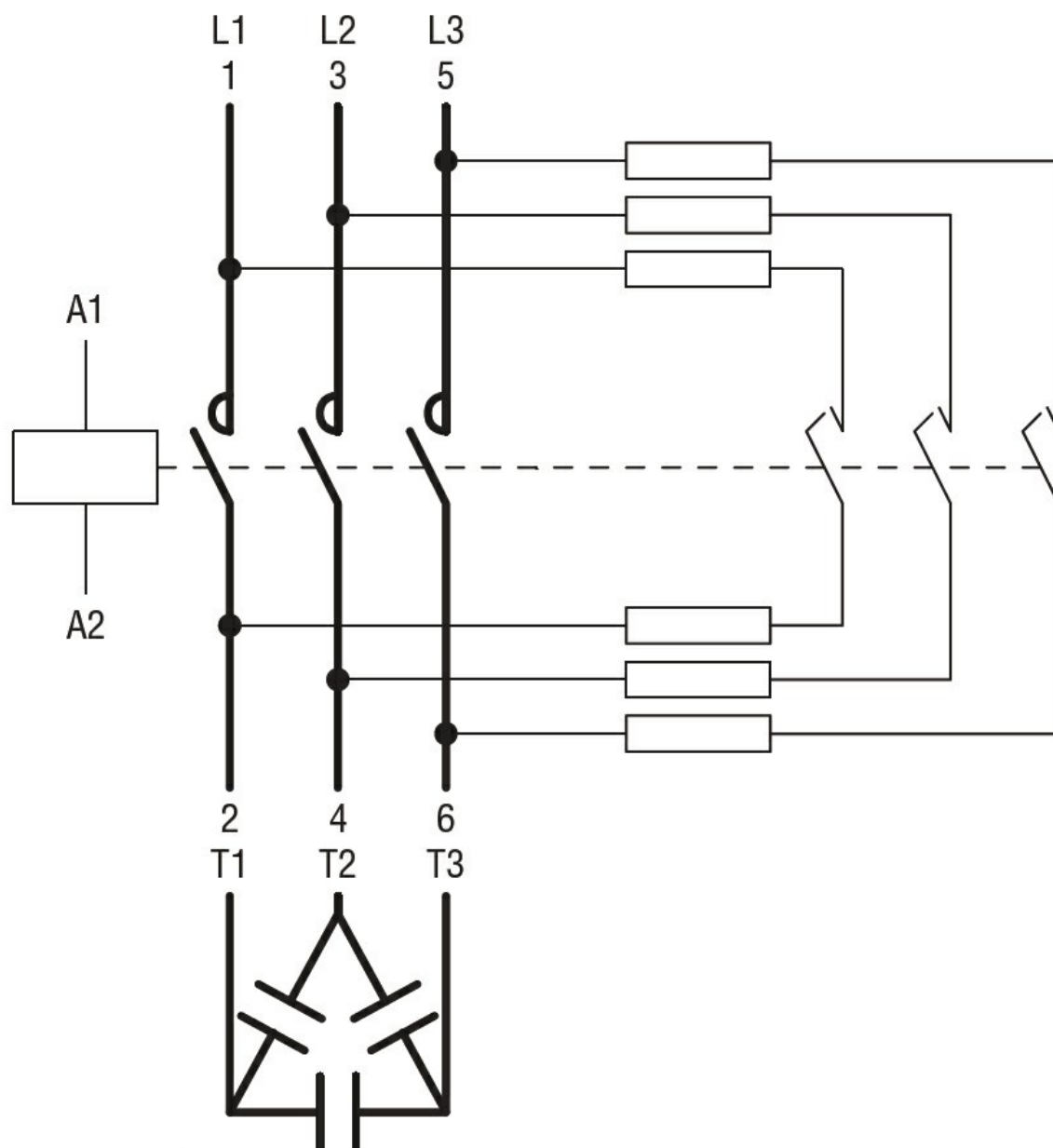
Pollution degree

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
EAC

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor