



Product designation Power contactor
Product type designation BFK65

Contact characteristics

Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min Hz	25
	max Hz	400
IEC Conventional free air thermal current I_{th}	A	100
Rated operational power AC-6b ($T \leq 40^\circ C$)	230V kvar	26
	400V kvar	45
	440...480V kvar	50
	690V kvar	56
Short-time allowable current for 10s (IEC/EN60947-1)	A	640
Protection fuse	gG (IEC)	A 100
Making capacity (RMS value)	A	650
Breaking capacity at voltage	440V A	520
	500V A	425
	690V A	376
Resistance per pole (average value)	m Ω	0.8
Power dissipation per pole (average value)	I_{th} W	8
Tightening torque for terminals	min Nm	4
	max Nm	5
	min lbin	2.95
	max lbin	3.69
Tightening torque for coil terminal	min Nm	0.8
	max Nm	1
	min lbin	0.8
	max lbin	0.74
Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	
	max	2
Flexible w/o lug conductor section	min mm ²	1.5
	max mm ²	35
Flexible c/w lug conductor section	min mm ²	1.5

		max	mm²	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	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	210
		holding	VA	15
		of 50/60Hz coil powered at 60Hz		
		in-rush	VA	195
		holding	VA	13
		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		

	Opening NO	min	ms	12
		max	ms	28
		min	ms	8
		max	ms	22
in DC				
	Closing NO	min	ms	40
		max	ms	85
		min	ms	20
		max	ms	55

UL technical data

General USE

Contactor

AC current A 100

Ambient conditions

Temperature

Operating temperature

min °C -50
max °C 70

Storage temperature

min °C -60
max °C 80

Max altitude

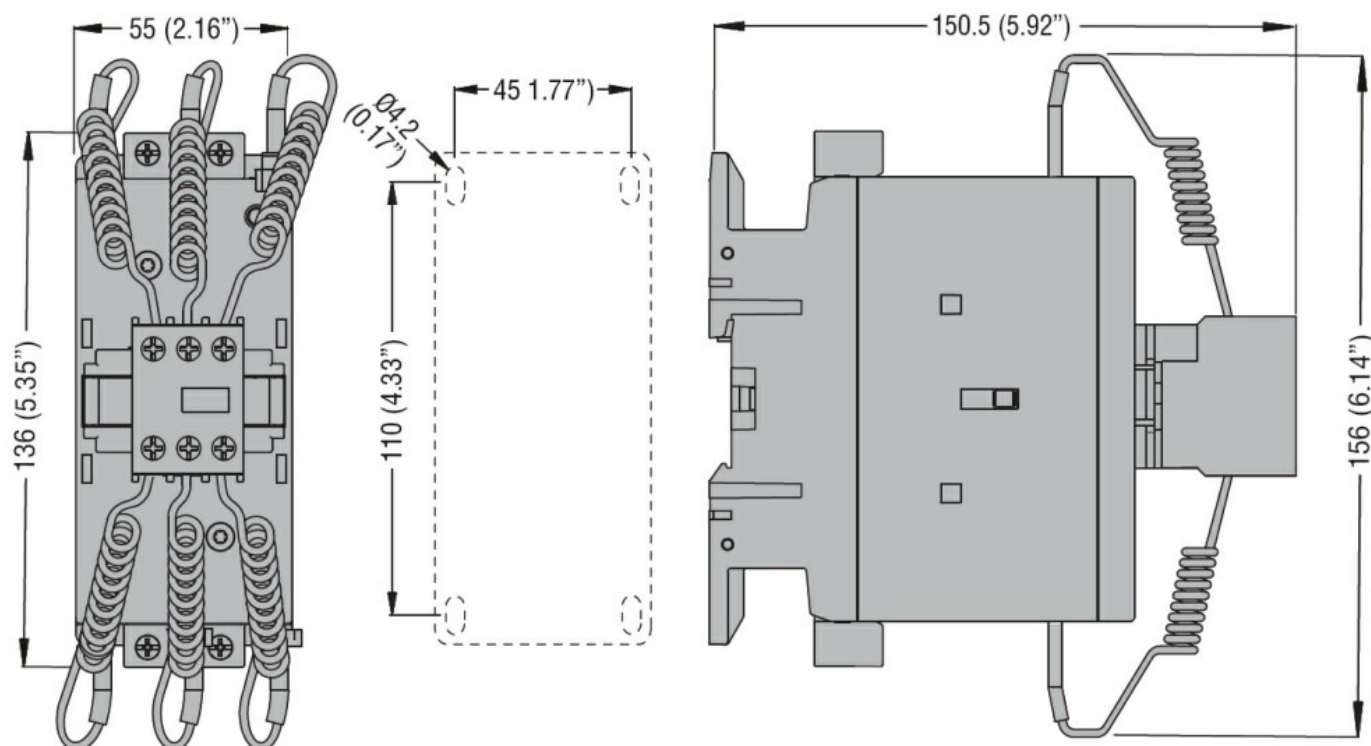
m 3000

Resistance & Protection

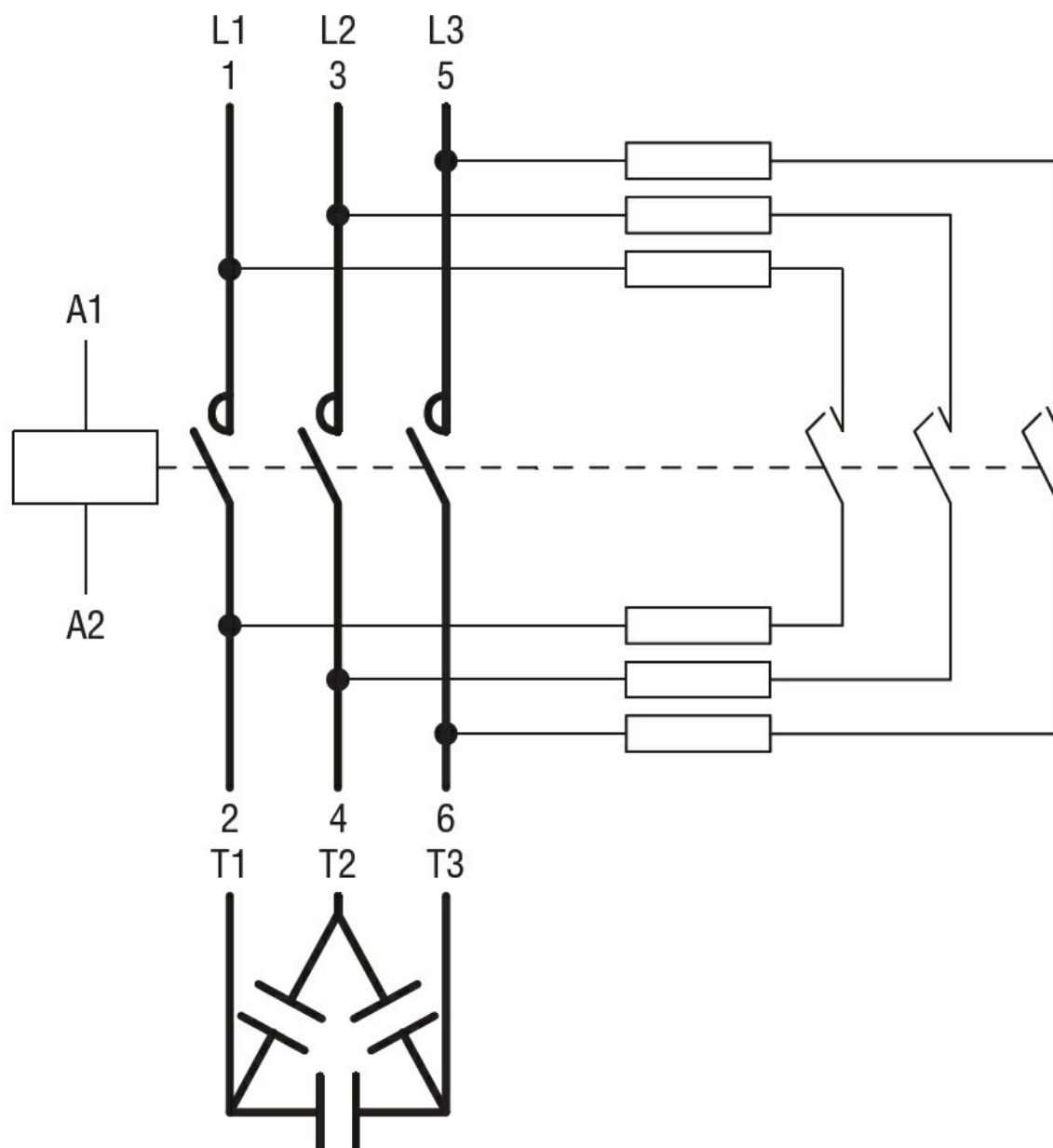
Pollution degree

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