



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
Operational current I_e	AC-1 ($\leq 55^\circ\text{C}$)	A		130
	AC-3 ($\leq 440\text{V}$ $\leq 55^\circ\text{C}$)	A		65
	AC-4 (400V)	A		31
Rated operational power AC-6b ($T \leq 40^\circ\text{C}$)	230V	kvar		26
	400V	kvar		45
	500V	kvar		50
	690V	kvar		56
Short-time allowable current for 10s (IEC/EN60947-1)	A			640
Protection fuse	gG (IEC)	A		100
	aM (IEC)	A		80
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
	AC3	W		3.4
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	lbft		0.8
	max	lbft		0.74
Max number of wires simultaneously connectable	nr.			2
Conductor section	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	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
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	cycles	400000
	mechanical load	cycles	15000000
Mirror contacts according to IEC/EN 60947-4-1			true
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	12
	max	V	600
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
	pick-up		
	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 operating voltage 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 operations			cycles/h 3600
Operating times			

Average time for Us control
in AC

Closing NO	min	ms	12
	max	ms	28
Opening NO	min	ms	8
	max	ms	22

in DC

Closing NO	min	ms	40
	max	ms	85
Opening NO	min	ms	20
	max	ms	55

UL technical data

Full-load current (FLA) for three-phase AC motor

at 480V	A	65
at 600V	A	62

Yielded mechanical performance

for three-phase AC motor

200/208V	hp	20
220/230V	hp	25
460/480V	hp	50
575/600V	hp	60

Contact rating of auxiliary contacts according to UL

SI - A600

General USE

Auxiliary contacts

AC voltage	V	600
AC current	A	10
DC voltage	V	250
DC current	A	1

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

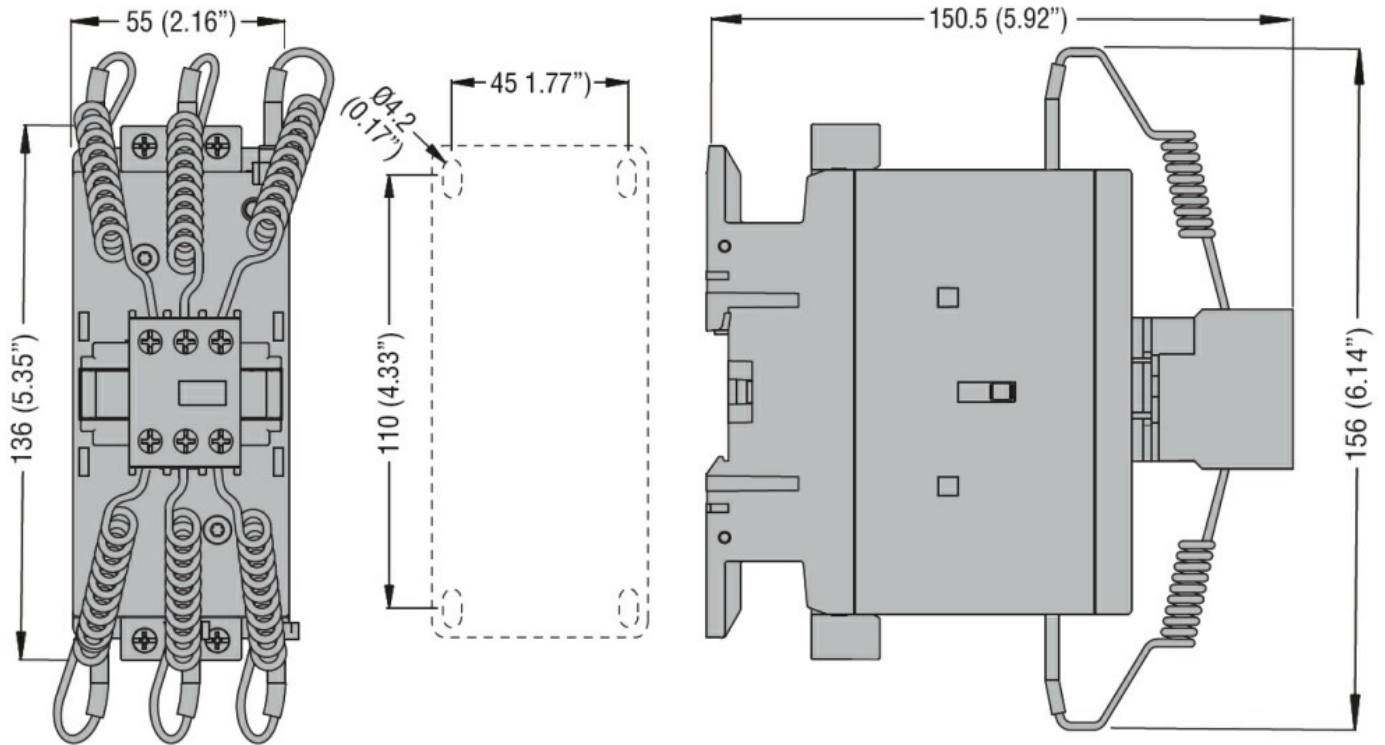
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Resistance & Protection

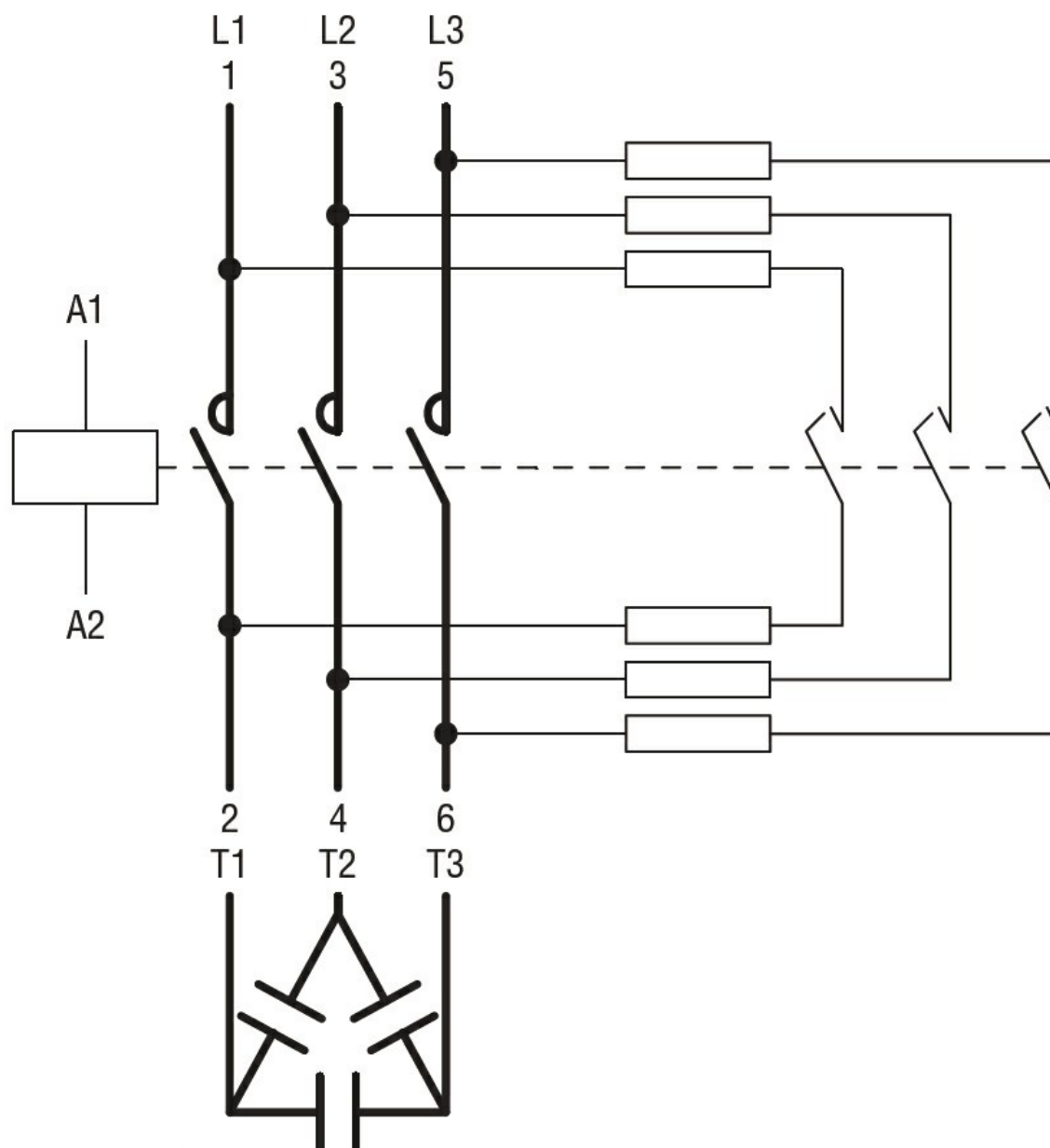
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching