



Product designation
Product type designation

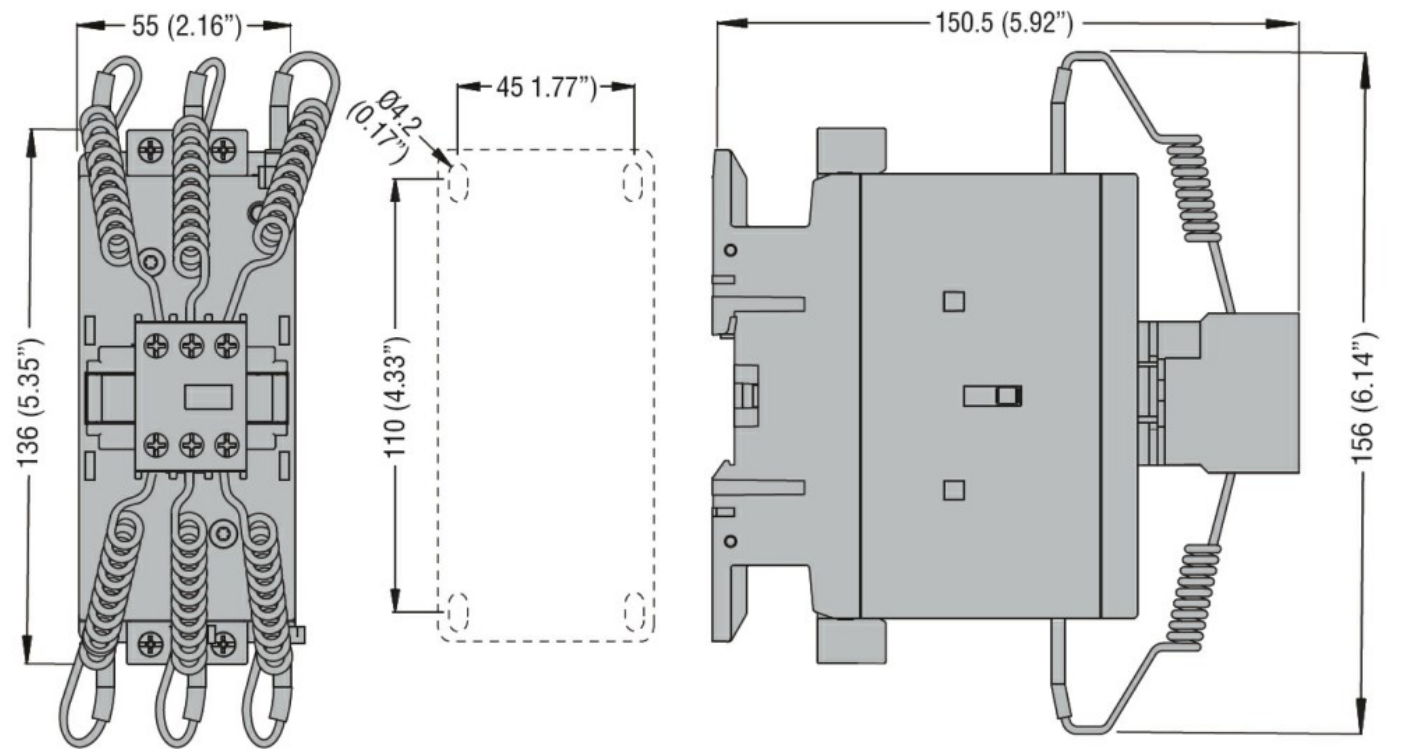
Power contactor
BFK50

Contact characteristics

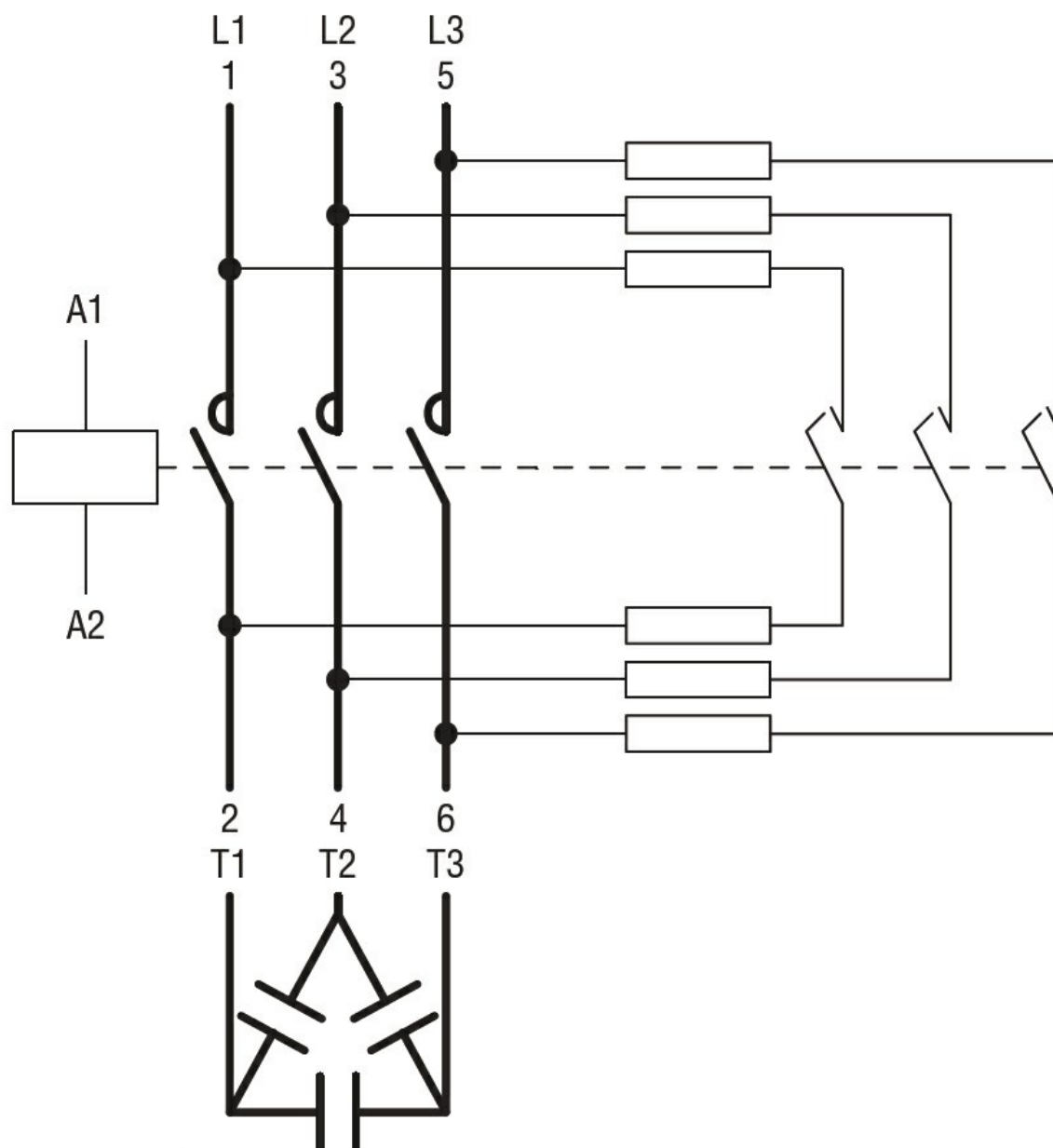
Number of poles	Nr.	3
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min Hz	25
	max Hz	400
IEC Conventional free air thermal current I_{th}	A	90
Rated operational power AC-6b ($T \leq 40^\circ C$)	230V kvar	22
	400V kvar	40
	440...480V kvar	41
	690V kvar	46
Short-time allowable current for 10s (IEC/EN60947-1)	A	400
Protection fuse	gG (IEC)	A 80
Making capacity (RMS value)	A	500
Breaking capacity at voltage	440V A	400
	500V A	352
	690V A	312
Resistance per pole (average value)	m Ω	0.8
Power dissipation per pole (average value)	I_{th} W	6.5
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	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
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz		V	24
AC operating voltage			
	of 60Hz coil powered at 60Hz		
	pick-up	min	%Us 80
		max	%Us 110
	drop-out	min	%Us 20
		max	%Us 55
AC average coil consumption at 20°C			
	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	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			
Rated operational voltage AC (UL)		V	600
General USE			
Contactor			

	AC current	A	90
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/BS 60947-1
IEC/EN/BS 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor