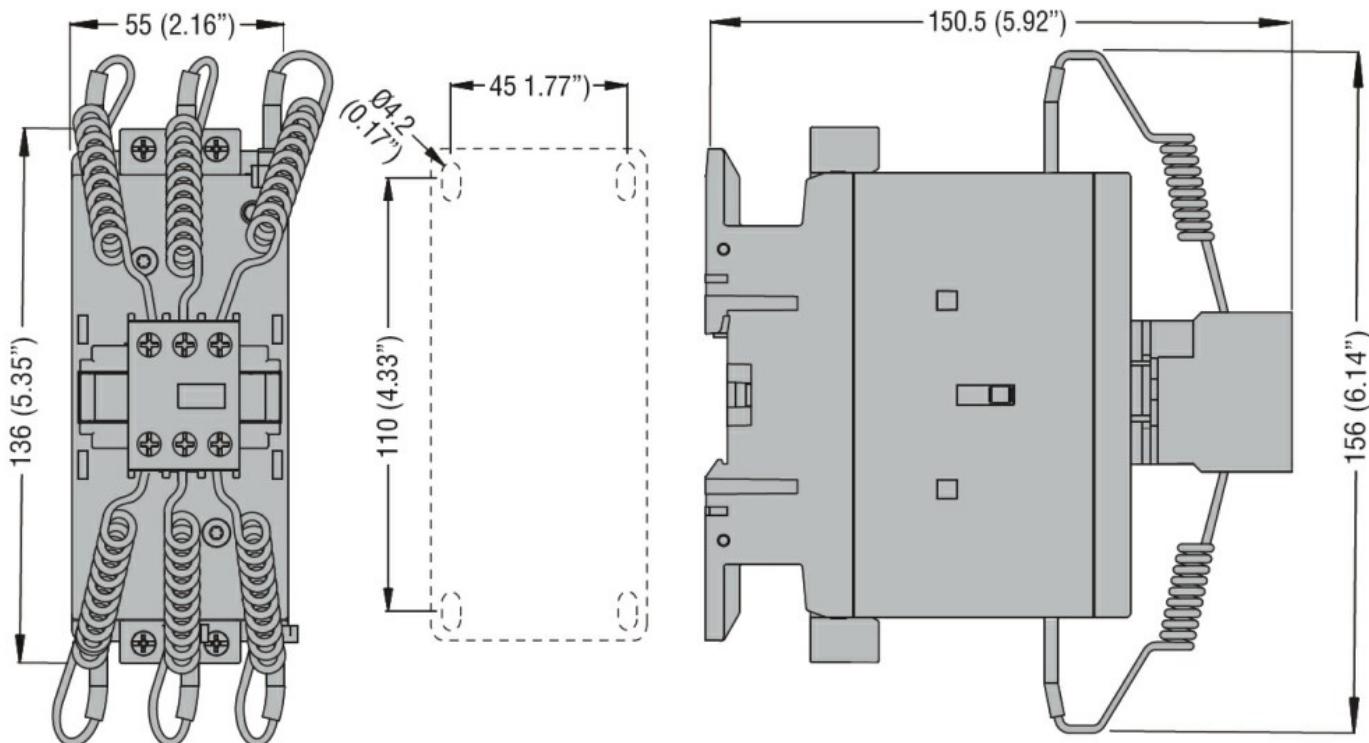




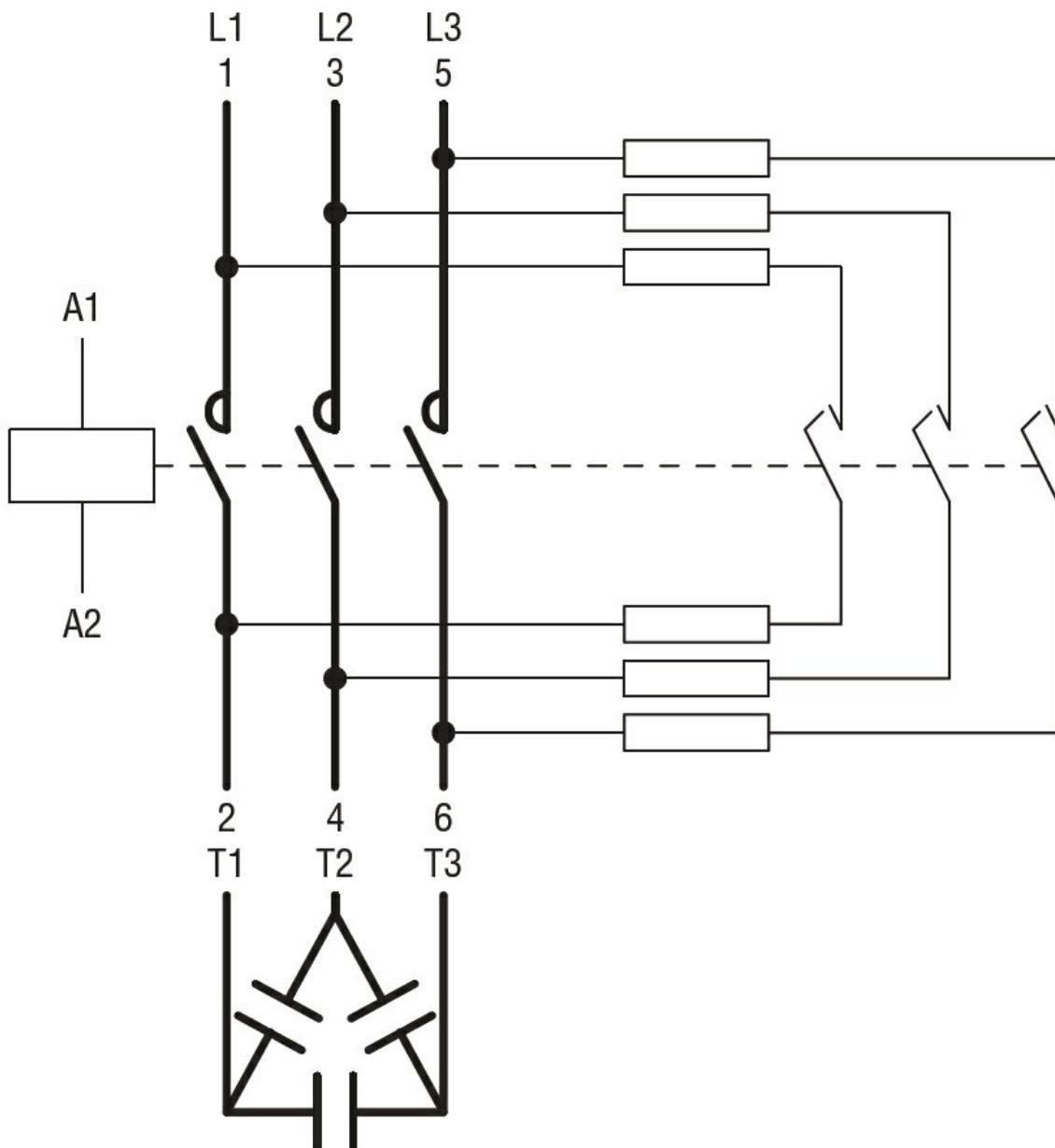
Product designation	Power contactor		
Product type designation	BFK50		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}		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)		$m\Omega$	0.8
Power dissipation per pole (average value)	I_{th}	W	6.5
Tightening torque for terminals	min	Nm	4
	max	Nm	5
	min	I_{bin}	2.95
	max	I_{bin}	3.69
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I_{bin}	0.8
	max	I_{bin}	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 mechanical load	cycles	400000 15000000		
EMC compatibility	yes				
AC coil operating					
Rated AC voltage at 60Hz	V	120			
AC operating voltage	of 60Hz coil powered at 60Hz pick-up				
	min max	%Us %Us	80 110		
	drop-out				
	min max	%Us %Us	20 55		
AC average coil consumption at 20°C					
of 60Hz coil powered at 60Hz	in-rush holding	VA VA	210 15		
Dissipation at holding ≤20°C 50Hz	W				
Max cycles frequency					
Mechanical operation	cycles/h				
Operating times	3600				
Average time for Us control					
in AC					
	Closing NO	min max	ms ms		
		12 28			
	Opening NO	min max	ms ms		
		8 22			
in DC					
	Closing NO	min max	ms ms		
		40 85			
	Opening NO	min max	ms ms		
		20 55			
UL technical data					
Rated operational voltage AC (UL)	V	600			
General USE					
Contactor					

Ambient conditions	AC current	A	90
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