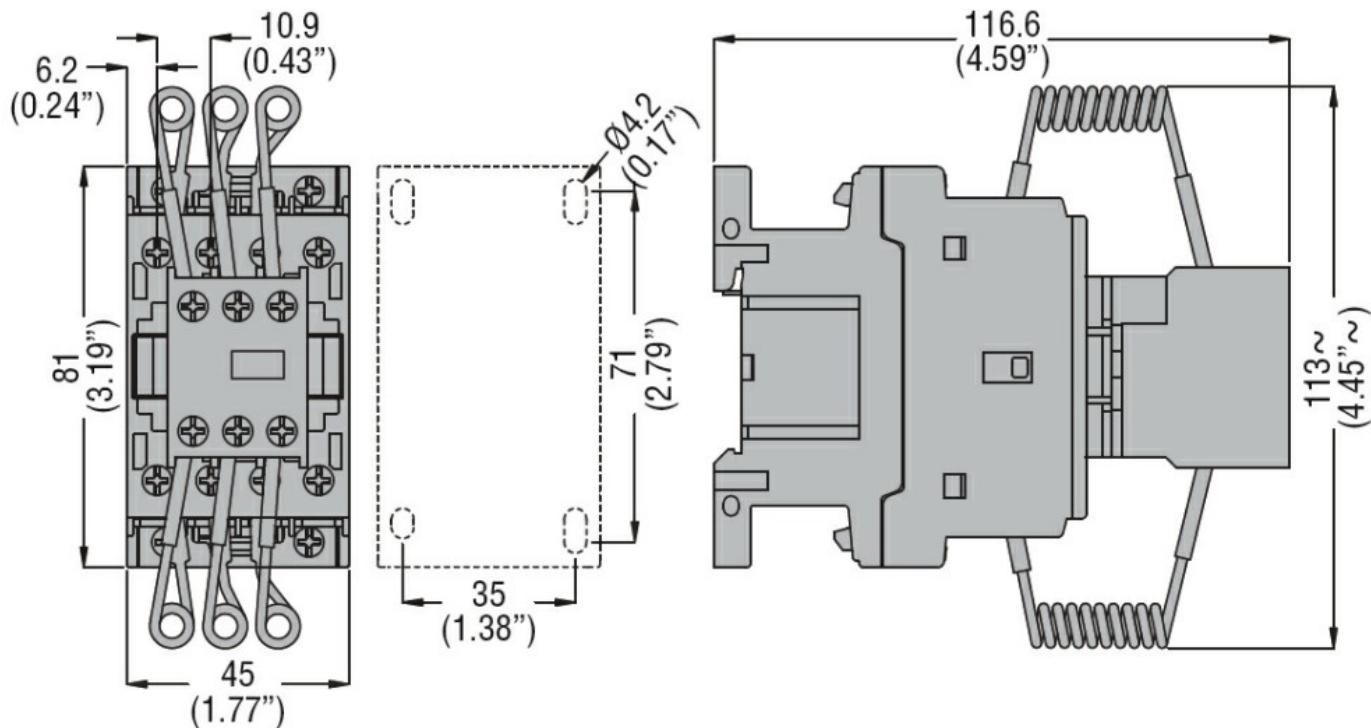




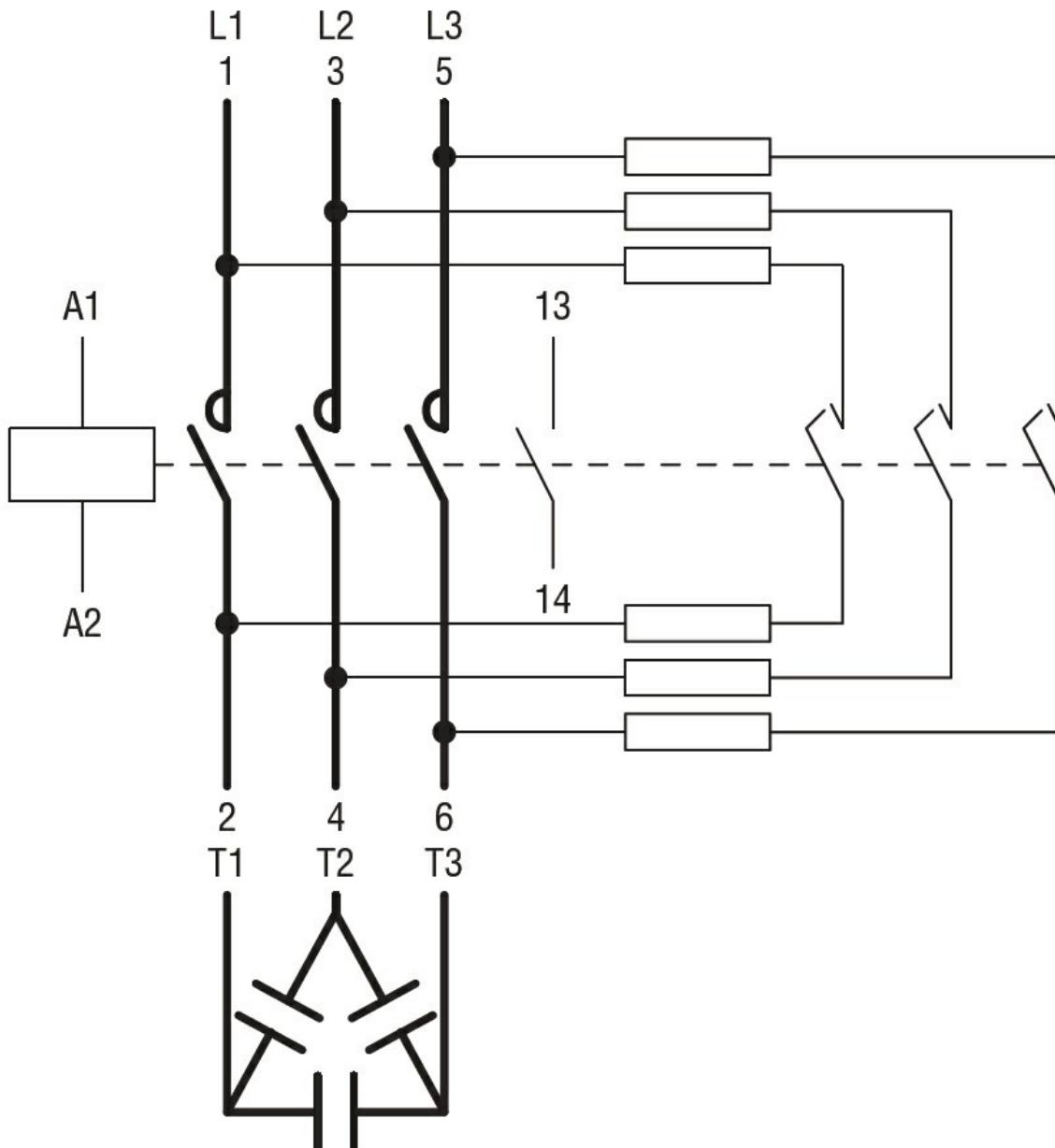
Product designation	Power contactor		
Product type designation	BFK09		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	A	25	
Rated operational power AC-6b ($T=40^\circ C$)	230V	kvar	4.5
	400V	kvar	7.5
	440...480V	kvar	9
	690V	kvar	10
Short-time allowable current for 10s (IEC/EN60947-1)	A	150	
Protection fuse	gG (IEC)	A	16
Making capacity (RMS value)	A	90	
Breaking capacity at voltage	440V	A	72
	500V	A	72
	690V	A	71
Resistance per pole (average value)	m?	2.5	
Power dissipation per pole (average value)	I_{th}	W	1.6
Tightening torque for terminals	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
	max	lbin	1.5
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		10
Flexible w/o lug conductor section	min	mm ²	1
	max	mm ²	6
Flexible c/w lug conductor section	min	mm ²	1

	max	mm ²	4
Flexible with insulated spade lug conductor section			
	min	mm ²	1
	max	mm ²	4
Power terminal protection according to IEC/EN 60529	IP20 when wired		
Mechanical features			
Operating position	normal	Vertical plan ±30°	
	allowable		
Fixing	Screw / DIN rail 35mm		
Weight	g	428	
Conductor section			
AWG/kcmil conductor section	max	10	
Auxiliary contact characteristics			
Thermal current I _{th}	A	10	
IEC/EN 60947-5-1 designation	A600 - P600		
Operating current AC15	230V	A	3
	400V	A	1.9
	500V	A	1.4
Operating current DC12	110V	A	5.7
Operating current DC13	24V	A	5.7
	48V	A	2.9
	60V	A	2.3
	110V	A	1.25
	125V	A	1.1
	220V	A	0.6
	600V	A	0.1
Operations			
Mechanical life	cycles	20000000	
Electrical life	cycles	400000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	400000
	mechanical load	cycles	20000000
Mirror contacts according to IEC/EN 609474-4-1	YES		
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	6.5	
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	10
		max	ms	20
	Closing NC			
		min	ms	14
		max	ms	28
UL technical data				
General USE				
Contactor			AC current	A 25
Auxiliary contacts			AC voltage	V 600
			AC current	A 10
			DC voltage	V 250
			DC current	A 1
Contact rating of auxiliary contacts according to UL				A600 - P600
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