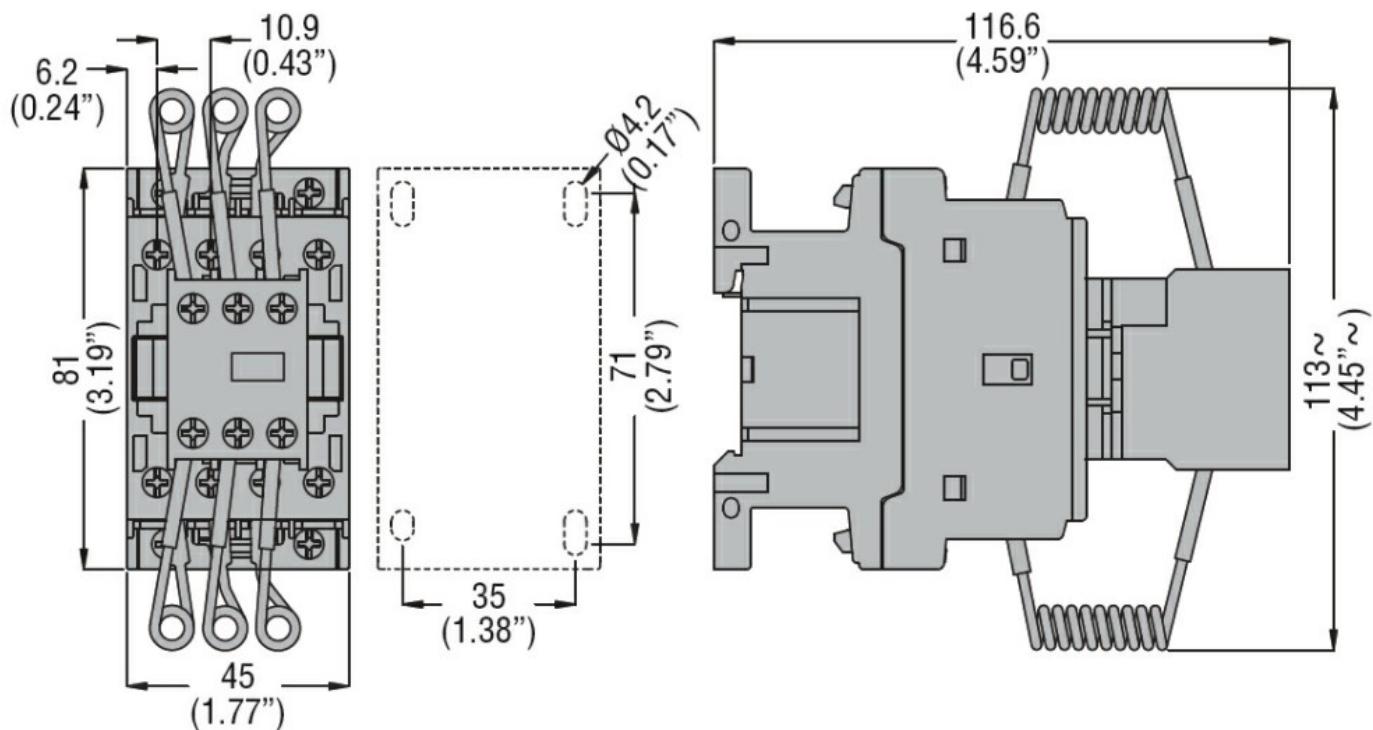




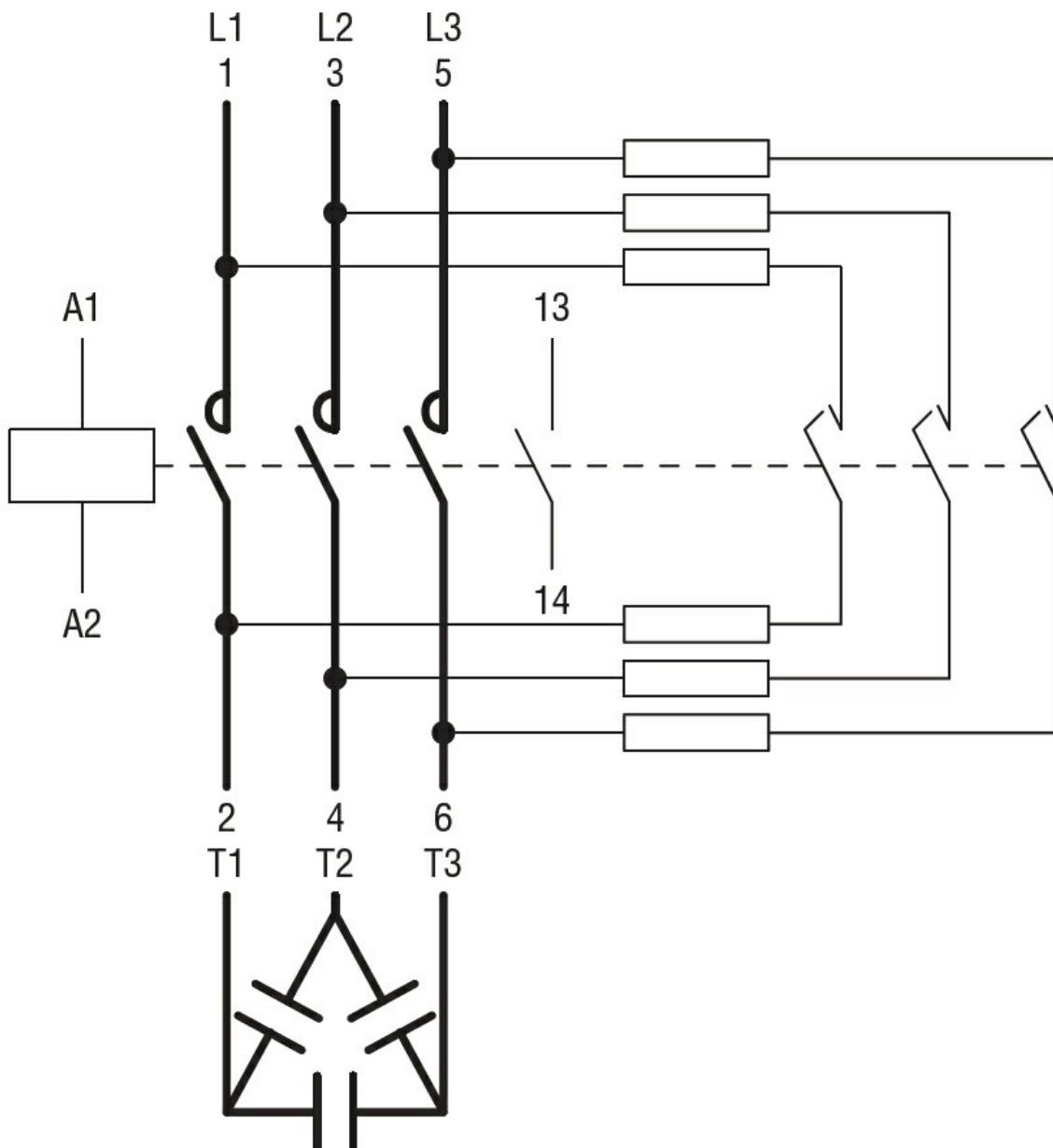
Product designation	Power contactor		
Product type designation	BFK18		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	A	32	
Rated operational power AC-6b ($T \leq 40^\circ C$)	230V	kvar	9
	400V	kvar	15
	440...480V	kvar	17
	690V	kvar	20
Short-time allowable current for 10s (IEC/EN60947-1)	A	200	
Protection fuse	gG (IEC)	A	40
Making capacity (RMS value)	A	180	
Breaking capacity at voltage	440V	A	144
	500V	A	120
	690V	A	94
Resistance per pole (average value)	m?	2.5	
Power dissipation per pole (average value)	I_{th}	W	2.6
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

Flexible with insulated spade lug conductor section	max	mm ²	4	
	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°		
Fixing	Screw / DIN rail 35mm			
Weight	g	4080		
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 60Hz	V	230		
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 holding	VA	75
		VA	9
Dissipation at holding $\leq 20^{\circ}\text{C}$ 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 32
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	$^{\circ}\text{C}$ -50
		max	$^{\circ}\text{C}$ 70
Storage temperature		min	$^{\circ}\text{C}$ -60
		max	$^{\circ}\text{C}$ 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