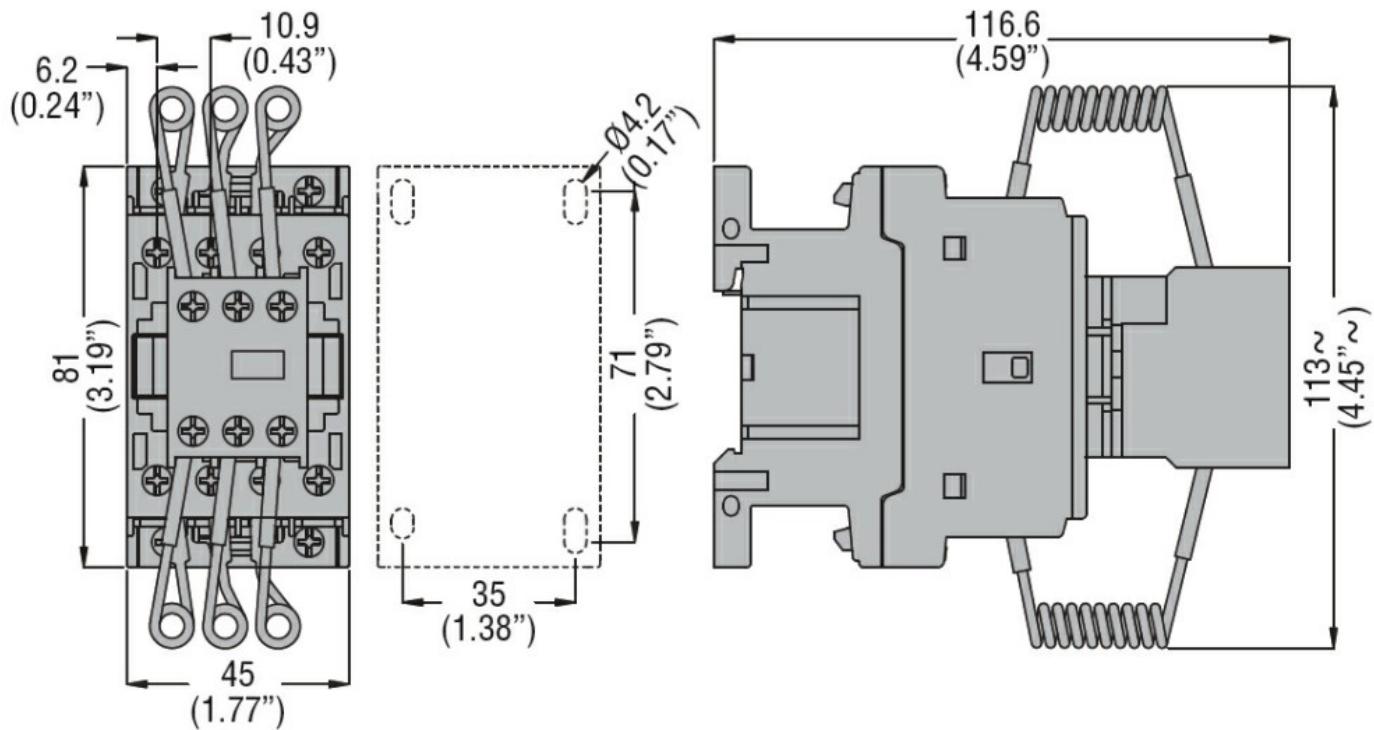




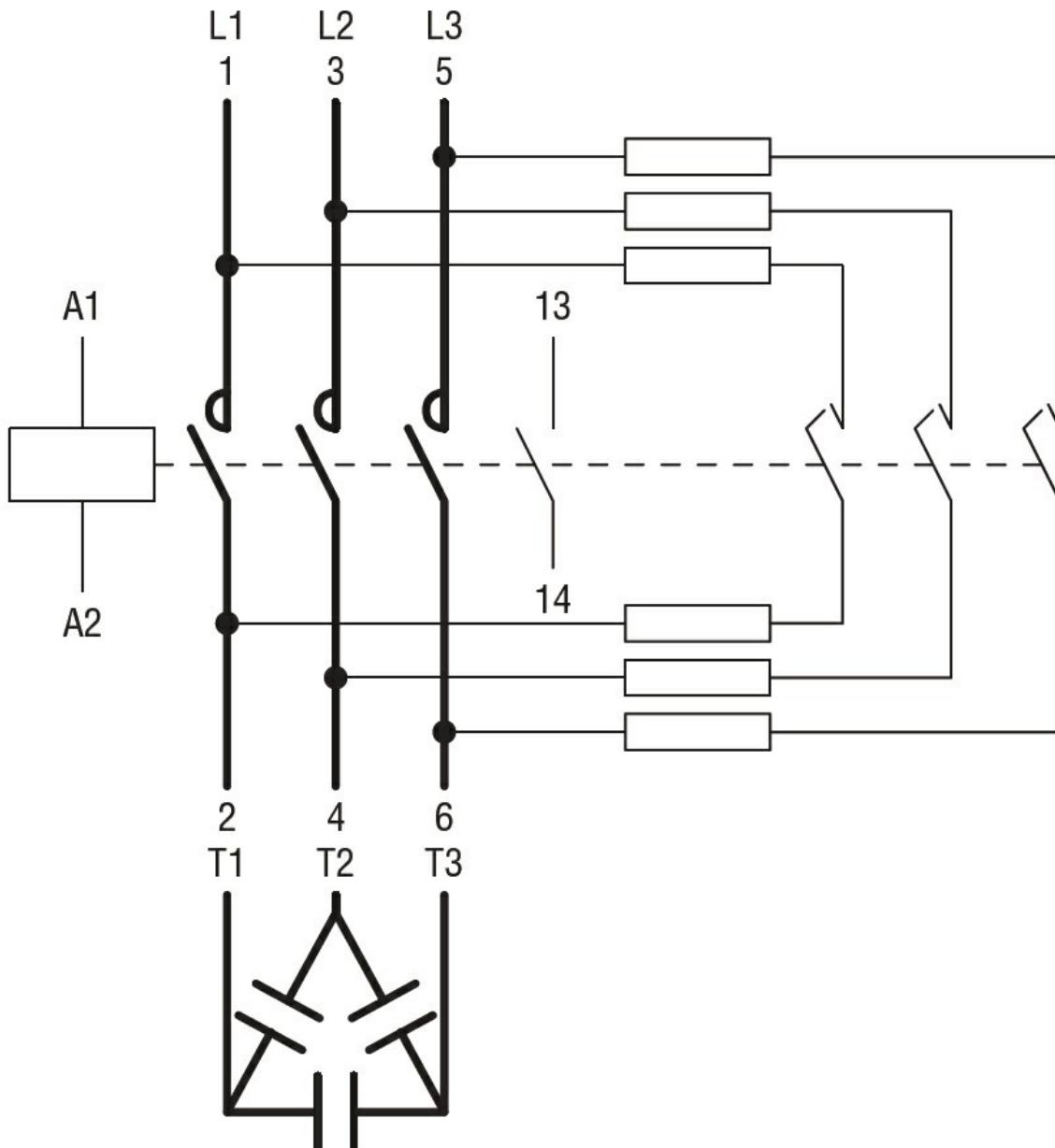
Product designation	Power contactor		
Product type designation	BFK18		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	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	460			
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	48			
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	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	°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