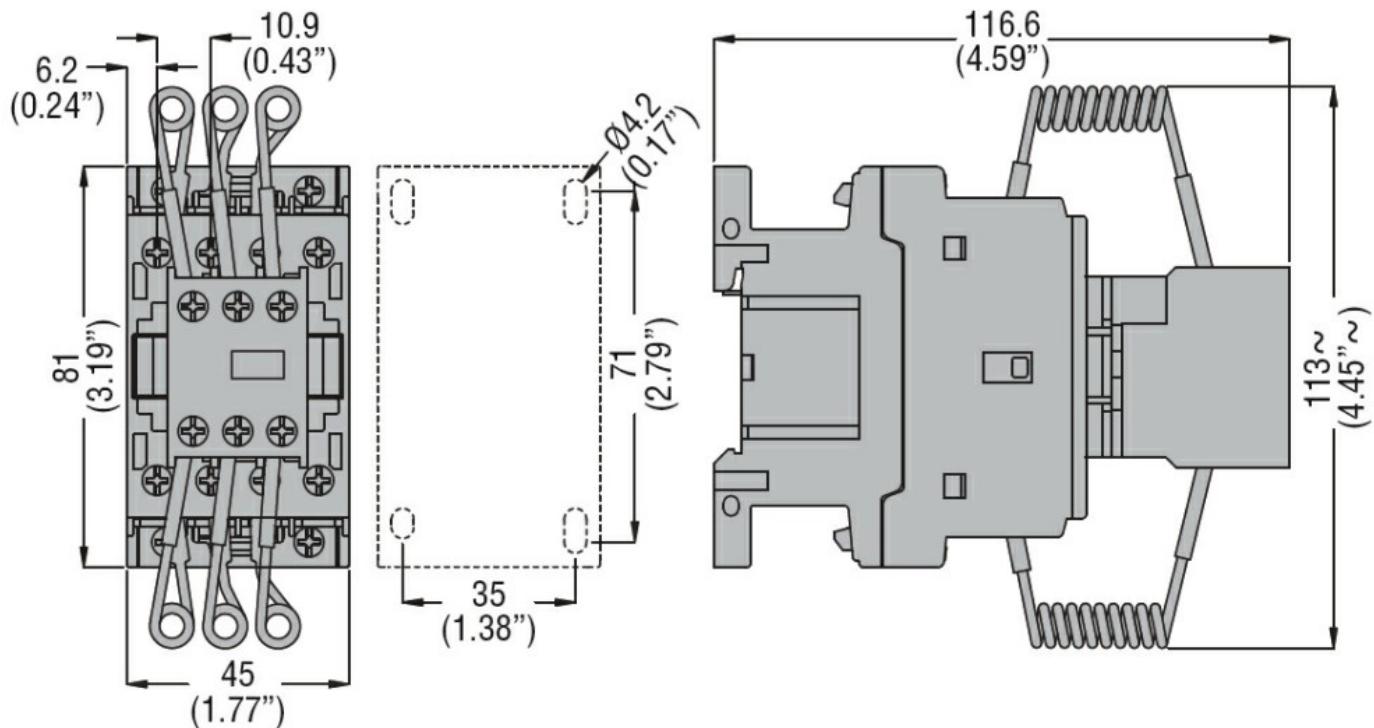




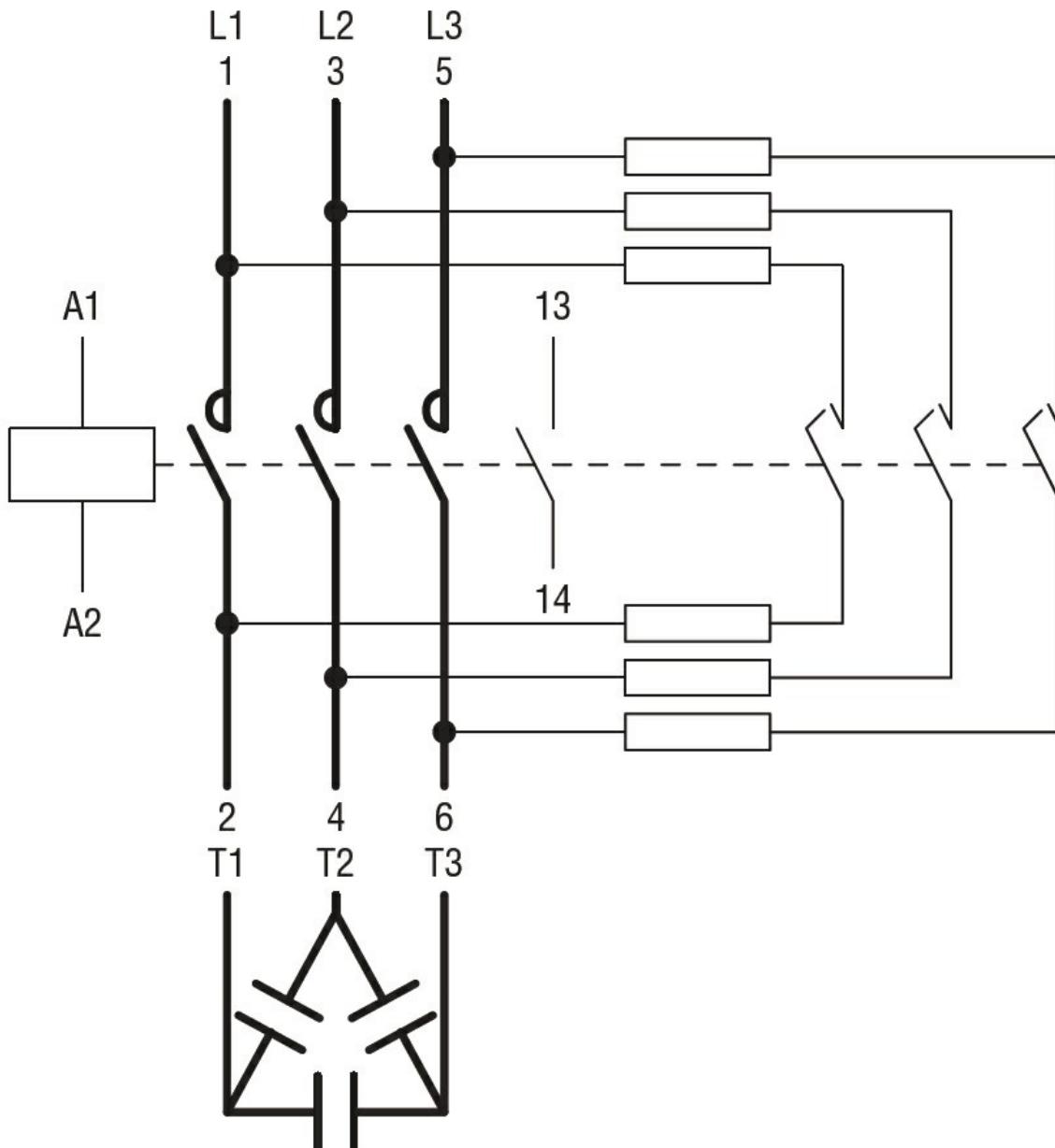
Product designation	Power contactor		
Product type designation	BFK18		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	690	
Rated impulse withstand voltage U_{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}		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)		$m\Omega$	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	Ibin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	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 properly wired		
Mechanical features			
Operating position	normal	allowable	Vertical plan ±30°
Fixing	Screw / DIN rail 35mm		
Weight	g	428	
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
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 holding	VA VA	75 9
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	70 6.5
of 60Hz coil powered at 60Hz	in-rush holding	VA VA	75 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 max	ms ms	8 24
Opening NO	min max	ms ms	10 20
Closing NC	min max	ms ms	14 28
UL technical data			
Rated operational voltage AC (UL)		V	600
General USE			
Contactor	AC current	A	32
Auxiliary contacts	AC voltage AC current DC voltage DC current	V A V A	600 10 250 1
Contact rating of auxiliary contacts according to UL			A600 - P600
Ambient conditions			
Temperature			
Operating temperature	min max	°C °C	-50 70
Storage temperature	min max	°C °C	-60 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

EAC

ETIM classification

ETIM 8.0

EC001079 -
Capacitor
contactor