



Product designation	Power contactor		
Product type designation	BFK12		
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	28
Rated operational power AC-6b ($T \leq 40^\circ C$)	230V	kvar	7
	400V	kvar	12.5
	440...480V	kvar	14
	690V	kvar	16
Short-time allowable current for 10s (IEC/EN60947-1)		A	150
Protection fuse	gG (IEC)	A	25
Making capacity (RMS value)		A	120
Breaking capacity at voltage	440V	A	96
	500V	A	96
	690V	A	94
Resistance per pole (average value)		m?	2.5
Power dissipation per pole (average value)	I_{th}	W	2
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	416	
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	24	
AC operating voltage			
of 60Hz coil powered at 60Hz			
	pick-up	min	%Us
		max	%Us
	drop-out	min	%Us
		max	%Us
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	28
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

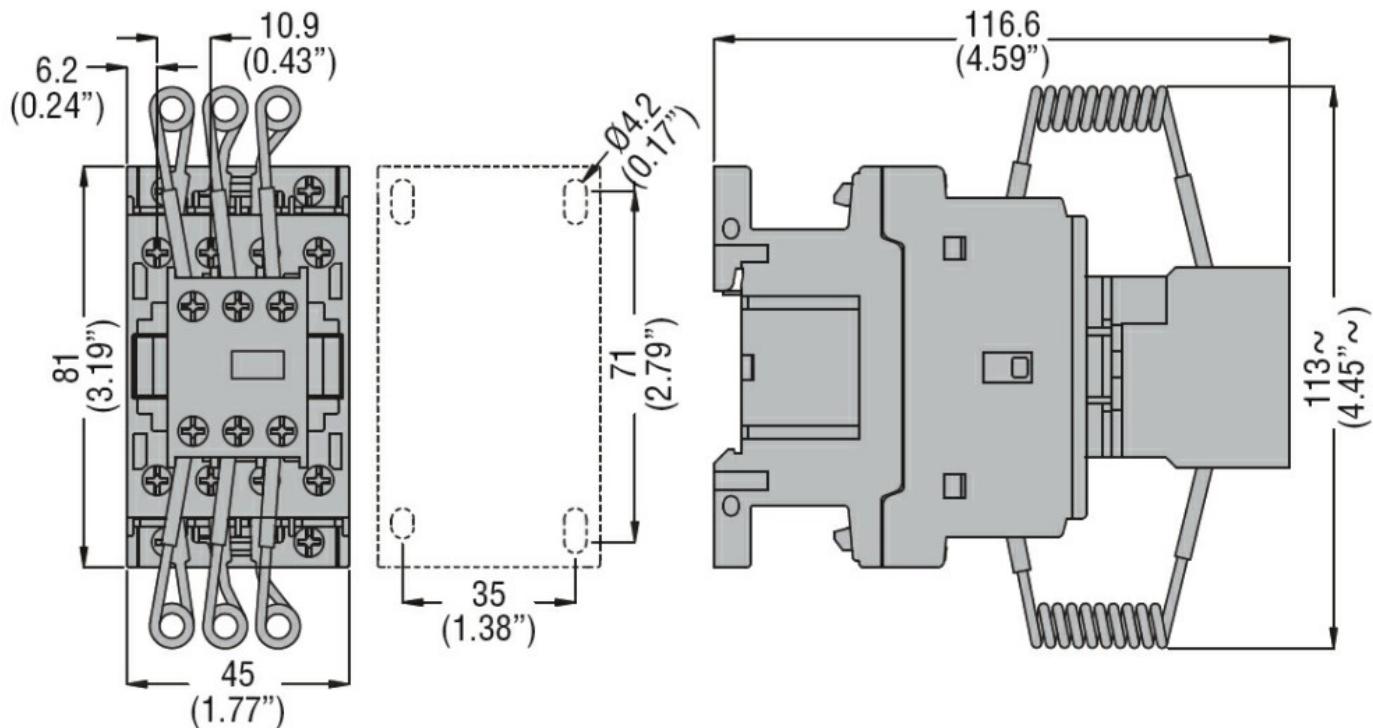
Operating temperature	min	$^{\circ}\text{C}$	-50
	max	$^{\circ}\text{C}$	70
Storage temperature			
	min	$^{\circ}\text{C}$	-60
	max	$^{\circ}\text{C}$	80

Max altitude m 3000

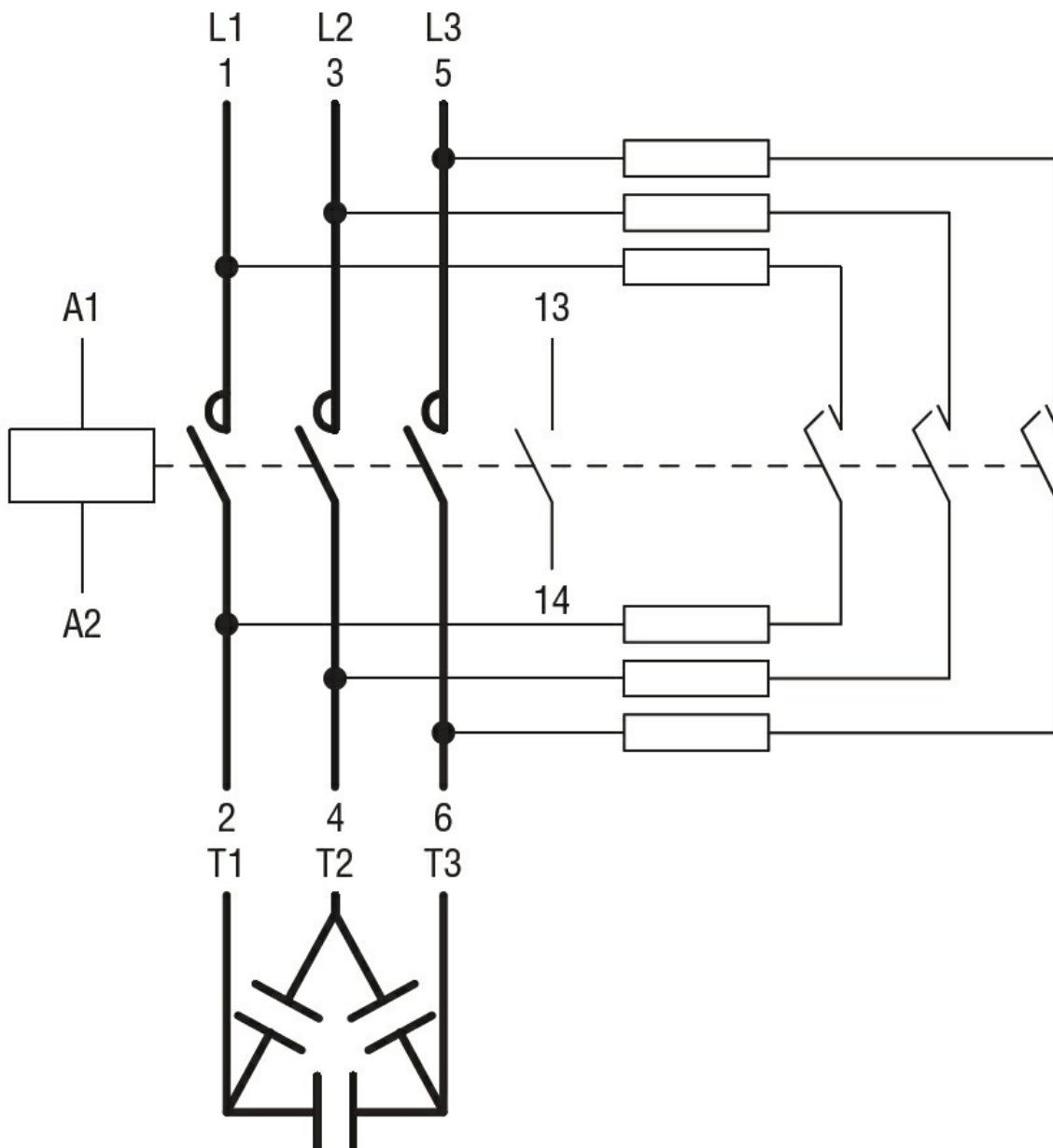
Resistance & Protection

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