



Product designation			Power contactor
Product type designation			BFK18
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	32	
Rated operational power AC-6b (T≤40°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
		A	180
Making capacity (RMS value)			
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)	Ith	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	mm²	1
	max	mm²	6
Flexible c/w lug conductor section	min	mm²	1

		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal protection according to IEC/EN 60529				IP20 when wired
Mechanical features				
Operating position		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	418
Conductor section				
AWG/kcmil conductor section				
		max		10
Auxiliary contact characteristics				
Thermal current Ith			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 contats according to IEC/EN 609474-4-1				YES
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60Hz			V	120
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	VA	75
	holding	VA	9
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	2.5

Max cycles frequency

Mechanical operation	cycles/h	3600
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Operating times

Average time for U_s 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
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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

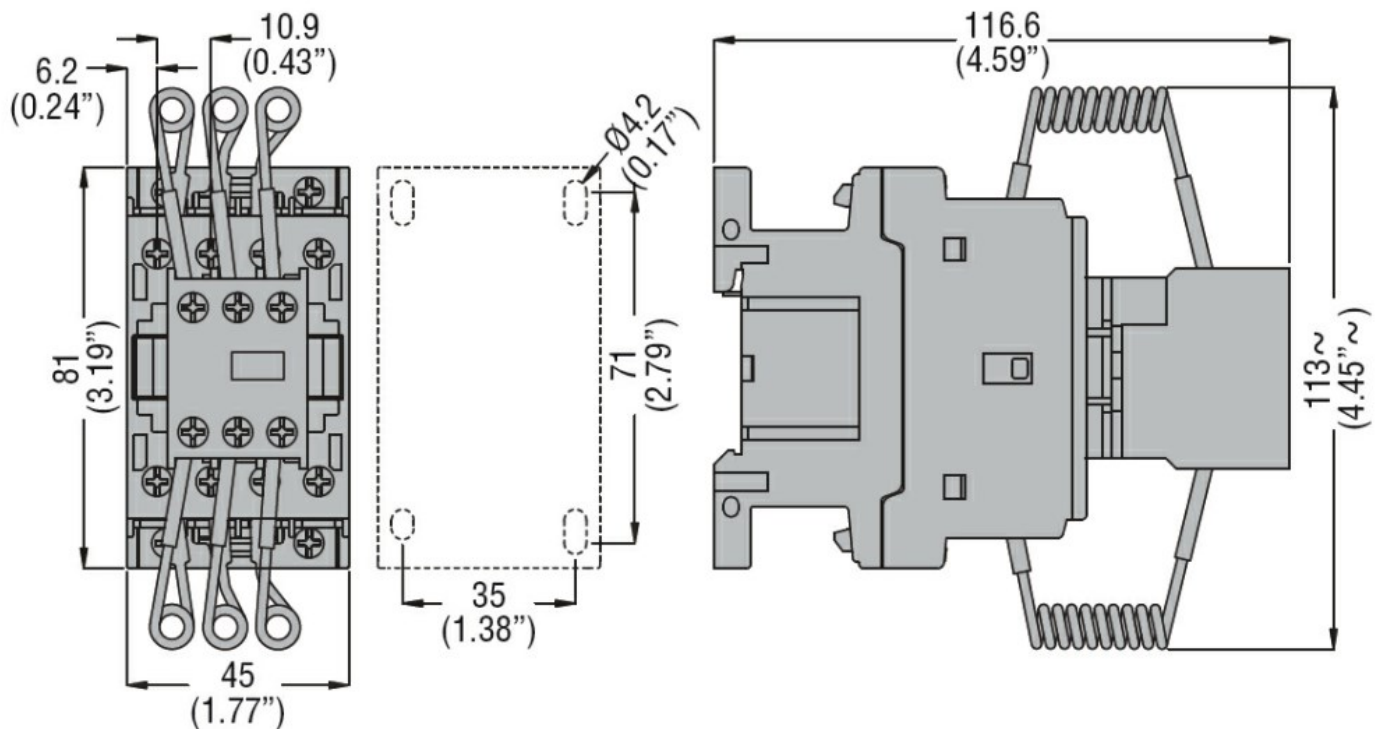
m 3000

Resistance & Protection

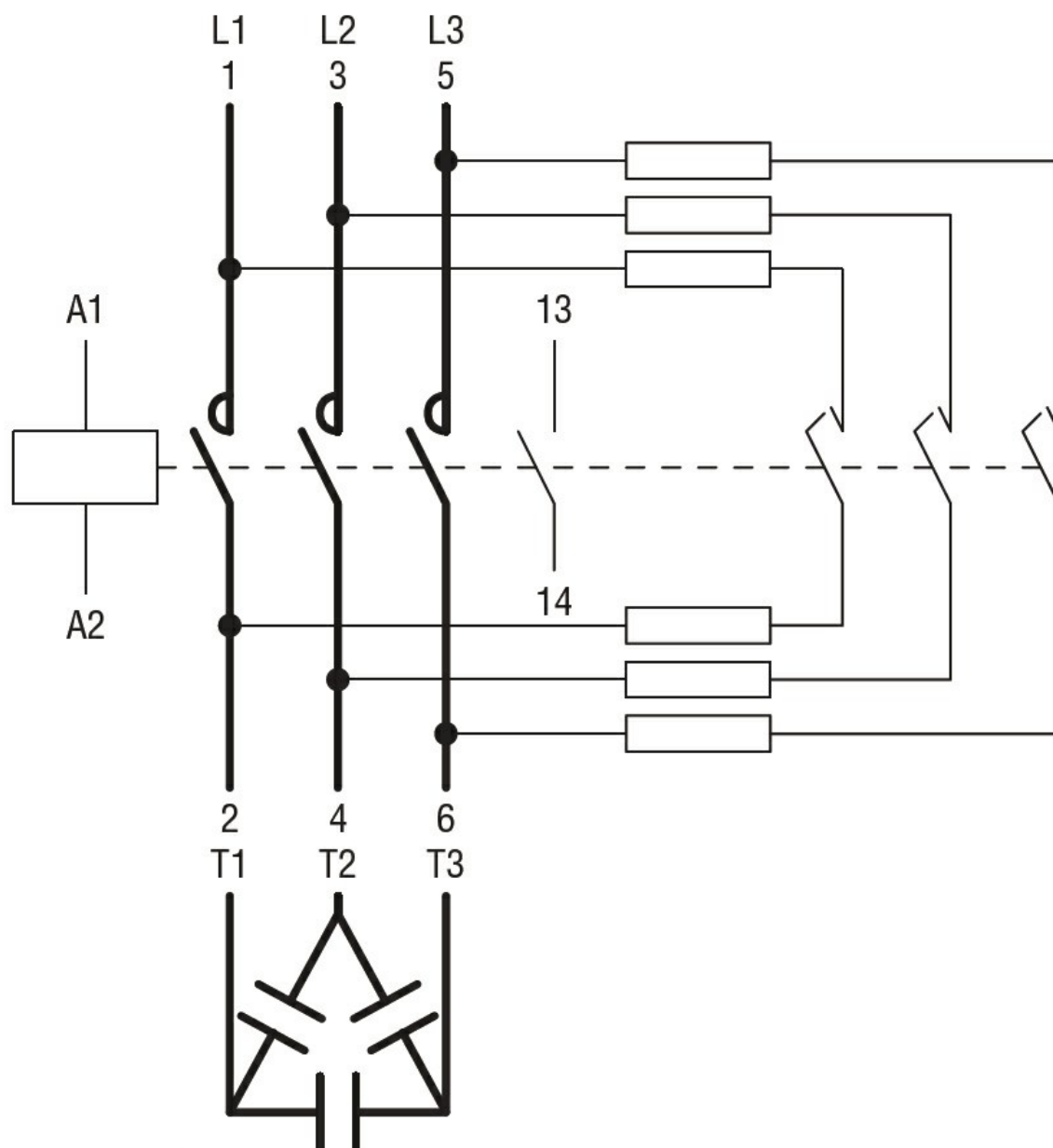
Pollution degree

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