BFK1810A110

CONTACTOR FOR POWER FACTOR CORRECTION WITH AC CONTROL CIRCUIT, INCLUDING LIMITING RESISTORS, MAXIMUM IEC OPERATIONAL POWER 400V = 15KVAR, COIL 110VAC 50/60HZ

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
Making capacity (RMS value)		A	180
Breaking capacity at voltage			
	440V	A	144
	500V	A	120
	690V	A	94
Resistance per pole (average value)		mΩ	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 properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±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 50/60Hz			V	110
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			

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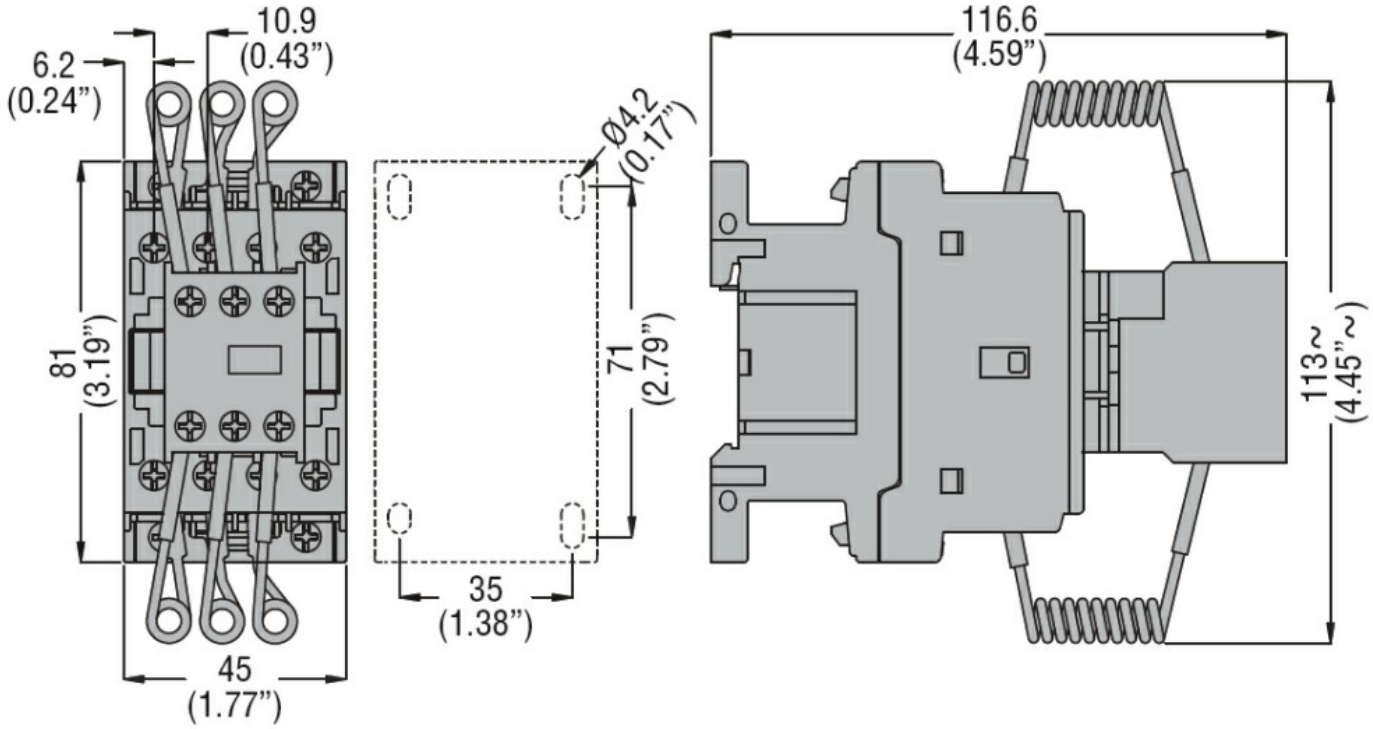
			min	%Us	85
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
AC average coil consumption at 20°C					
	of 50/60Hz coil powered at 50Hz				
			in-rush	VA	75
			holding	VA	9
	of 50/60Hz coil powered at 60Hz				
			in-rush	VA	70
			holding	VA	6.5
	of 60Hz coil powered at 60Hz				
			in-rush	VA	75
			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

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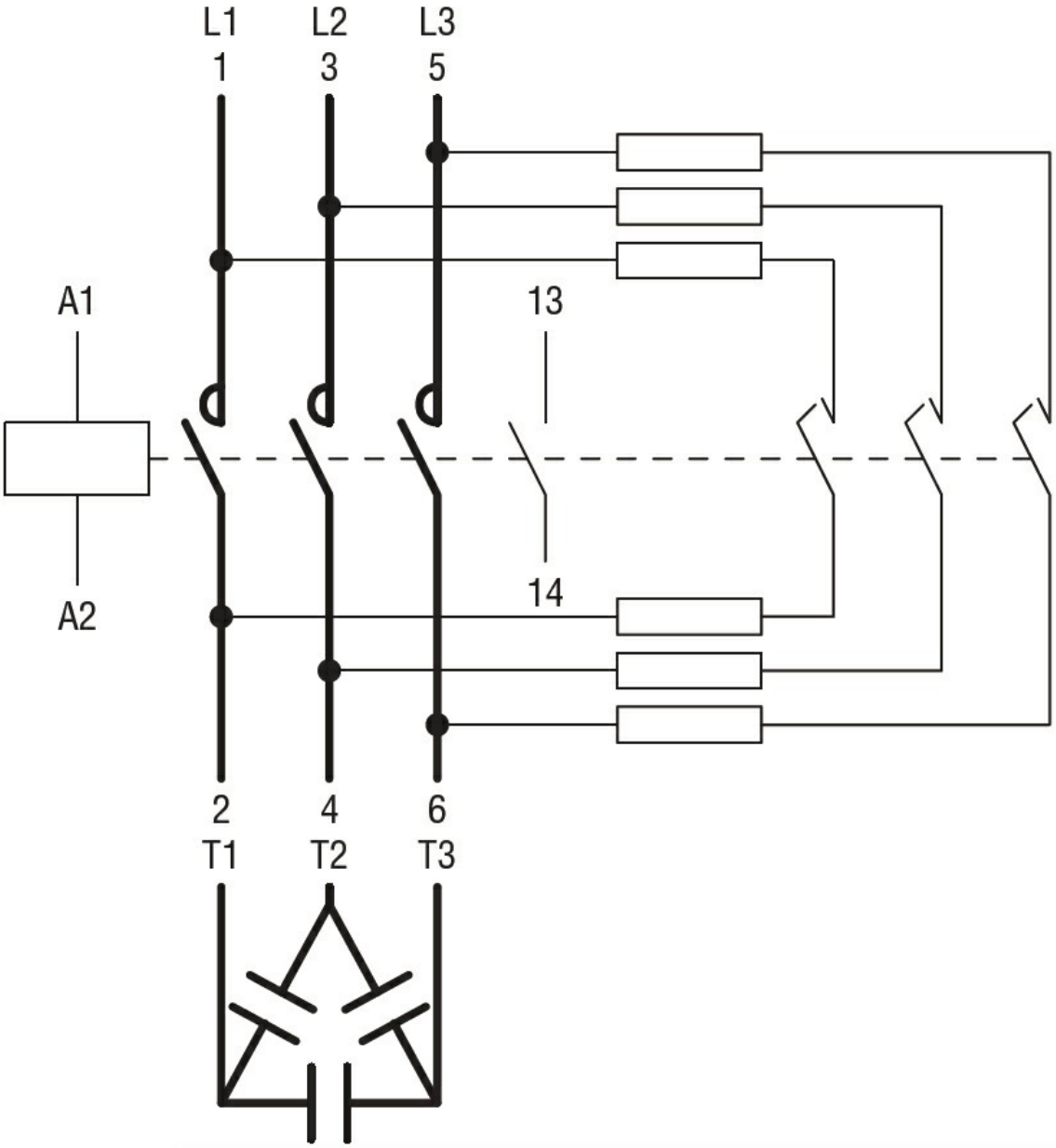

Certifications and compliance

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