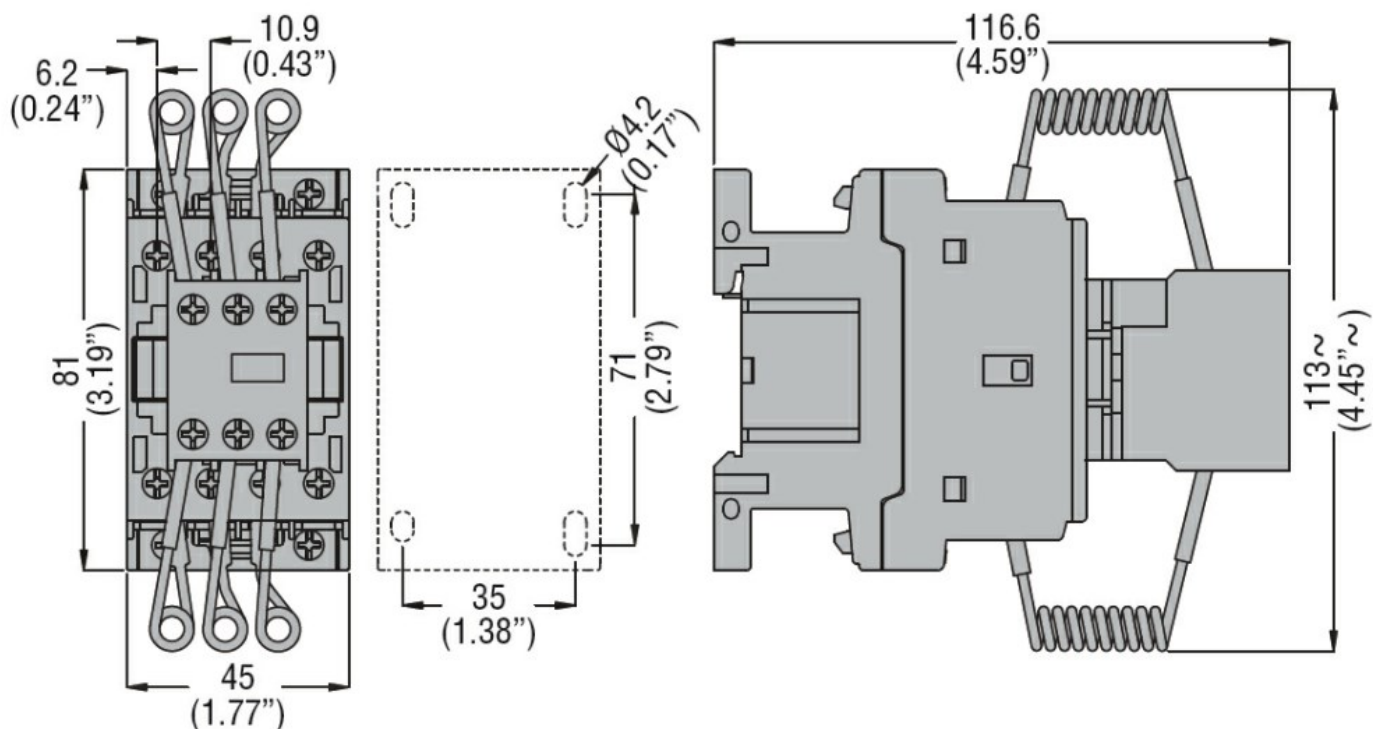




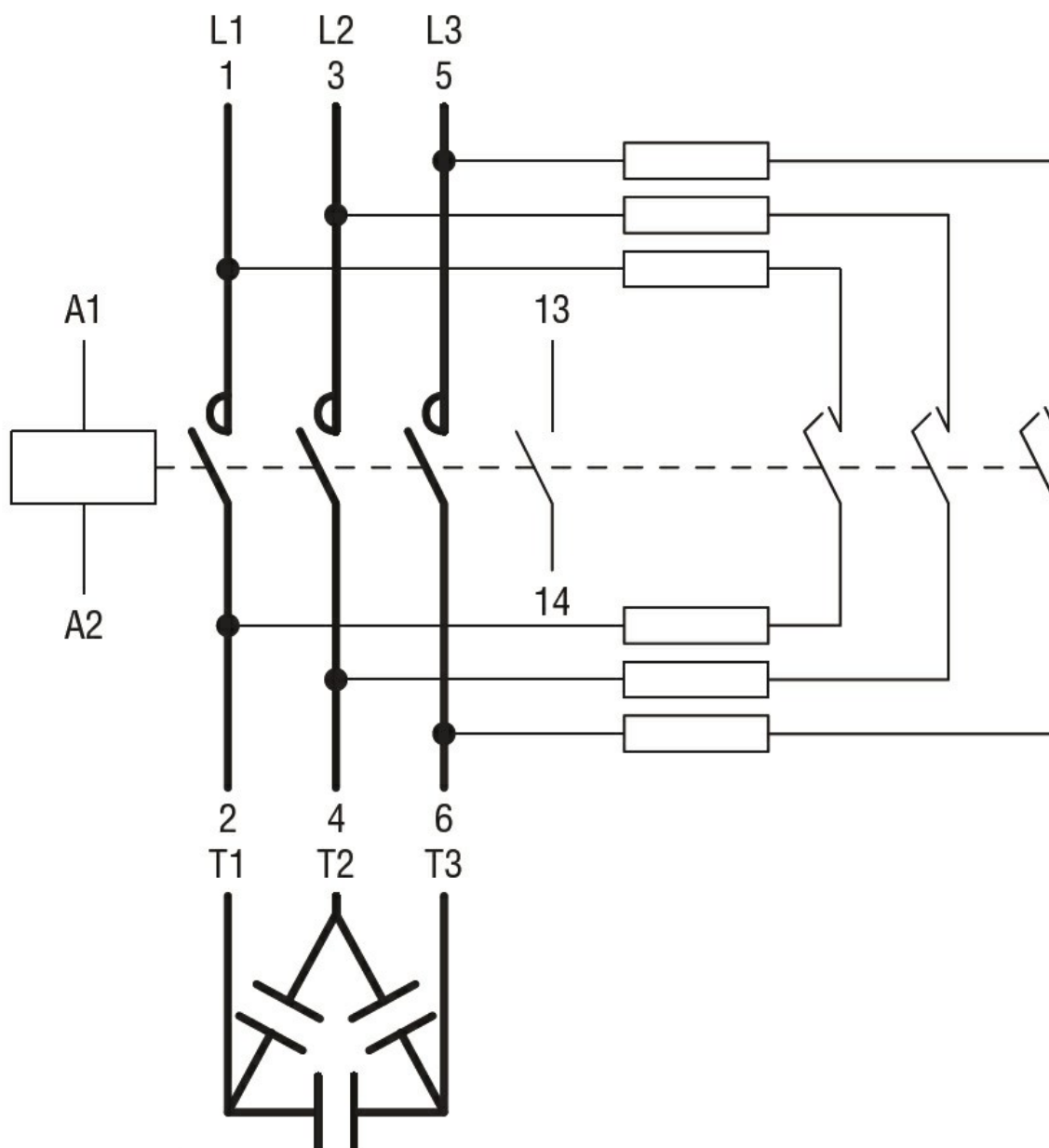
Product designation			Power contactor
Product type designation			BFK12
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	28	
Rated operational power AC-6b (T≤40°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
		A	120
Making capacity (RMS value)			
Breaking capacity at voltage	440V	A	96
	500V	A	96
	690V	A	94
Resistance per pole (average value)	mΩ	2.5	
Power dissipation per pole (average value)	Ith	W	2
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

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 properly wired
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	418
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	24
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				
Rated operational voltage AC (UL)			V	600
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	°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/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