



Product designation
Product type designation

Power contactor
BFK32

Contact characteristics

Number of poles	nr.	3
Rated insulation voltage U_i	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operating frequency		
	Operational frequency min	Hz 25
	Operational frequency max	Hz 400
Conventional free air thermal current I_{th}	A	56
Operating current		
	Operational current AC3 ($\leq 440V \leq 55^\circ C$)	A 32
	Operational current AC4 (400V)	A 13.5
Short-time allowable current for 10s (IEC/EN60947-1)	A	320
Protection fuse		
	gG (IEC)	A 63
	aM (IEC)	A 32
Making capacity (RMS value)	A	320
Breaking capacity at voltage		
	Breaking capacity 440V	A 256
	Breaking capacity 500V	A 240
	Breaking capacity 690V	A 192
Resistance per pole (average value)	m Ω	2
Power dissipation per pole (average value)		
	Power dissipation pole (average value) I_{th}	W 6
	AC3	W 2
Tightening torque for terminals		
	min	Nm 2.5
	max	Nm 3
	min	lbft 1.8
	max	lbft 2.2
Tightening torque for coil terminal		
	min	Nm 0.8
	max	Nm 1
	min	lbft 0.59
	max	lbft 0.74
max number of wires simultaneously connectable	nr.	2
Conductor section		
AWG		
	min	14
	max	6
Flexible w/o lug conductor section		
	min	mm ² 2.5
	max	mm ² 16
Flexible c/w lug conductor section		

		min	mm ²	1
		max	mm ²	10
Flexible with insulated spade lug conductor section				
		min	mm ²	1
		max	mm ²	10
Power terminal protection according to IEC/EN 60529				IP20
Ambient conditions				
Temperature				
Operating temperature				
		min	°C	-50
		max	°C	70
Storage temperature				
		min	°C	-60
		max	°C	80
Max altitude			m	3,000
Operating position				
			normal allowable	Vertical plan ±30°
Mounting				Screw / DIN rail 35mm
Weight			g	0.432
Operations				
Mechanical life			Cycles	20,000,000
Electrical life			Cycles	1600000
Safety related data				
Mirror contacts according to IEC/EN 60947-4-1				Yes
EMC compatibility				Yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	12
		max	V	600
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	40
		max	%Us	55
of 60Hz coil powered at 60Hz				
pick-up				
		min	%Us	80
		max	%Us	110
drop-out				
		min	%Us	20
		max	%Us	55
AC operating voltage				

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 $\leq 20^{\circ}\text{C}$ 50Hz

W	2.5
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Max cycles frequency

Mechanical operations

Cycles/h 3,600

Operating times

Average time for U_s control

in AC

Closing NO

min	ms	8
max	ms	24

Opening NO

min	ms	5
max	ms	15

Closing NC

min	ms	9
max	ms	20

Opening NC

min	ms	9
max	ms	17

in DC

Closing NO

min	ms	53
max	ms	65

Opening NO

min	ms	14
max	ms	18

Closing NC

min	ms	23
max	ms	28

Opening NC

min	ms	46
max	ms	56

UL technical data

Full-load current (FLA) for three-phase AC motor

at 480V	A	27
at 600V	A	27

Yielded mechanical performance

for single-phase AC motor

at 110/120V	hp	3
at 230V	hp	7.5

for three-phase AC motor

at 200/208V	hp	10
at 220/230V	hp	10
at 460/480V	hp	20
at 575/600V	hp	25

Contact rating of auxiliary contacts according to UL

SI - A600

General USE

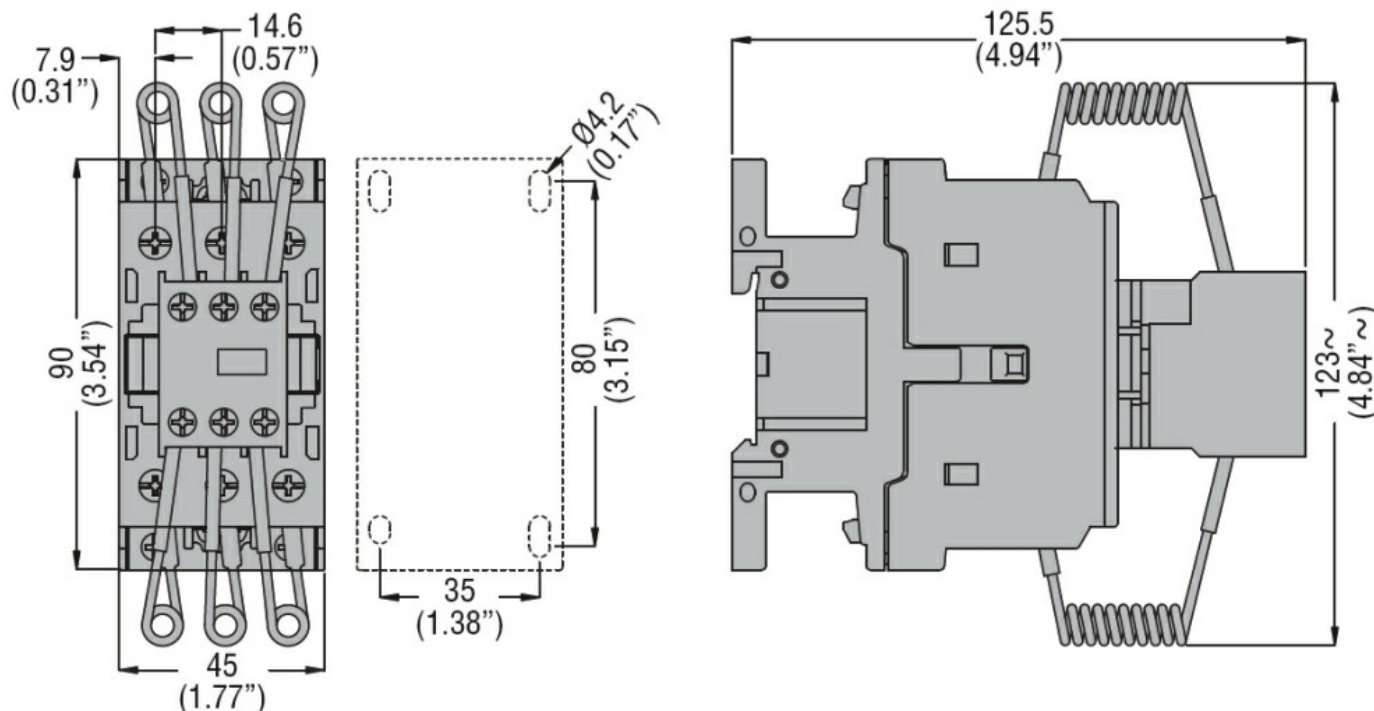
Contactor

AC current A 32

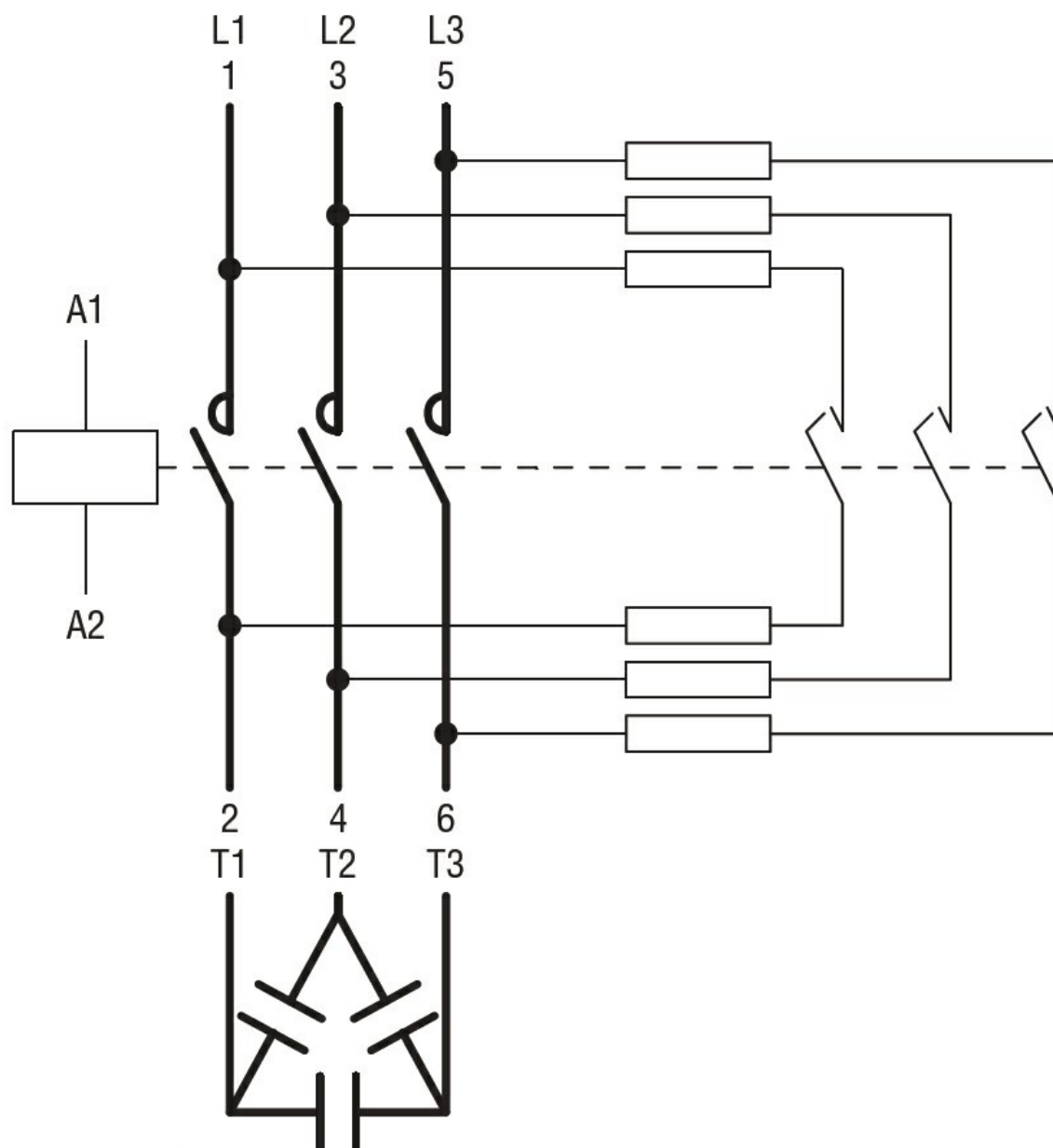
Auxiliary contacts

AC voltage V 600
AC current A 10
DC voltage V 250
DC current A 1

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

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

Compliance

$$\frac{\text{CCC}}{\text{cULus}} = \text{EAC}$$

ETIM 6 classification

EC000066 - Power contactor, AC switching