



Product designation	Power contactor		
Product type designation	BF65		
Contact characteristics			
Number of poles	nr.	3	
Rated insulation voltage U_i	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operating frequency	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current I_{th}	A	100	
Operating current	Operational current AC1 ($\leq 40^\circ\text{C}$)	A	100
	Operational current AC3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	65
	Operational current AC4 (400V)	A	31
Rated operational power AC1 ($T \leq 40^\circ\text{C}$)	230V	kW	38
	400V	kW	65
	500V	kW	82
	690V	kW	114
Rated operational power AC3 ($T \leq 55^\circ\text{C}$)	230V	kW	18.5
	400V	kW	30
	415V	kW	37
	440V	kW	37
	500V	kW	37
	690V	kW	45
1000V	kW	30	
Short-time allowable current for 10s (IEC/EN60947-1)	A	640	
Protection fuse	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)	A	650	
Breaking capacity at voltage	Breaking capacity 440V	A	520
	Breaking capacity 500V	A	425
	Breaking capacity 690V	A	376
Resistance per pole (average value)	m Ω	0.8	
Power dissipation per pole (average value)	Power dissipation pole (average value) I_{th}	W	8
	AC3	W	3.4
Tightening torque for terminals	min	Nm	4
	max	Nm	5
	min	lbft	2.95
	max	lbft	3.69

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1
min	lbft	0.8
max	lbft	0.74

max number of wires simultaneously connectable

nr.	2
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Conductor section

AWG

min	14
max	2

Flexible w/o lug conductor section

min	mm ²	1.5
max	mm ²	35

Flexible c/w lug conductor section

min	mm ²	1.5
max	mm ²	35

Power terminal protection according to IEC/EN 60529

IP20 front

Auxiliary contact characteristics

Operational current AC1 (≤40°C)

A 100

Operating current DC13

110V A Screw / DIN rail
35mm

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

m 3000

Operating position

normal allowable Vertical plan
±30°

Mounting

Screw / DIN rail
35mm

Weight

g 1.02

Operations

Mechanical life

Cycles 15000000

Electrical life

Cycles 1400000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	Cicli	1400000
mechanical load	Cicli	15000000

Mirror contacts according to IEC/EN 60947-4-1

yes

EMC compatibility

yes

AC coil operating

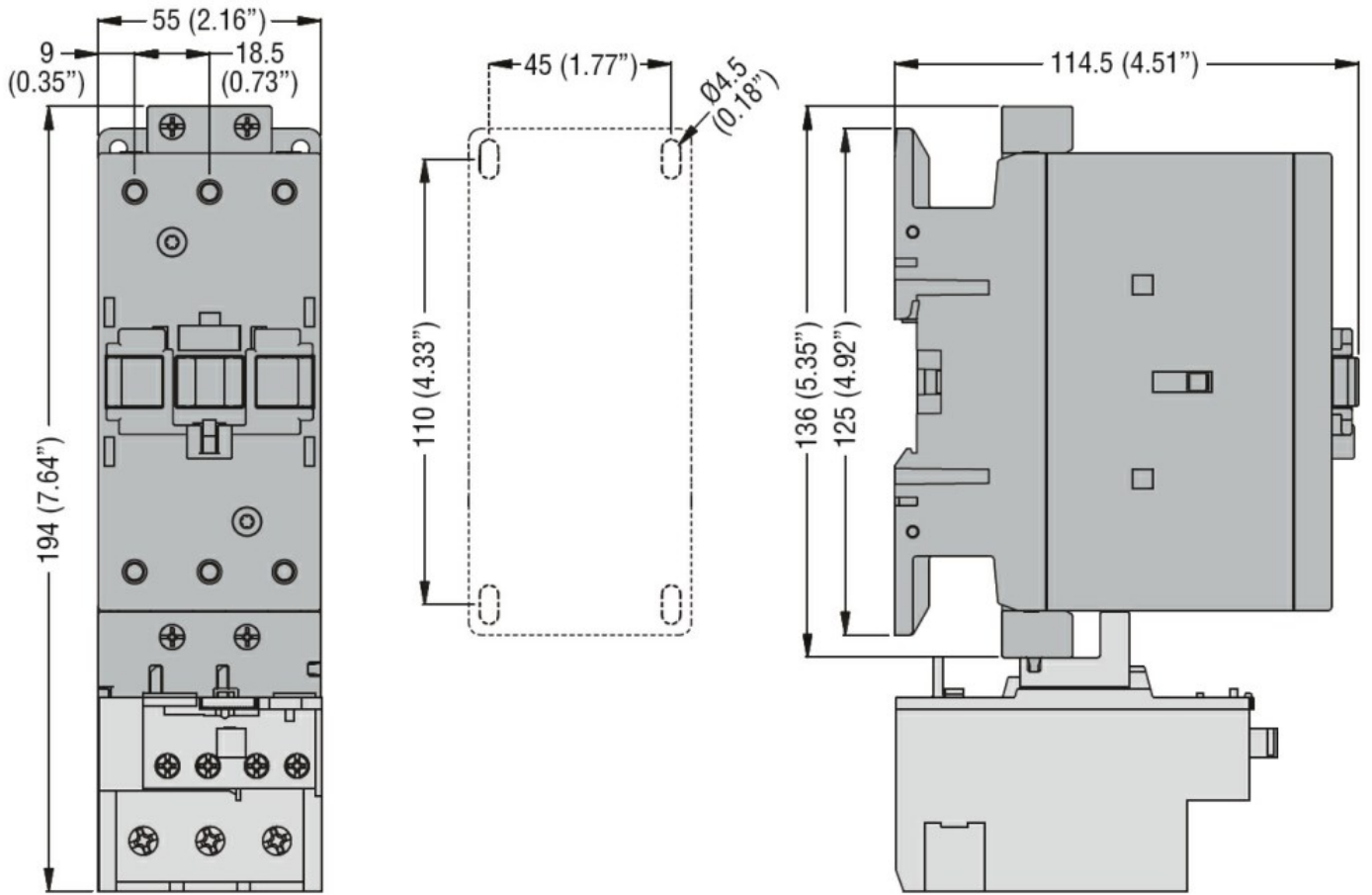
AC operating voltage

of 50/60Hz coil powered at 50Hz
pick-up

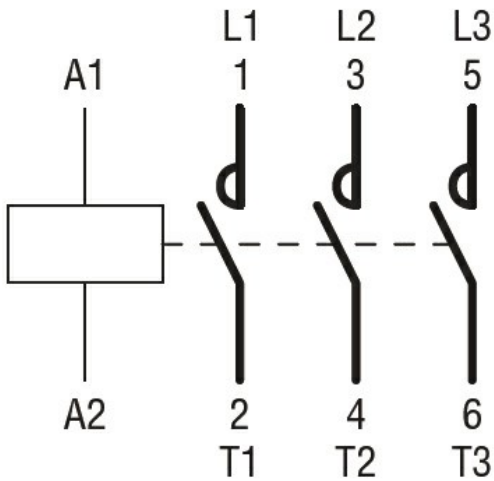
min	%Us	0.8
max	%Us	1.1

drop-out

		min	%Us	0.2
		max	%Us	0.55
of 50/60Hz coil powered at 60Hz				
	pick-up			
		min	%Us	0.85
		max	%Us	1.1
	drop-out			
		min	%Us	0.4
		max	%Us	0.55
of 60Hz coil powered at 60Hz				
	pick-up			
		min	%Us	0.8
		max	%Us	1.1
	drop-out			
		min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
of 50/60Hz coil powered at 50Hz				
		in-rush	VA	210
		holding	VA	15
of 50/60Hz coil powered at 60Hz				
		in-rush	VA	195
		holding	VA	13
of 60Hz coil powered at 60Hz				
		in-rush	VA	210
		holding	VA	15
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz				
			W	5.0
Max cycles frequency				
Mechanical operations				
			Cycles/h	3600
Operating times				
Average time for Us control				
	in AC			
		Closing NO		
		min	ms	12
		max	ms	28
		Opening NO		
		min	ms	8
		max	ms	22
UL technical data				
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	65
		at 600V	A	62
Yielded mechanical performance				
	for three-phase AC motor			
		at 200/208V	hp	20
		at 220/230V	hp	25
		at 460/480V	hp	50
		at 575/600V	hp	60
General USE				
	Contactor			
		AC current	A	32
Other features				
Pollution degree				
				3
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

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching