



Product designation
Product type designation

Power contactor
BFD65

Contact characteristics

Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz 25	
	max	Hz 400	
IEC Conventional free air thermal current I_{th}	A	115	
Operational current I_e	AC-1 ($\leq 55^\circ\text{C}$)	A 130	
	IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	400V A 100 600V A 75 800V A 45 1000V A 35	
Short-time allowable current for 10s (IEC/EN60947-1)	A	640	
Protection fuse	gG (IEC)	A 125	
	aM (IEC)	A 80	
Resistance per pole (average value)	m Ω	0.6	
Power dissipation per pole (average value)	I_{th}	W 7.9	
	Tightening torque for terminals	min Nm 4 max Nm 5 min lbin 2.95 max lbin 3.69	
Tightening torque for coil terminal	min Nm 0.8 max Nm 1 min lbin 0.8 max lbin 0.74		
	Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	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	

Mechanical features

Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight		g 1240
Conductor section	AWG/kcmil conductor section	
	max	2

Operations

Mechanical life	cycles	15000000
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Safety related data

Performance level B10d according to EN/ISO 13489-1	mechanical load	cycles	15000000
EMC compatibility			yes

AC coil operating

Rated AC voltage at 60Hz	V	230
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 holding	VA	210
		VA	15
Dissipation at holding ≤20°C 50Hz		W	5

Max cycles frequency

Mechanical operation	cycles/h	3600
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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
in DC				
	Closing NO	min	ms	40
		max	ms	85
	Opening NO	min	ms	20
		max	ms	55

UL technical data

General USE	Contactor	AC current	A	115
	4 poles in series DC1			

600V A 100

Ambient conditions

Temperature

Operating temperature

min °C -50
max °C 70

Storage temperature

min °C -60
max °C 80

Max altitude

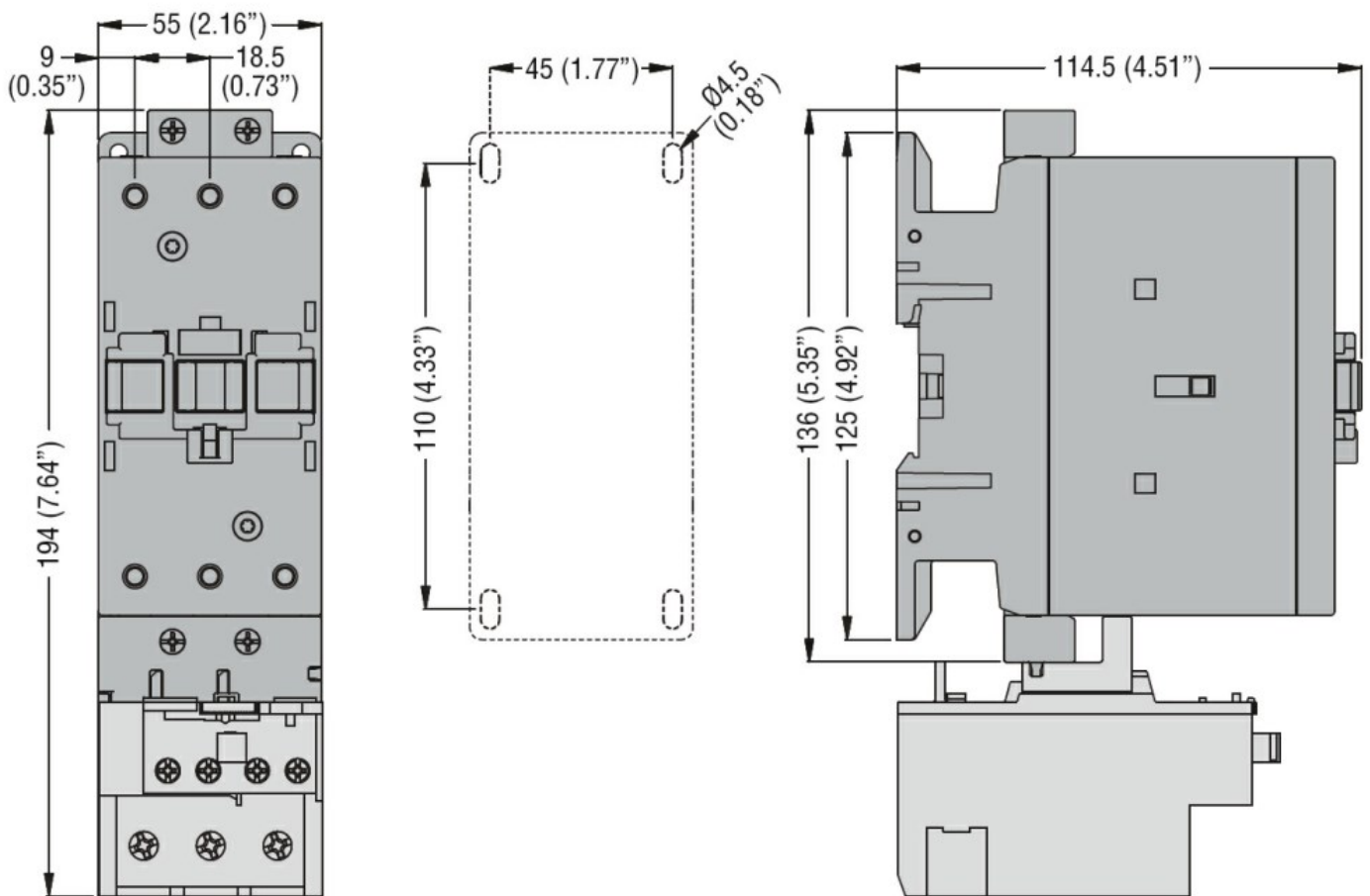
m 3000

Resistance & Protection

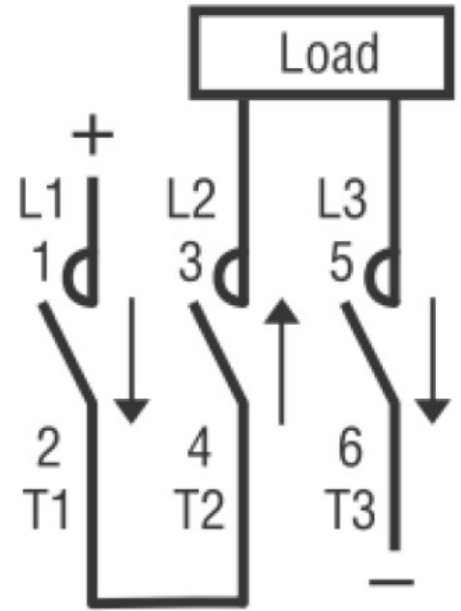
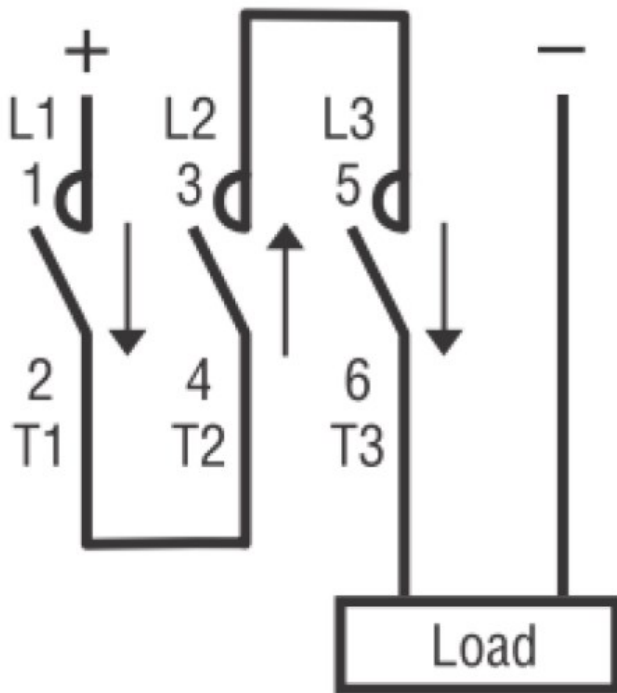
Pollution degree

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

ETIM classification

ETIM 8.0

EC002552 -
 Power contactor,
 DC switching