



Product designation				Power contactor
Product type designation				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		
IEC max current I_e in DC1 with $L/R \leq 1$ 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			
Tightening torque for terminals	min	Nm	4	
	max	Nm	5	
	min	I_{bin}	2.95	
	max	I_{bin}	3.69	
	Tightening torque for coil terminal			
	min	Nm	0.8	
max	Nm	1		
min	I_{bin}	0.8		
max	I_{bin}	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
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	460
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	VA 210
		holding	VA 15
Dissipation at holding ≤20°C 50Hz		W	5
Max cycles frequency			
Mechanical operation		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
	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

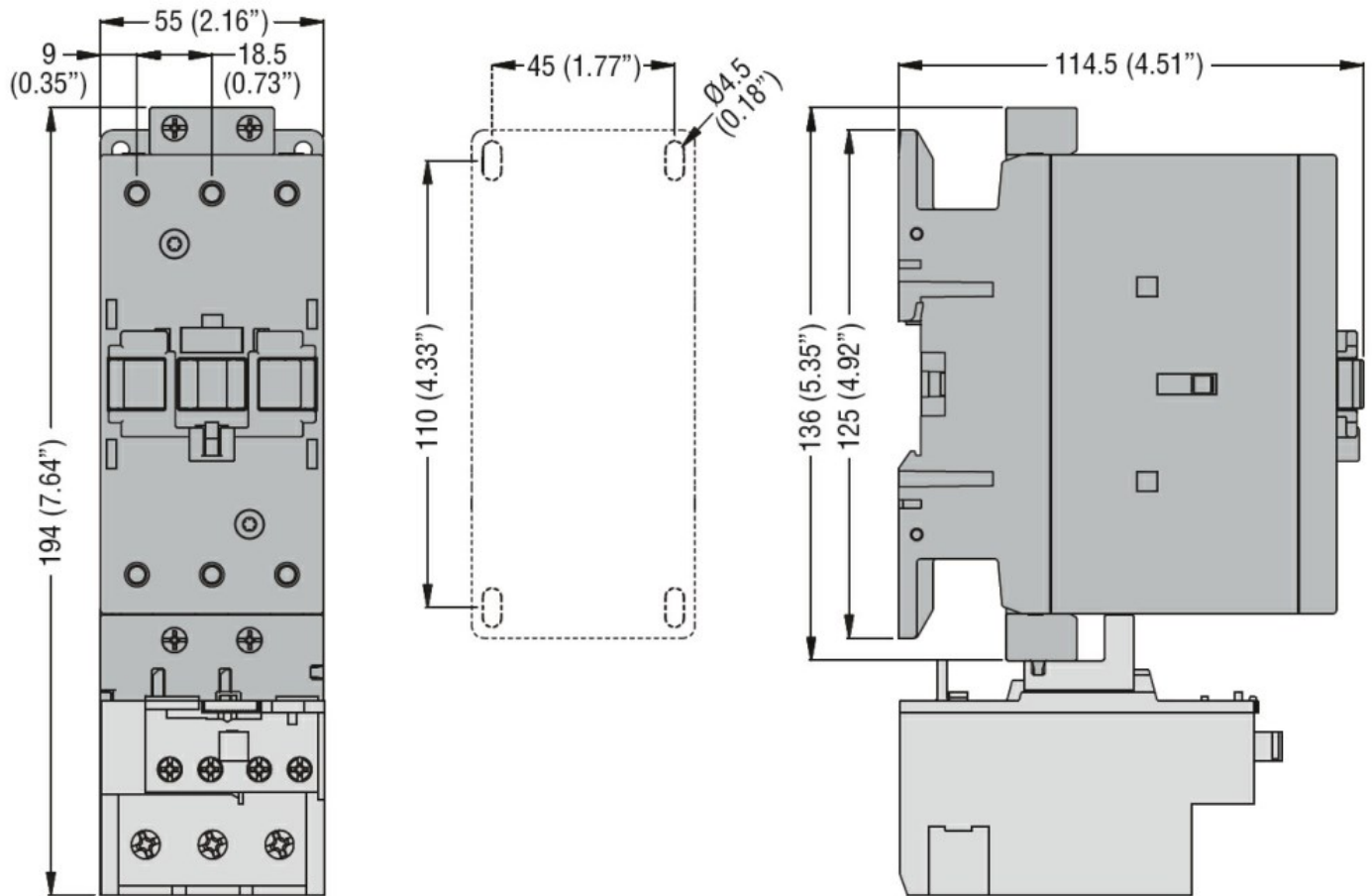
m	3000
---	------

Resistance & Protection

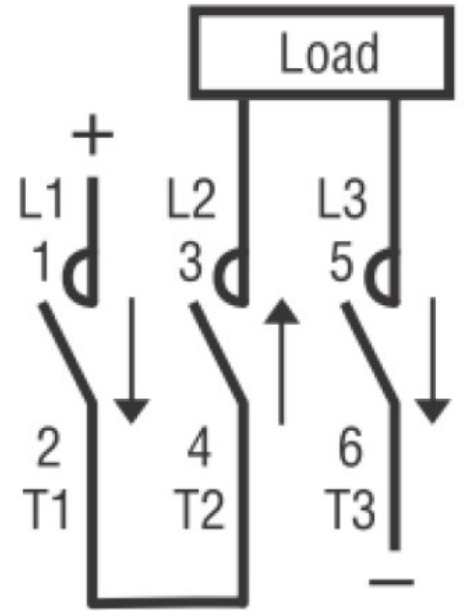
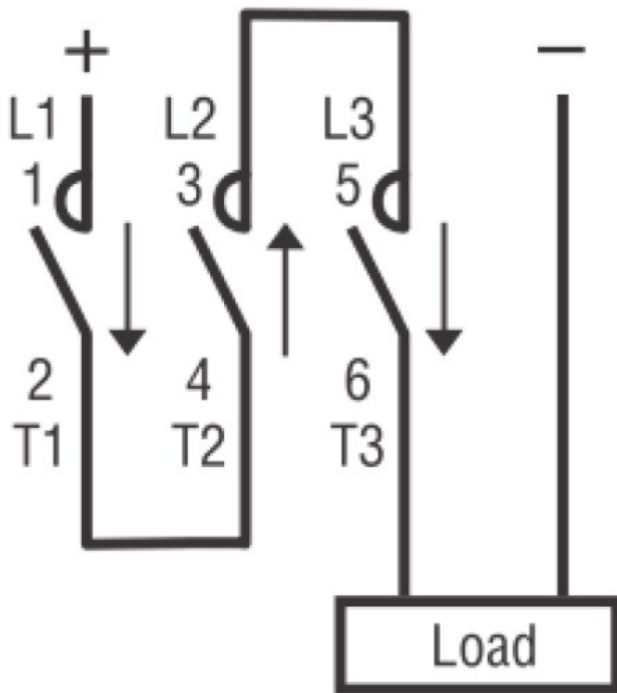
Pollution degree

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