



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
IEC max current I_e in DC1 with $L/R \leq 1ms$ 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)	mΩ	0.6
Power dissipation per pole (average value)	I_{th}	W 7.9
Tightening torque for terminals	min	Nm 4
	max	Nm 5
	min	Ibin 2.95
	max	Ibin 3.69
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	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
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		
Rated operational voltage AC (UL)	V	600
General USE		
Contactor		
	AC current	A 115
4 poles in series DC1		
	600V	A 100
Ambient conditions		
Temperature		
Operating temperature		

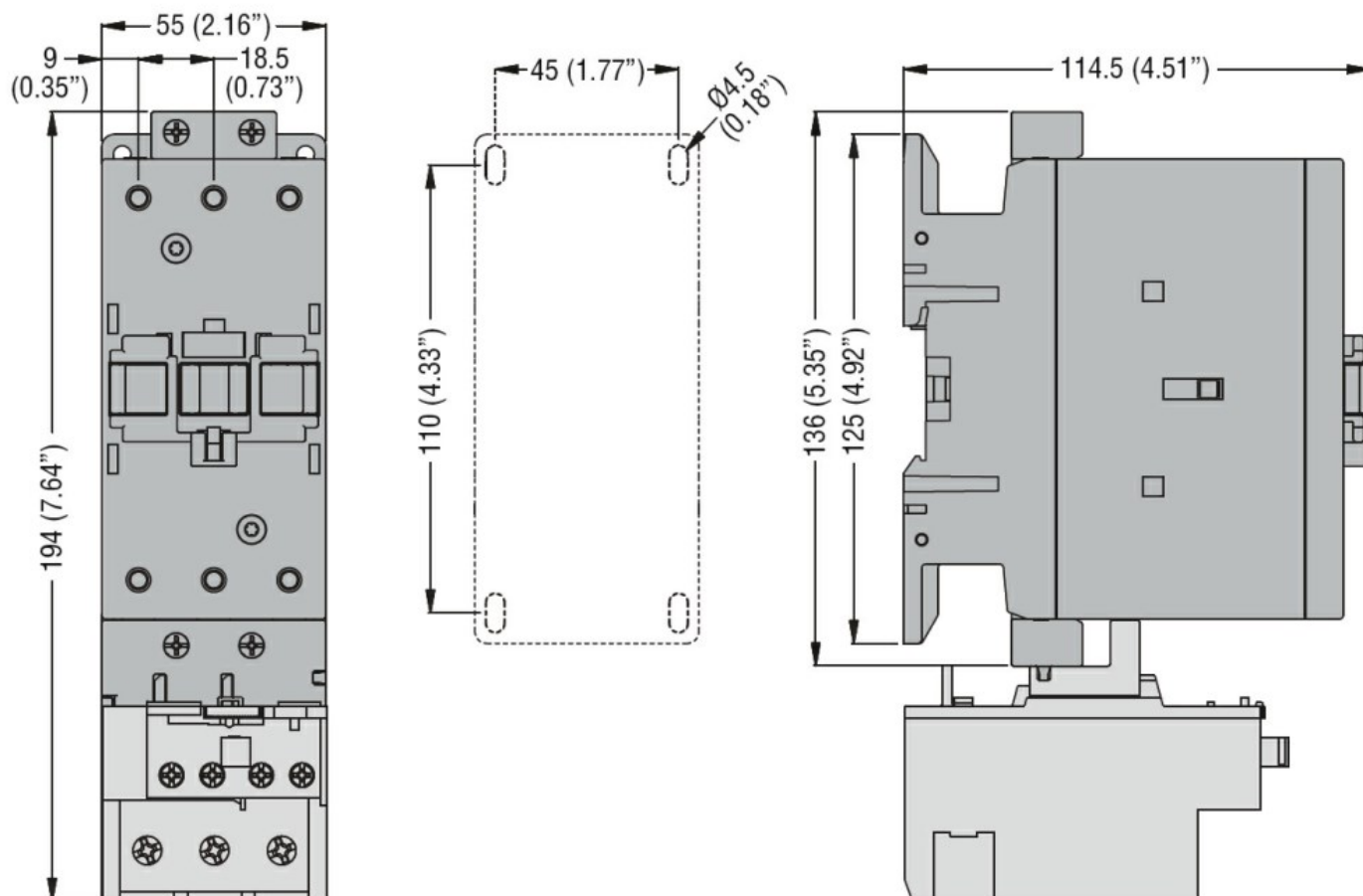
Storage temperature	min	°C	-50
	max	°C	70
Max altitude	min	°C	-60
	max	°C	80
		m	3000

Resistance & Protection

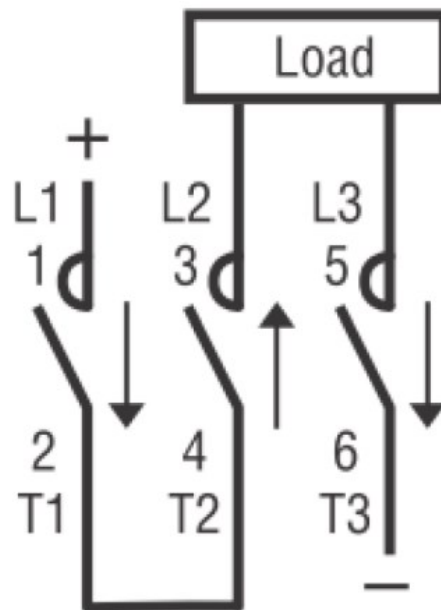
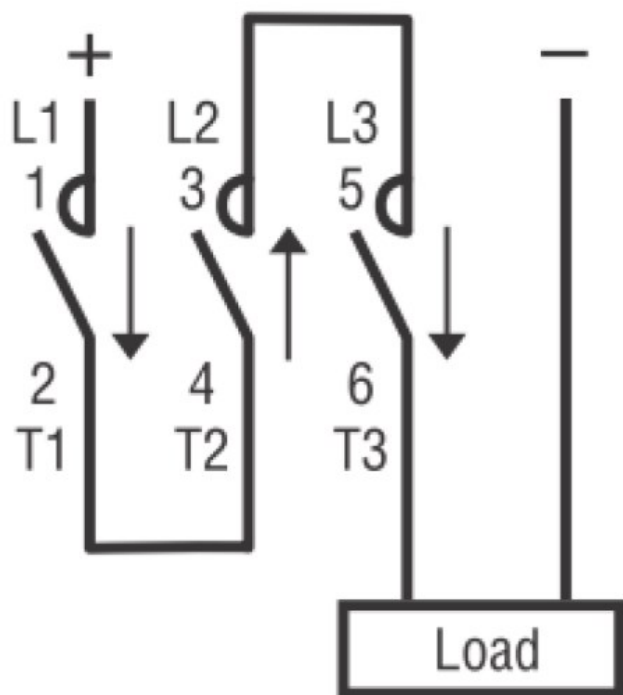
Pollution degree

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