

Product designation			Power contactor	
Product type designation			BFD80	
Contact characteristics				
Number of poles			Nr.	3
Rated insulation voltage Ui IEC/EN			V	1000
Rated impulse withstand voltage Uimp			kV	8
Operational frequency			min	Hz
			max	Hz
IEC Conventional free air thermal current Ith			A	115
Operational current Ie			AC-1 (≤40°C)	A
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series				160
			400V	A
			600V	A
			800V	A
			1000V	A
Short-time allowable current for 10s (IEC/EN60947-1)			A	640
Protection fuse				
			gG (IEC)	A
			aM (IEC)	A
Resistance per pole (average value)			m?	0.6
Power dissipation per pole (average value)				
			Ith	W
Tightening torque for terminals				7.9
			min	Nm
			max	Nm
			min	lbin
			max	lbin
Tightening torque for coil terminal				3.69
			min	Nm
			max	Nm
			min	lbin
			max	lbin
Max number of wires simultaneously connectable			Nr.	2
Conductor section				
AWG/Kcmil				
			max	2
Flexible w/o lug conductor section				
			min	mm²
			max	mm²
Flexible c/w lug conductor section				
			min	mm²
			max	mm²
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position			normal	Vertical plan
			allowable	±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 24

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

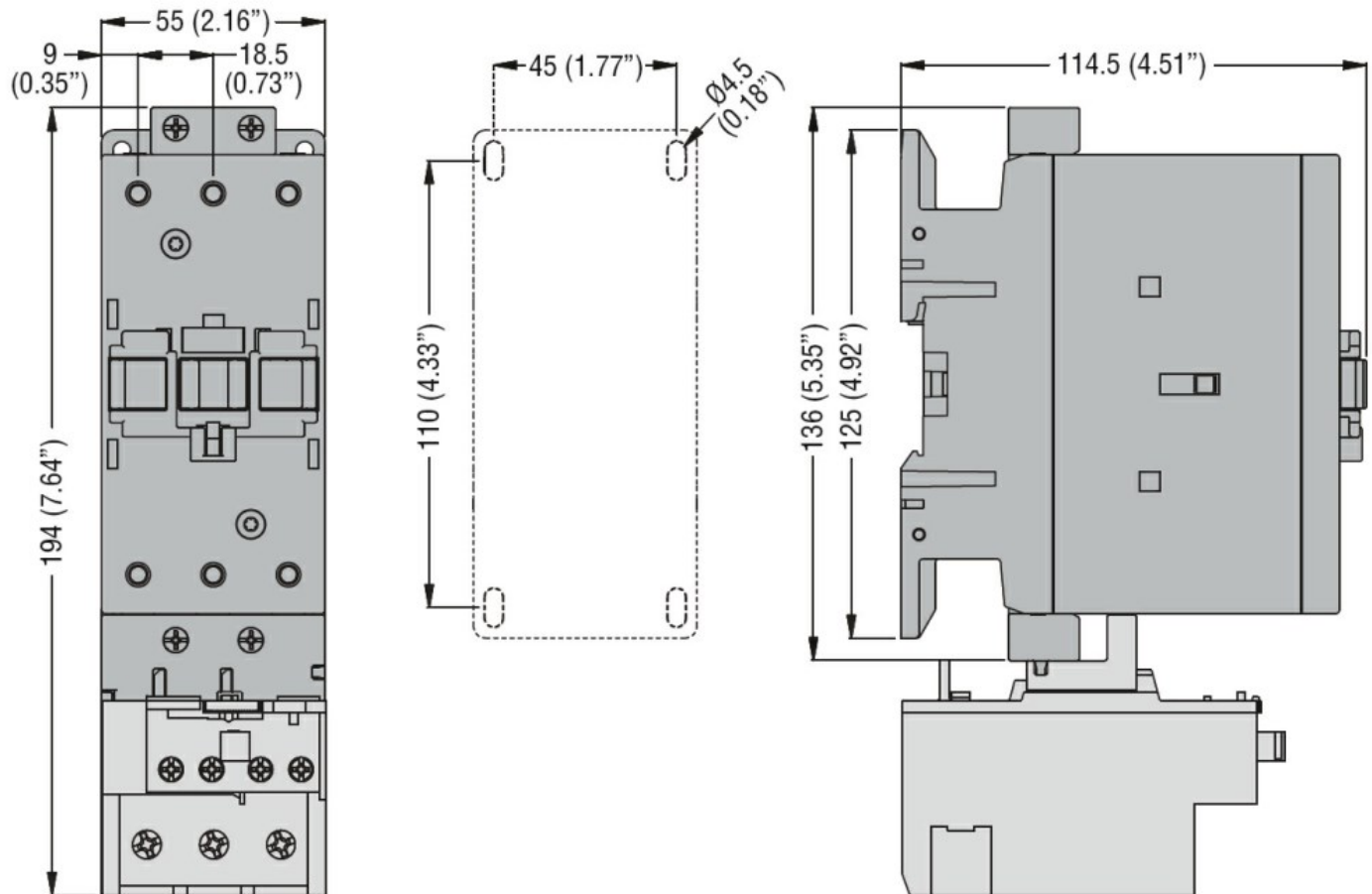
Operating temperature

min °C -50
max °C 70

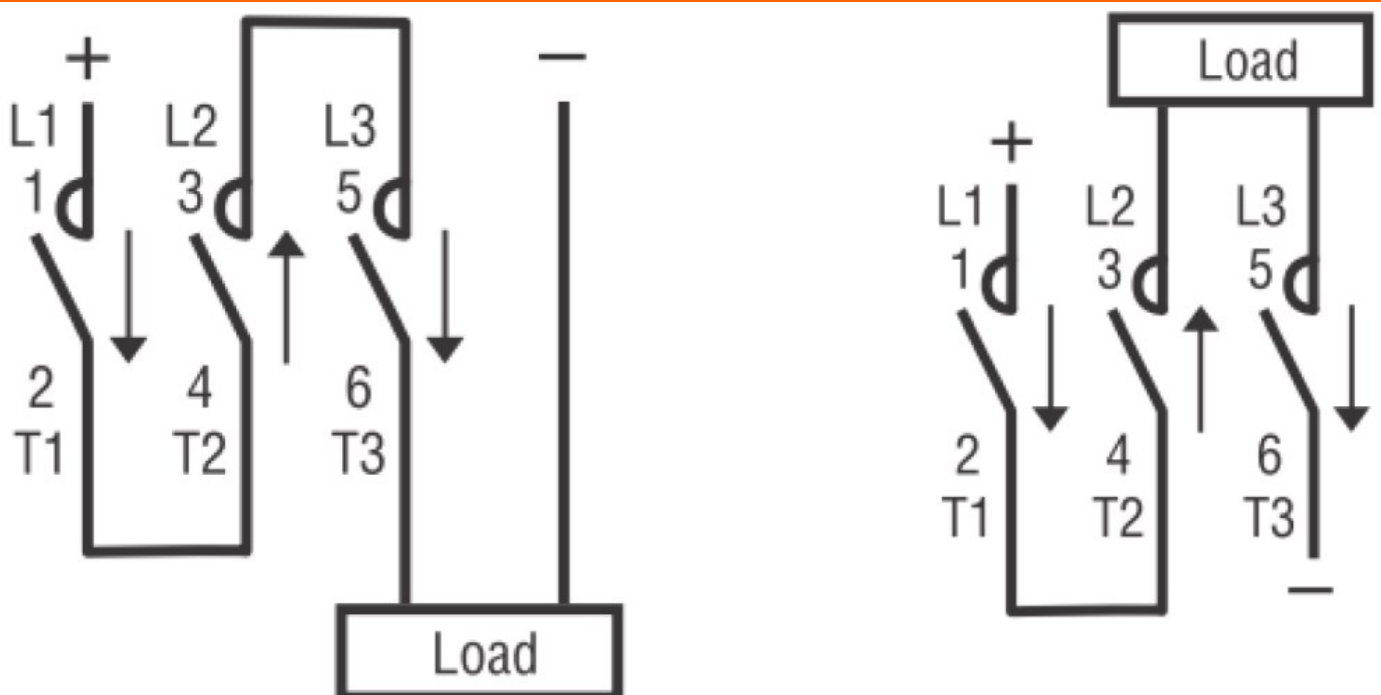
Storage temperature

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 60947-1
IEC/EN 60947-4-1
UL 60947-4-1

ETIM classification

ETIM 8.0	EC002552 - Power contactor, DC switching
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