

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	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A 115		
Operational current Ie	AC-1 ($\leq 55^{\circ}\text{C}$) A 130		
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	400V	A	100
	600V	A	100
	800V	A	76
	1000V	A	60
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? 0.6		
Power dissipation per pole (average value)	Ith	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	Vertical plan	
	allowable	$\pm 30^{\circ}$	
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	575
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 altitude

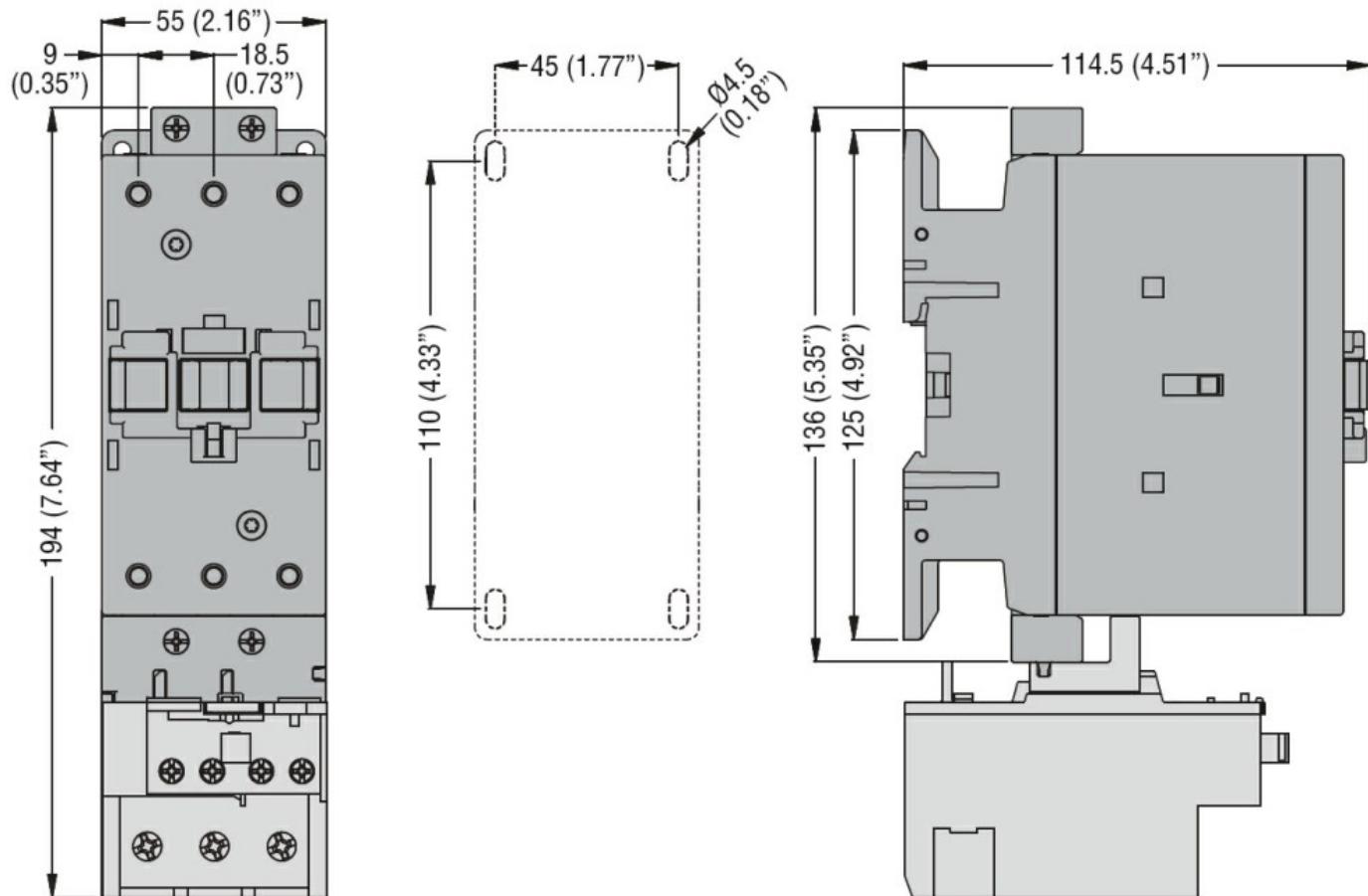
max ${}^{\circ}\text{C}$ 80
m 3000

Resistance & Protection

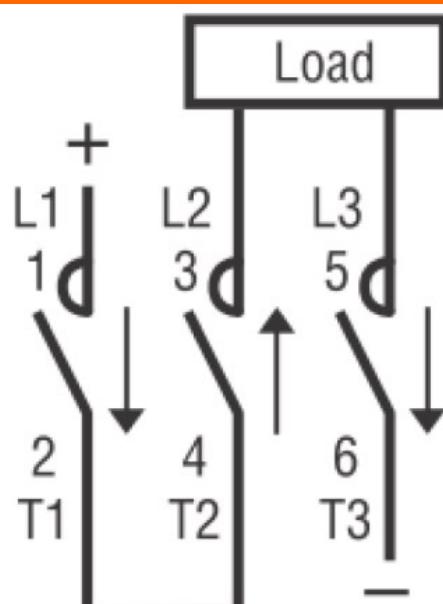
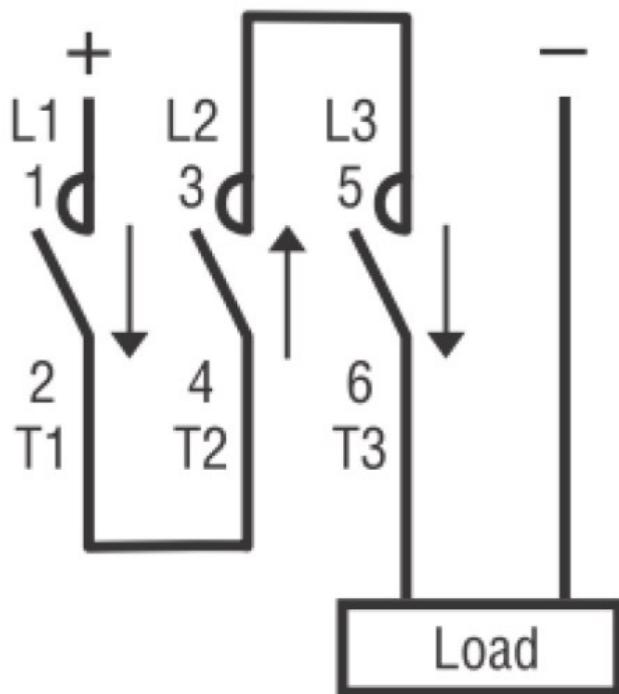
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1.
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-4-1

ETIM classification

ETIM 8.0

EC002552 -
Power contactor,
DC switching