BFD6500A024

THREE-POLE CONTACTOR, 35A/1000V DC1, AC COIL, 24VAC 50/60HZ

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
IEC max current Ie in DC1 with L/R ≤ 1ms 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	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section			
	min	mm²	1.5
	max	mm²	35
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 50/60Hz				V	24
AC operating voltage					
	of 50/60Hz coil powered at 50Hz				
		pick-up			
			min	%Us	80
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
	of 50/60Hz coil powered at 60Hz				
		pick-up			
			min	%Us	85
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
AC average coil consumption at 20°C					
	of 50/60Hz coil powered at 50Hz				
			in-rush	VA	210
			holding	VA	15
	of 50/60Hz coil powered at 60Hz				
			in-rush	VA	195
			holding	VA	13
	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

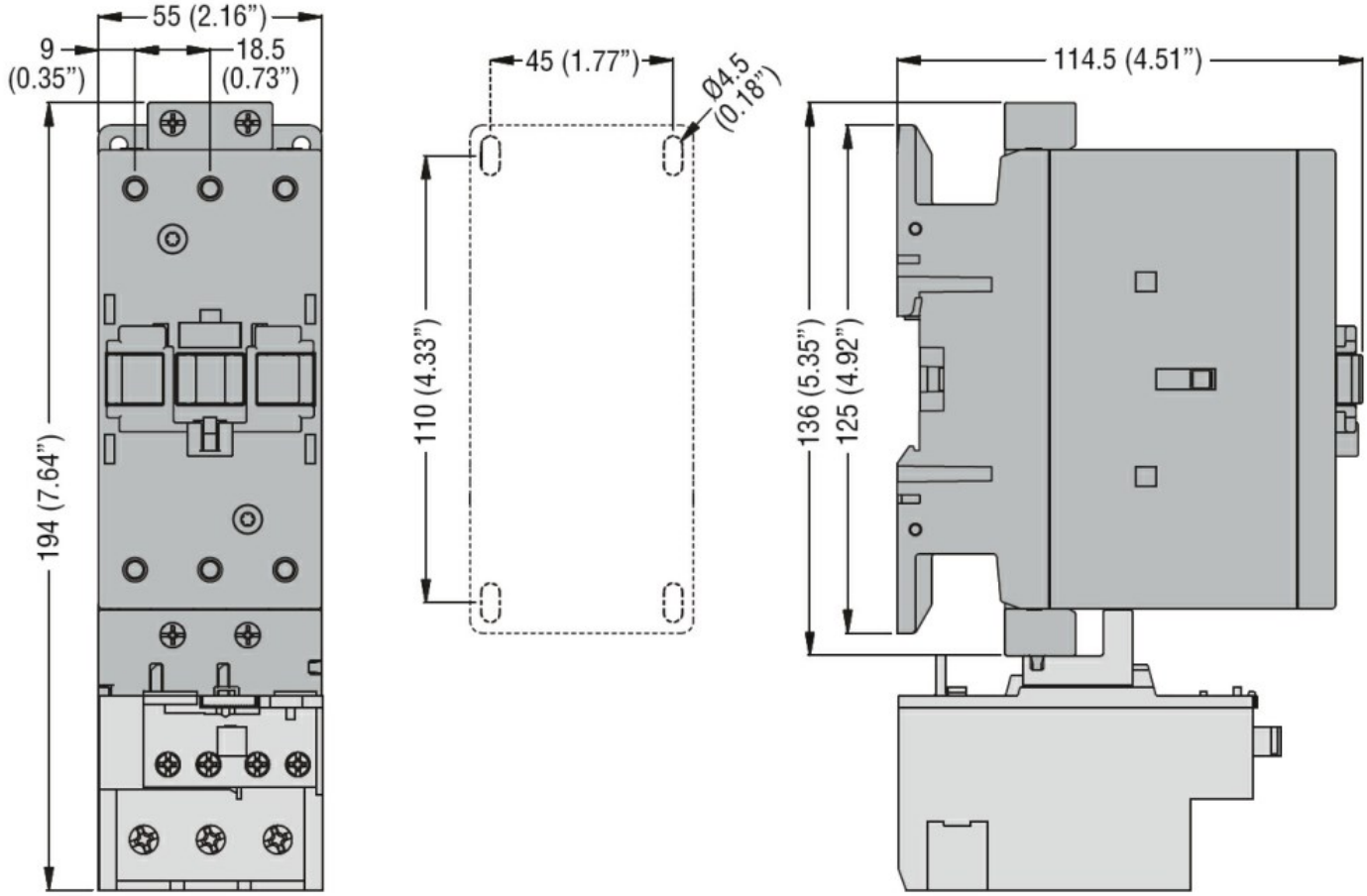
Ambient conditions

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

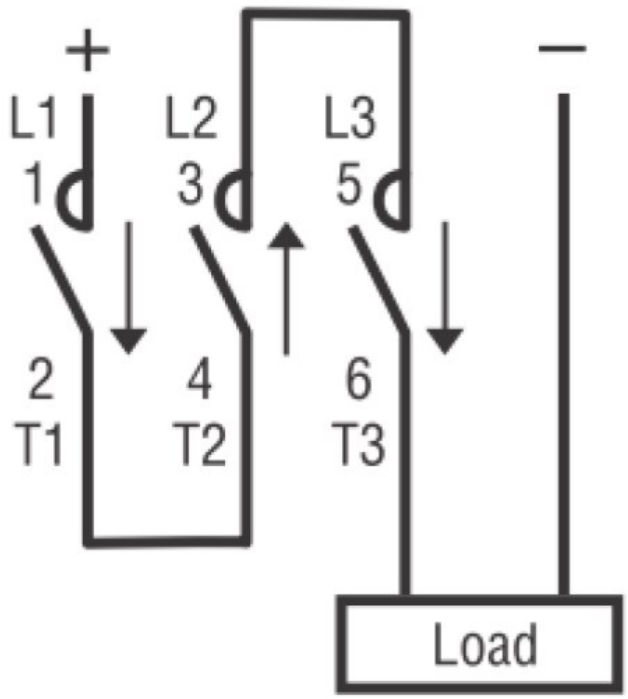
Resistance & Protection

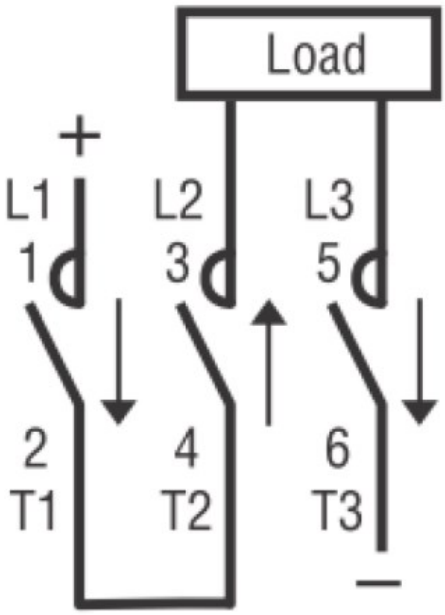
Pollution degree	3

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