



Product designation			Power contactor
Product type designation  Contact characteristics			BFD80
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated insulation voltage of IEC/EN  Rated impulse withstand voltage Uimp		kV	8
·		ΚV	0
Operational frequency		1.1-	0.5
	min	Hz	25 400
IEC Conventional free air thermal current Ith	max	Hz_	115
		A	110
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	400\/	۸	100
	400V	A	100
	600V	A	80
	800V	A	65
Chart time allowable correct for 40a (IEC/ENCO047.4)	1000V	A 	60
Short-time allowable current for 10s (IEC/EN60947-1)		A	640
Protection fuse	O (IEO)	۸	405
	gG (IEC)	A	125
Desigtance per pela (average value)	aM (IEC)	A	80
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)	الماء	۱۸/	7.0
Timbtoning tours of a toursingle	Ith	W	7.9
Tightening torque for terminals		N	4
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
Tinktonia a tonova for poil tomoir al	max	lbin	3.69
Tightening torque for coil terminal		Niss	0.0
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
May number of using a insultangently connectable	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			0
Flavible w/s lun and dustan anglism	max		2
Flexible w/o lug conductor section		ma :== 2	1 E
	min	mm²	1.5
Flavible about a service and about	max	mm²	35
Flexible c/w lug conductor section		····· 2	4.5
	min	mm²	1.5
D	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			

Operating position



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			normal allowable		Vertical plan ±30°
Fixing					Screw / DIN rail 35mm
Weight				g	1240
Conductor section					
	AWG/kcmil conductor	section			
0			max		2
Operations Machanical life				av al a a	4500000
Mechanical life				cycles	15000000
Safety related data	od according to EN/ISO	12490 1			
Periormance level bit	Od according to EN/ISO	13469-1	machanical load	ovoloo	1500000
EMC compatibility			mechanical load	cycles	15000000
EMC compatibility AC coil operating					yes
Rated AC voltage at 60	<b>∩</b> ⊔			V	120
AC operating voltage	JI 12			V	120
AC operating voltage	of 60Hz coil powered	at 60H-			
	or dornz con powered a	pick-up			
		pick-up	min	%Us	80
			max	%Us	110
		drop-out	max	7003	110
		drop out	min	%Us	20
			max	%Us	55
AC average coil consu	mption at 20°C			,,,,,	
, 10 a. 10. ago 10 1010	of 60Hz coil powered	at 60Hz			
	0. 001.12 00.1 poworou (	at 001 12	in-rush	VA	210
			holding	VA	15
Dissipation at holding :	 ≤20°C 50Hz		<u></u>	W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co	ontrol				
-	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				400
Ambient conditions			600V	Α	100
Websert conditions					



# Temperature

### Operating temperature

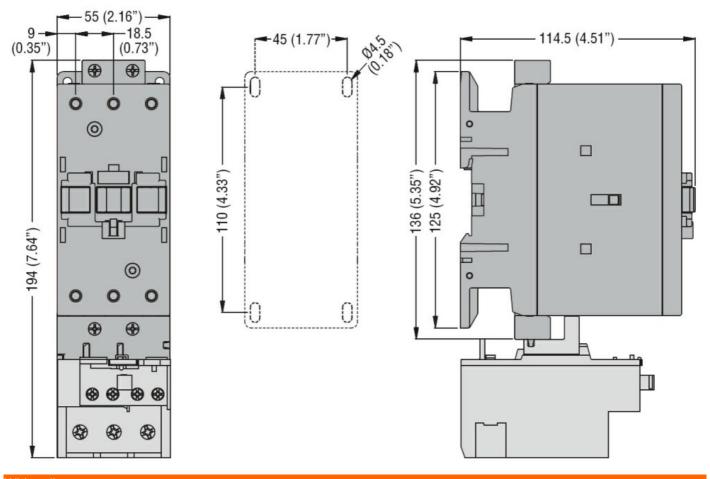
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
		m	3000
ion			

Resistance & Protection

Pollution degree 3

#### **Dimensions**

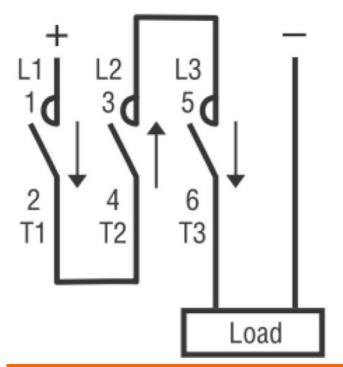
Max altitude

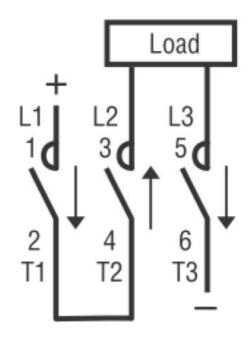


Wiring diagrams



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## 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