



Product type designation BFD80 Contact characteristics Jumber of poles Nr. 3 Rated insulation voltage Ui IEC/EN V 1000 Rated impulse withstand voltage Uimp kV 8					10 10 14
March Ma	Product designation				Power contacto
Author of poles Nr. 3	Product type designa	tion			BFD80
Rated insulation voltage Ui IEC/EN V 1000 Lated impulse withstand voltage Uimp kV 8 Apperational frequency min Hz 25 max Hz 400 EC Conventional free air thermal current Ith A 115 Operational current Ie AC-1 (≤55°C) A 130 EC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series 400V A 100 600V A 80 EC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series 400V A 100 600V A 100 600V A 60 60 60 A 60 60 A 60 60 60 60 A 60 60 60 60 A 60<	Contact characteristic	es S			
Rated impulse withstand voltage Uimp kV 8 Operational frequency min Hz 25 max Hz 400 EC Conventional free air thermal current lth A 115 Operational current le AC-1 (≤55°C) A 130 EC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 400 V A 100 600V A 80 800 V A 65 600V A 80 800 V A 66 600V-Total current for 10s (IEC/EN60947-1) A 640 60 600V-total current for 10s (IEC/EN60947-1) A 640 60 600V-total current for 10s (IEC/EN60947-1) MΩ C 70 60 600V-total current for 10s (IEC/EN60947-1) MΩ MΩ 70 60 60	Number of poles			Nr.	3
Department Propertional frequency Propertional frequency Propertional frequency Propertional frequency Propertional current leth	Rated insulation volta	ge Ui IEC/EN		V	1000
min Hz 25 max Hz 400				kV	8
Max	Operational frequency	y			
EC Conventional free air thermal current lth			min	Hz	25
AC-1 (≤55°C) A 130			max	Hz	400
AC-1 (≤55°C)	IEC Conventional free	e air thermal current Ith		Α	115
AC-1 (≤55°C)	Operational current le)			
EC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 400V A 100 600V A 80 800V A 65 1000V A 60 10	•		AC-1 (≤55°C)	Α	130
A 00V	IEC max current le in	DC1 with L/R ≤ 1ms with 3 poles in series	(/		
600V A 80 800V A 65 1000V A 65 1000V A 60 1000V	-		400V	Α	100
800V A 65 1000V A 60 1000V A 60 60 1000V A 60 60 60 60 60 60 60					
1000V A 60					
Short-time allowable current for 10s (IEC/EN60947-1)					
Protection fuse gG (IEC) A 125 aM (IEC) A 80 Resistance per pole (average value) mΩ 0.6 Prower dissipation per pole (average value) Ith W 7.9 Resistance per pole (average value) W 7.9	Short-time allowable	current for 10s (IEC/EN60947-1)	10001		
Property of the property of		culterition 103 (IEO/EN00347-1)			040
A 80 mΩ 0.6 cesistance per pole (average value)	1 Totalion rase		aG (IEC)	Δ	125
Resistance per pole (average value) mΩ 0.6					
Some dissipation per pole (average value) Ith W 7.9 W 7.9 W 7.9 W T.9 W T.9					
Ith W 7.9 7.9				11152	0.0
Min Nm 4 Max Nm 5 Min Nm 1 Min Nm Nm 1 Min Nm Nm 1 Min Nm Nm Nm Nm Nm Nm Nm N	rowei dissipation per	pole (average value)	Ith	۱۸/	7.0
min Nm 4 max Nm 5 min Ibin 2.95 max Ibin 3.69	Tightoning torque for	torminals	IUI	VV	7.9
max Nm 5 min lbin 2.95 max lbin 3.69	rigitieriirig torque for	terriiriais	min	Nm	4
Min Ibin 2.95 max Ibin 3.69					
Max Ibin 3.69					
Min Nm 0.8 max Nm 1 min lbin 0.8 max lbin 0.74					
min Nm 0.8 max Nm 1 min lbin 0.8 max lbin 0.74	Tightoning torque for	anil terminal	IIIdX	IDIII	3.09
max Nm 1 min Ibin 0.8 max Ibin 0.74	rightening torque for	con terminal		Nine	0.0
Max number of wires simultaneously connectable Nr. 2					
Max number of wires simultaneously connectable Nr. 2					
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 1.5 max mm² 1.5 max mm² 35					
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 max max mm² 35 max max max max max max max	NA	Z. R L	max		
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 max mm² 35 max mm² 35		simultaneously connectable		INľ.	
max 2	Conductor section	AVAIQ/IZ 'I			
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		AVVG/Kcmil			
min mm² 1.5 max mm² 35 Flexible c/w lug conductor section min mm² 1.5 max mm² 35			max		2
Flexible c/w lug conductor section max mm² 35 Flexible c/w lug conductor section min mm² 1.5 max mm² 35		Flexible w/o lug conductor section		_	
Flexible c/w lug conductor section min mm² 1.5 max mm² 35					
min mm² 1.5 max mm² 35			max	mm²	35
max mm² 35		Flexible c/w lug conductor section			
			min		
Power terminal protection according to IEC/EN 60529 IP20 front			max	mm²	
	Power terminal protect	ction according to IEC/EN 60529			IP20 front

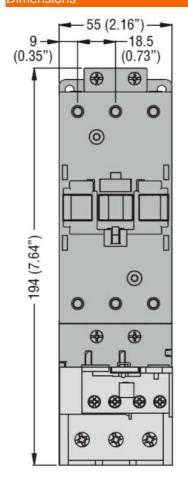


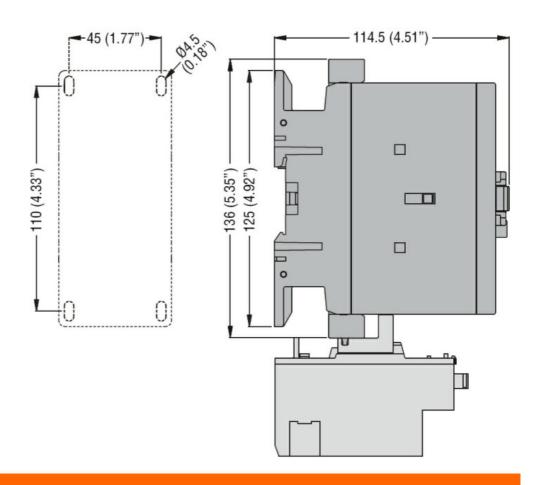
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Operating position					
3,			normal allowable		Vertical plan ±30°
Fixing					Screw / DIN rai 35mm
Veight				g	1240
Conductor section					
	AWG/kcmil cond	uctor section			
			max		2
Operations					
Mechanical life				cycles	15000000
Safety related data				,	
Performance level B1	0d according to EN	/ISO 13489-1			
	ou according to	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	mechanical load	cycles	15000000
EMC compatibility				0,0.00	yes
AC coil operating					yee
Rated AC voltage at 6	0Hz			V	575
AC operating voltage	V. 16			· ·	5.0
To operating voltage	of 60Hz coil power	arad at 60Uz			
	or don't con powe				
		pick-up	min	%Us	80
		duam acut	max	%Us	110
		drop-out		0/11-	00
			min	%Us	20
			max	%Us	55
AC average coil consu					
	of 60Hz coil power	ered 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 co	ontrol				
	in AC				
		Closing NO			
		-	min	ms	12
			max	ms	28
		Opening NO			
		, ,	min	ms	8
			max	ms	22
	in DC				
	= -	Closing NO			
		2.35	min	ms	40
			max	ms	85
		Opening NO	IIIdA	1113	50
		Opening NO	min	me	20
				ms ms	
II toobnigal deta			max	ms	55
JL technical data					
General USE	0 ()				
	Contactor				
	4 poles in series		AC current	Α	115



		0001/		400
		600V	Α	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 & Protect	tion			
Pollution degree				3
Dimensions				

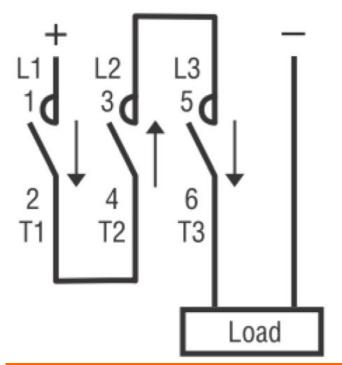


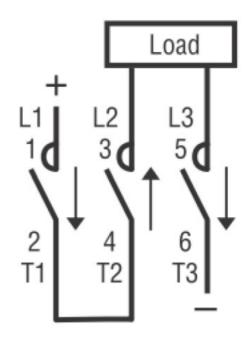


Wiring diagrams



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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