BFD150T4E230

FOUR-POLE CONTACTOR, 100A/1000V DC1, AC/DC COIL, 100-250VAC/DC



Product designation			Power contactor
Product type designation			BFD150
Contact characteristics			
Number of poles		Nr.	4
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	165
Operational current Ie			
	AC-1 (≤40°C)	A	160
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	400V	A	165
	600V	A	165
	800V	A	125
	1000V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse			
	gG (IEC)	A	250
	aM (IEC)	A	160
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		2/0
Flexible w/o lug conductor section			
	min	mm²	1.5
	max	mm²	70
Flexible c/w lug conductor section			
	min	mm²	1.5
	max	mm²	70
Power terminal protection according to IEC/EN 60529			IP20 front

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Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	2460
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	100
		max	V	250
Rated AC voltage at 50/60Hz			V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		min	%Us	20
		max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		min	%Us	20
		max	%Us	≤70 Us min
AC average coil consumption at 20°C				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	70…175
		holding	VA	1.7…3.5
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70…175
		holding	VA	1.7…3.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	70…175
		holding	VA	1.7…3.5
Dissipation at holding ≤20°C 50Hz			W	1.3…1,5
DC coil operating				
DC rated control voltage				
		min	V	100
		max	V	250
DC rated control voltage			V	230
DC operating voltage				
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max

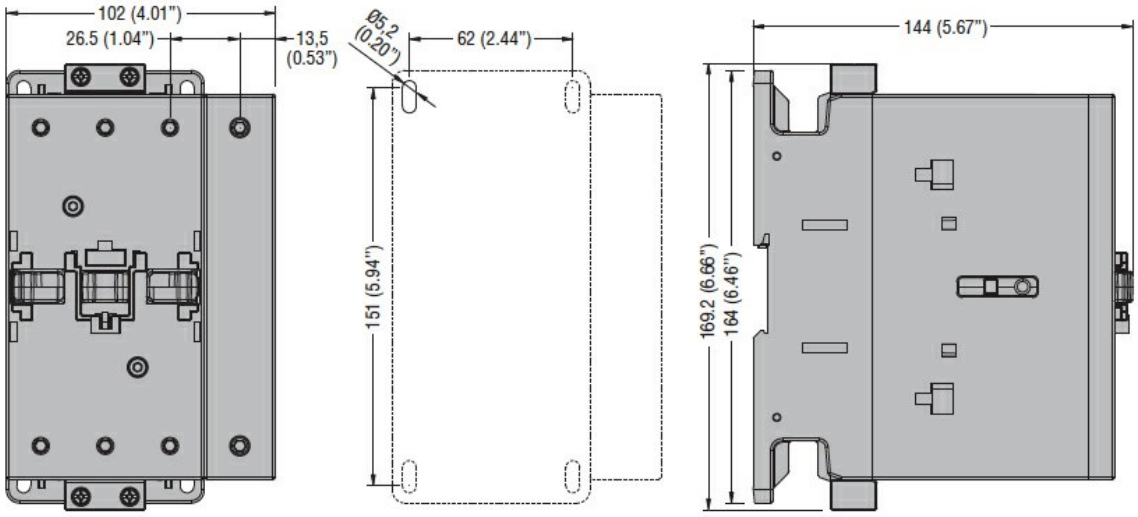
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	drop-out				
			max	%Us	≤70 Us min
Average coil consumption ≤20°C					
			in-rush	W	70…80
			holding	W	1.3…1.5
Max cycles frequency					
Mechanical operation				cycles/h	2000
Operating times					
Average time for Us control					
	in AC				
		Closing NO			
			min	ms	45
			max	ms	40
		Opening NO			
			min	ms	24
			max	ms	60
	in DC				
		Closing NO			
			min	ms	45
			max	ms	90
		Opening NO			
			min	ms	24
			max	ms	60
UL technical data					
General USE					
	Contactor				
			AC current	A	165
	4 poles in series DC1				
			600V	A	165
Ambient conditions					
Temperature					
	Operating temperature				
			min	°C	-40
			max	°C	70
	Storage temperature				
			min	°C	-50
			max	°C	80
Max altitude				m	3000
Resistance & Protection					
Pollution degree					3
Dimensions					

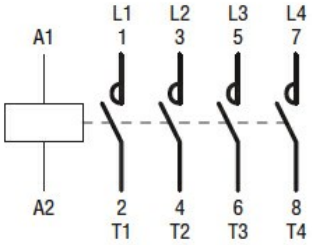
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Wiring diagrams



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

Certificates

	cULus

ETIM classification

ETIM 8.0	EC000066 - Power contactor, AC switching

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