BFD150T4E024

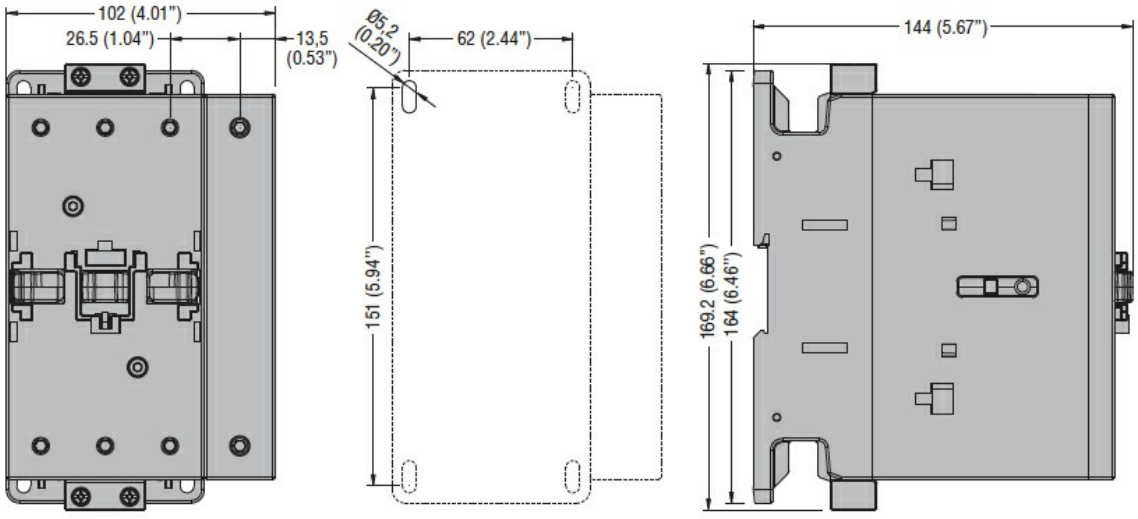
FOUR-POLE CONTACTOR, 100A/1000V DC1, AC/DC COIL, 20-48VAC/DC

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
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
Mechanical features			
Operating position			

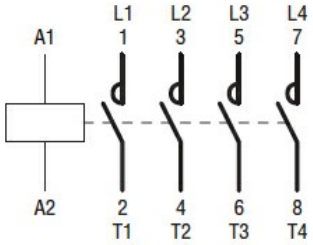
		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	2460
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz				
		min	V	20
		max	V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		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			
		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	20
		max	V	48
DC operating voltage				
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	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



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