BF160T4E110



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 60... 130VAC/DC



			(PA
Product designation			Power contactor
Product type designation			BF160
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		А	250
Operational current le			
	AC-1 (≤40°C)	А	250
	AC-1 (≤55°C)	A	210
	AC-1 (≤70°C)	A	180
	AC-3 (≤440V ≤55°C)	A	160
	AC-4 (400V)	A	75
Rated operational power AC-1 (T≤40°C)			
	230V	kW	95
	400V	kW	165
	500V	kW	181
	690V	kW	284
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	А	250
	48V	A	250
	75V	A	250
	110V	A	110
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	250
	48V	A	250
	75V	A	250
	110V	A	150
	220V	A	130
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	250
	48V	A	250
	75V	A	250
	110V	A	160
	220V	A	150
	330V	A	130
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series		-	
	≤24V	А	250
	48V	A	250
	75V	A	250
	110V	A	250

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	220V	А	250
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201	7.	200
	≤24V	А	250
	48V	A	250
	48V 75V	A	160
	110V		
		A	80
	220V	A	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series	-0 A) (050
	≤24V	A	250
	48V	A	250
	75V	A	160
	110V	Α	120
	220V	A	90
IEC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series			
	≤24V	A	250
	48V	Α	250
	75V	Α	160
	110V	Α	140
	220V	Α	120
	330V	А	90
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	А	250
	48V	А	250
	75V	A	160
	110V	A	140
	220V	A	140
	330V	A	140
	460V	A	90
Short-time allowable current for 10s (IEC/EN60947-1)	1001	A	1280
Protection fuse		7.	1200
Thechoritase	gG (IEC)	А	315
	aM (IEC)		200
Making consoity (PMS value)		A A	1360
Making capacity (RMS value)		A	1300
Breaking capacity at voltage	4401/		4000
	440V	A	1360
	500V	A	1326
	690V	A	1139
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	lth	W	11
	AC3	W	4.5
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	lbin	159
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
	normal		Vertical plan
	norma		

BF160T4E110



BF160T4E110 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 60...

ENERGY AND AUTOMATION

130VAC/DC

		allowable		±30°
Fixing				Screw
Neight			g	4000
Operations				
Mechanical life			cycles	1000000
Electrical life			cycles	1000000
Safety related data				
Performance level B10	Od according to EN/ISO 13489-1			
		rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50	0/60Hz, 60Hz			
		min	V	60
		max	V	130
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out		0/11	-70.11
		max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up		0/11	
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out		0/11-	
	umption at 20°C	max	%Us	≤70 Us min
AC average coil consu	•			
	of 50/60Hz coil powered at 50Hz		1/4	160 000
		in-rush	VA	160230
	of E0/60Hz coil powered at 60Hz	holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz	in ruch	\/٨	160 220
		in-rush	VA VA	160230 1.53.0
	of 60Hz coil powered at 60Hz	holding	VA	1.53.0
		in-rush	VA	160230
		holding	VA VA	1.53.0
Dissipation at holding :	<20°C 50Hz	noiuing	W	1.53.0
Dissipation at holding s			٧V	1.53.0
DC coll operating				
	<u> </u>	min	V	60
		max	v	130
DC operating voltage		Παλ	v	100
	pick-up			
	μινι-αμ	min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out	Παλ	/003	110 03 1110
	arop-out	max	%Us	≤70 Us min
Average coil consump	tion <20°C	Πdλ	/003	-10 03 mm
werage con consump		in-rush	W	160230
		holding	W	1.53.0
Max cycles frequency			vv	1.0
Max cycles frequency Mechanical operation			cycles/h	1000
viechanical operation			cycles/n	1000

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding BF160T4E110



ENERGY AND AUTOMATION

130VAC/DC

Operating times				
Average time for Us co	ntrol			
	in AC			
	Closing NO			
	-	min	ms	50
		max	ms	100
	Opening NO			
		min	ms	35
		max	ms	75
UL technical data				
Yielded mechanical pe	rformance			
	for three-phase AC motor			
		200/208V	HP	50
		220/230V	HP	60
		460/480V	HP	125
		400/480V 575/600V	HP	150
General USE		575/0004		100
General USE	Contactor			
	Contactor	AC current	А	250
Chart airquit protection	fuer 6001/	AC current	A	250
Short-circuit protection				
	High fault			400
		Short circuit current	kA	100
		Fuse rating	A	400
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	A	400
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protectio	n			
Pollution degree				3
Dimensions				



140 (5.51") 149 (5.87") 5 (0.20") (1.38") (1.38") (2.75") 112 (4.41") 0 0 0 0 С O 0 G Œ FF 四 四 Ð 0 0 ⊕ Г 177 (6.97") Ē 128 (5.04") 187 (7.36") 169 (6.65") 193 (7.60") €0—□ E • 0 . 05.4 (0.21") 昭 日日 Œ C 0 0

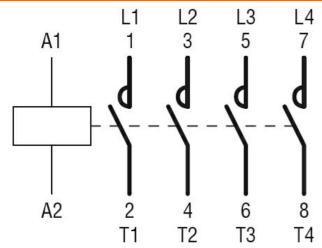
128 (5.04") -

Wiring diagrams

-18-(0.71")

Ø8.5 (0.33")

____35 ___ (1.38*)



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		
		EC000066 -
		–

Power contactor, AC switching

ETIM 8.0