

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC COIL 60HZ, 230VAC



			30 10 11
Product designation			Power contactor
Product type designation			BF50
Contact characteristics			2.00
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			-
or comercian are question	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	90
Operational current le			
	AC-1 (≤40°C)	Α	90
	AC-1 (≤55°C)	Α	75
	AC-1 (≤70°C)	Α	65
	AC-3 (≤440V ≤55°C)	Α	50
	AC-4 (400V)	Α	28
Rated operational power AC-3 (T≤55°C)	7.0 . (1001)		
· · · · · · · · · · · · · · · · · · ·	230V	kW	11
	400V	kW	22
	415V	kW	22
	440V	kW	22
	500V	kW	22
	690V	kW	30
	1000V	kW	22
Rated operational current AC-3 (T≤55°C)	10001		
Traise sportational surrout to a (1-55 c)	230V	Α	50
	400V	A	50
	415V	A	50
	440V	A	50
	500V	A	44
	690V	A	39
	1000V	A	23
Rated operational power AC-1 (T≤40°C)	1000 V		20
Nated operational power AO-1 (1340 O)	230V	kW	34
	400V	kW	59
	500V	kW	74
	690V	kW	102
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	090 V	KVV	102
ILO max ounchi le in DO i with L/N > ims with i poles in selles	≤24V	٨	45
	≤24V 48V	A A	45 40
	46 V 75 V		
		A	40
	110V	A	8
IEC may current to in DC1 with L/B < 1mg with 2 pales in series	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	-21 1	Λ	60
	≤24V	Α	60



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	48V	Α	60
	75V	Α	60
	110V	Α	50
	220V	A	7
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V		
in series	-211 /	۸	00
	≤24V	A	60
	48V	Α	60
	75V	Α	60
	110V	Α	55
	220V	Α	75
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	60
	48V	Α	60
	75V	A	60
	110V	A	60
	220V	Α	90
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	30
	48V	Α	25
	75V	Α	22
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series		- , ,	
TEO THAX CUITOTIC IN BOO BOO WILL ETC = TOTAL WILL 2 POICS IN SCIECE	≤24V	Α	35
	48V	Α	35
	75V	Α	30
	110V	Α	25
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	50
	48V	Α	50
	75V	Α	45
	110V	A	30
	220V		40
150	220 V	Α	40
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	.0.43.4		
	≤24V	Α	55
	48V	Α	55
	75V	Α	55
	110V	Α	45
	220V	Α	50
Short-time allowable current for 10s (IEC/EN60947-1)		Α	400
Protection fuse			
	gG (IEC)	Α	100
	aM (IEC)	A	50
Making consoity (PMC value)	aivi (ILO)		
Making capacity (RMS value)		Α	500
Breaking capacity at voltage		_	
	440V	Α	400
	500V	Α	352
	690V	Α	312
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Ith	W	6.5
	AC-3	W	2
Tightoning targue for tarminals	AU-3	VV	
Tightening torque for terminals			



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		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
	/ (V G/(Gillii	max		2
	Flexible w/o lug conductor section	Παλ		
	r lexible w/o lug corluctor section	min	mm²	1.5
			mm²	35
	Flavilla akulus aasalustas aasti sa	max	IIIII-	33
	Flexible c/w lug conductor section	*.	na :== ?	1 E
		min	mm²	1.5
		max	mm²	35
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	1020
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data				
Performance level B1	10d according to EN/ISO 13489-1			
		rated load	cycles	1400000
		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 6	2011			230
	50HZ		V	
AC operating voltage			V	
AC operating voltage			V	
AC operating voltage	of 60Hz coil powered at 60Hz		V	
AC operating voltage		min		
AC operating voltage	of 60Hz coil powered at 60Hz	min max	%Us	80
AC operating voltage	of 60Hz coil powered at 60Hz pick-up	min max		
AC operating voltage	of 60Hz coil powered at 60Hz	max	%Us %Us	80 110
AC operating voltage	of 60Hz coil powered at 60Hz pick-up	max min	%Us %Us %Us	80 110 20
	of 60Hz coil powered at 60Hz pick-up drop-out	max	%Us %Us	80 110
AC operating voltage AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out	max min	%Us %Us %Us	80 110 20
	of 60Hz coil powered at 60Hz pick-up drop-out	max min max	%Us %Us %Us %Us	80 110 20 55
	of 60Hz coil powered at 60Hz pick-up drop-out	max min max in-rush	%Us %Us %Us %Us	80 110 20 55
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out sumption at 20°C of 60Hz coil powered at 60Hz	max min max	%Us %Us %Us %Us VA	80 110 20 55 210 15
AC average coil cons Dissipation at holding	of 60Hz coil powered at 60Hz pick-up drop-out sumption at 20°C of 60Hz coil powered at 60Hz	max min max in-rush	%Us %Us %Us %Us	80 110 20 55
AC average coil cons Dissipation at holding Max cycles frequency	of 60Hz coil powered at 60Hz pick-up drop-out sumption at 20°C of 60Hz coil powered at 60Hz ≤20°C 50Hz	max min max in-rush	%Us %Us %Us %Us VA VA	80 110 20 55 210 15
AC average coil cons Dissipation at holding	of 60Hz coil powered at 60Hz pick-up drop-out sumption at 20°C of 60Hz coil powered at 60Hz ≤20°C 50Hz	max min max in-rush	%Us %Us %Us %Us VA	80 110 20 55 210 15



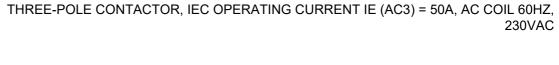


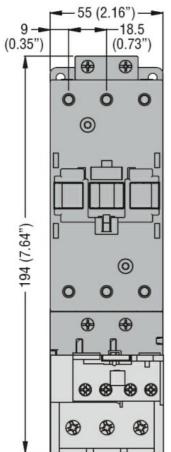
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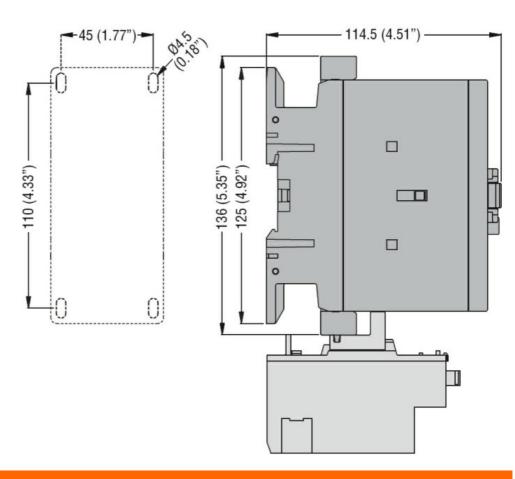
Average time for Us co	ontrol				
_	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			•
			min	ms	8
	:- DC		max	ms	22
	in DC	Closing NO			
		Closing NO	min	ms	40
			max	ms	85
		Opening NO	max	1113	00
		opormig 110	min	ms	20
			max	ms	55
UL technical data					
Rated operational volta	age AC (UL)			V	600
Full-load current (FLA)		motor			
			at 480V	Α	52
			at 600V	Α	41
Yielded mechanical pe			-		
	for single-phase A	AC motor			
			110/120V	HP	5
			230V	HP	10
	for three-phase A	C motor			
			200/208V	HP	15
			220/230V	HP	20
			460/480V	HP	40
			575/600V	HP	40
General USE	0 1 1				
	Contactor		AC aurrant	۸	00
Short-circuit protection	1 fues 600\/		AC current	Α	90
Short-circuit protection	High fault				
	riigiriauit		Short circuit current	kA	100
			Fuse rating	A	150
			Fuse class	,,	J
	Standard fault		. 450 01400		
	_ 10.100.010011		Short circuit current	kA	5
			Fuse rating	Α	150
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperating	ature			
			min	°C	-50
			max	°C	70
	Storage temperate	ure			
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	on				
Pollution degree					3
Dimensions					



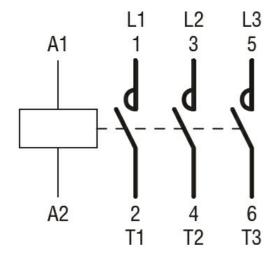
ENERGY AND AUTOMATION







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

CCC



BF5000A23060

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cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching