

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 94A, AC COIL 60HZ, 220VAC



Product designation Power contactor Product type designation **BF94** Contact characteristics Nr. 3 Number of poles Rated insulation voltage Ui IEC/EN ٧ 1000 k۷ Rated impulse withstand voltage Uimp 8 Operational frequency Ηъ 25 min Hz 400 max IEC Conventional free air thermal current Ith 115 Α Operational current le AC-1 (≤40°C) Α 115 AC-1 (≤55°C) Α 95 AC-1 (≤70°C) Α 80 AC-3 (≤440V ≤55°C) Α 95 AC-4 (400V) 45 Rated operational power AC-3 (T≤55°C) kW 30 230V 400V kW 55 415V kW 55 440V kW 55 500V kW 55 690V kW 55 1000V kW 37 Rated operational current AC-3 (T≤55°C) 230V Α 94 400V Α 94 415V Α 94 440V Α 94 500V 78 690V 57 Α 1000V Α 28 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V Α 77 48V Α 66 75V Α 66 110V Α 8 220V IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 110 48V 110 75V Α 110 90 110V Α

IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series

220V

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	≤24V	Α	110	
	48V	Α	110	
	75V	Α	110	
	110V	Α	93	
	220V	Α	95	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
	≤24V	Α	115	
	48V	Α	115	
	75V	A	115	
	110V	Α	110	
	220V	A	115	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201	- , ,	110	
120 max current to in 200-200 with 2702 forms with 1 poics in scries	≤24V	Α	45	
	48V	A	33	
	75V	A	33	
	110V	A	3	
IFO to in DO2 DO5 with L/D < 45 with 0 inin	220V	Α	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	40.41.4	•	0.5	
	≤24V	Α	65 	
	48V	Α	55	
	75V	Α	55	
	110V	Α	43	
	220V	Α	5	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series				
	≤24V	Α	86	
	48V	Α	75	
	75V	Α	75	
	110V	Α	64	
	220V	Α	64	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series				
	≤24V	Α	96	
	48V	Α	95	
	75V	Α	95	
	110V	Α	80	
	220V	Α	80	
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640	
Protection fuse				
	gG (IEC)	Α	125	
	aM (IEC)	Α	100	
Making capacity (RMS value)	·	Α	950	
Breaking capacity at voltage				
3 p	440V	Α	640	
	500V	A	625	
	690V	A	456	
Resistance per pole (average value)	000 7	mΩ	0.6	
Power dissipation per pole (average value)		11122	5.5	
i omoi dissipation poi poio (average value)	Ith	W	7.9	
	AC-3	W	7.9 5.4	
Tightoning targue for tarminals	AU-3	VV	ა.4	
Tightening torque for terminals		N I.a.:	4	
	min	Nm	4	
	max	Nm	5	
	min	lbin	3	
	max	lbin	3.7	



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Tightening torque for				
	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.59
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section	•			
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
Power terminal protec	ction according to IEC/EN 60529	Παλ	111111	IP20
Mechanical features	Stion according to IEC/EN 00329			IF2U
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1100000
Safety related data	i		Oyolos	1100000
•	10d according to EN/ISO 13489-1			
enomiance level b	Tod according to EN/130 13469-1	roted load	ovoloo	1100000
		rated load	cycles	1100000
		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 6			V	220
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	drop-out			
		min	%Us	20
	-f F0/0011'' 1 + 0011	max	%Us	55
	ot 50/60Hz coil powered at 60Hz	max	%Us	55
	of 50/60Hz coil powered at 60Hz pick-up	max	%Us	55
	of 50/60Hz coil powered at 60Hz pick-up			
	•	min	%Us	85
	pick-up			
	•	min max	%Us %Us	85 110
	pick-up	min max min	%Us %Us %Us	85 110 20
	pick-up drop-out	min max	%Us %Us	85 110
	pick-up drop-out of 60Hz coil powered at 60Hz	min max min	%Us %Us %Us	85 110 20
	pick-up drop-out	min max min max	%Us %Us %Us %Us	85 110 20 55
	pick-up drop-out of 60Hz coil powered at 60Hz	min max min max min	%Us %Us %Us %Us	85 110 20 55
	of 60Hz coil powered at 60Hz pick-up	min max min max	%Us %Us %Us %Us	85 110 20 55
	pick-up drop-out of 60Hz coil powered at 60Hz	min max min max min	%Us %Us %Us %Us %Us	85 110 20 55 80 110
	of 60Hz coil powered at 60Hz pick-up	min max min max min	%Us %Us %Us %Us %Us	85 110 20 55 80 110
	of 60Hz coil powered at 60Hz pick-up	min max min max min max	%Us %Us %Us %Us %Us	85 110 20 55 80 110
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out	min max min max min max min	%Us %Us %Us %Us %Us	85 110 20 55 80 110
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out	min max min max min max min	%Us %Us %Us %Us %Us	85 110 20 55 80 110
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55
AC average coil cons	of 60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55
Dissipation at holding	of 60Hz coil powered at 60Hz pick-up drop-out drop-out sumption at 20°C of 60Hz coil powered at 60Hz	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55
Dissipation at holding Max cycles frequency	drop-out of 60Hz coil powered at 60Hz pick-up drop-out drop-out sumption at 20°C of 60Hz coil powered at 60Hz	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55 210 15
Dissipation at holding	drop-out of 60Hz coil powered at 60Hz pick-up drop-out drop-out sumption at 20°C of 60Hz coil powered at 60Hz	min max min max min max min max	%Us %Us %Us %Us %Us %Us %Us %Us	85 110 20 55 80 110 20 55 210 15



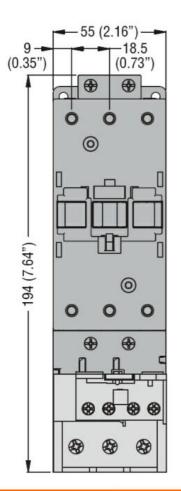
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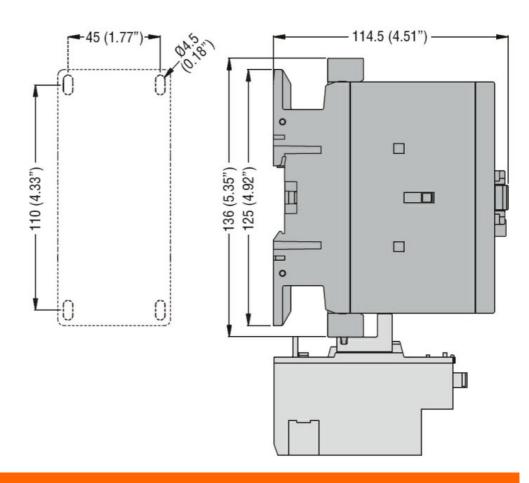
Operating times					
Average time for Us	control				
J	in AC				
		Closing NO			
		-	min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
Rated operational vo	<u> </u>			V	600
Full-load current (FL/	A) for three-phase A	AC motor			
			at 480V	Α	77
			at 600V	Α	77
Yielded mechanical p					
	for three-phase	AC motor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
0 11105			575/600V	HP	75
General USE	0				
	Contactor		40		445
01 - 4 - 2 - 2 - 2 - 2 - 2 - 2			AC current	A	115
Short-circuit protection					
	High fault		Ob ant already accommend	Ι. Δ	400
			Short circuit current	kA	100
			Fuse rating	Α	200
	Standard fault		Fuse class		J
	Stantuard lauf		Short circuit current	kA	10
			Fuse rating	KA A	200
			Fuse class	\wedge	RK5
Ambient conditions			1 435 61435		11110
Temperature					
· Simporataro	Operating temporating	erature			
	opolating tempt	5.4.4.0	min	°C	-50
			max	°C	70
	Storage tempera	ature	max		· •
	Cicrago tompon		min	°C	-60
			max	°C	80
Max altitude				m	3000
Dimensions					



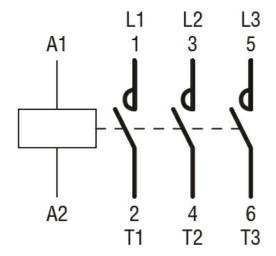
ENERGY AND AUTOMATION

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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

CCC



BF9400A22060

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cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching