



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 Нъ 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) 230V kW 30 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 66 Α 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 220V 9

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



	≤24V	Α	110
	48V	Α	110
	75V	Α	110
	110V	A	93
150	220V	A	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series		_	
	≤24V	Α	115
	48V	Α	115
	75V	Α	115
	110V	Α	110
	220V	Α	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			_
	≤24V	Α	45
	48V	Α	33
	75V	Α	33
	110V	Α	3
	220V	A	-
IFC may current le in DC2 DC5 with L/D < 15mg with 2 notes in carios	220 V		
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	40 AV /		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		- , ,	
120 max current to in 200-200 with 2/1 2 forts with 4 poics in series	≤24V	Α	96
	48V		
		A	95
	75V	A	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			
	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)		2	
1 ones alsospation per pere (average value)	Ith	W	7.9
	AC-3	W	7.9 5.4
Tightoning to you of an to you in all	AU-3	VV	ე.4
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	3
	max	Ibin	3.7



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			
Flexible w/o lug conductor section			
	min	mm²	1.5
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
			Screw / DIN rail
Fixing			35mm
Veight		g	1
Derations		3	
Mechanical life		cycles	15000000
Electrical life		cycles	1100000
Safety related data		0,0.00	1100000
Mirror contats according to IEC/EN 609474-4-1			YES
EMC compatibility			yes
AC coil operating			yes
Rated AC voltage at 50/60Hz, 60Hz			
valed AC vollage at 50/00112, 00112	min	V	20
		V	48
AC an austing valtage	max	V	40
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up		0/11	0511
	min	%Us	85 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	85 Us min
pick-up	min max	%Us %Us	85 Us min 110 Us max
•		%Us	110 Us max
pick-up drop-out			
pick-up drop-out	max	%Us	110 Us max
pick-up drop-out	max	%Us	110 Us max
pick-up drop-out AC average coil consumption at 20°C	max	%Us	110 Us max
pick-up drop-out AC average coil consumption at 20°C	max max	%Us %Us	110 Us max ≤70 Us min
pick-up drop-out AC average coil consumption at 20°C	max max in-rush	%Us %Us VA	110 Us max ≤70 Us min 35120
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	max max in-rush	%Us %Us VA	110 Us max ≤70 Us min 35120
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	max max in-rush holding	%Us %Us VA VA	110 Us max ≤70 Us min 35120 1.53.7
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz	max max in-rush holding in-rush	%Us %Us VA VA VA	110 Us max ≤70 Us min 35120 1.53.7 35120 1.53.7
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz	max max in-rush holding in-rush	%Us %Us VA VA VA VA	110 Us max ≤70 Us min 35120 1.53.7 35120
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz DC coil operating	max max in-rush holding in-rush	%Us %Us VA VA VA VA	110 Us max ≤70 Us min 35120 1.53.7 35120 1.53.7
pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	max max in-rush holding in-rush	%Us %Us VA VA VA VA	110 Us max ≤70 Us min 35120 1.53.7 35120 1.53.7

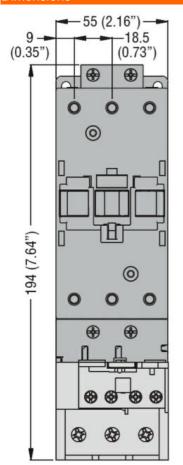


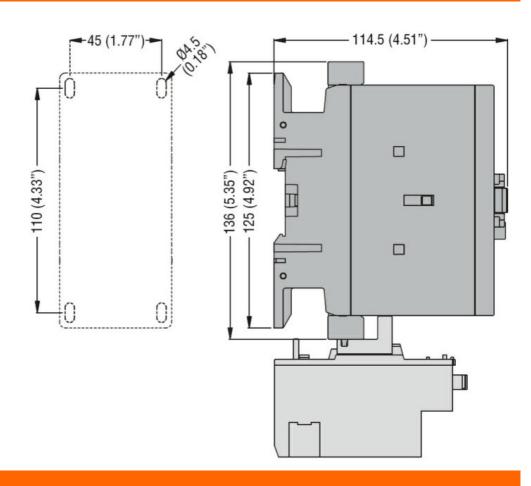
DC operating voltage				
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
Average coil consump	tion ≤20°C			
		in-rush	W	2368
		holding	W	1.21,9
Max cycles frequency		, and the second		
Mechanical operation			cycles/h	3600
Operating times			,	
Average time for Us co	ontrol			
J	in AC			
	Closing NO			
	5.559	min	ms	12
		max	ms	28
	Opening NO	max	11.0	
	Oponing NO	min	ms	8
		max	ms	22
	in DC	шах	1113	
	Closing NO			
	Closing NO	min	mo	40
		min	ms	40
	On anima NO	max	ms	85
	Opening NO	•.		00
		min	ms	20
		max	ms	55
UL technical data				
-ull-load current (FLA)	for three-phase AC motor		_	
		at 480V	Α	77
		at 600V	Α	77
Yielded mechanical pe				
	for three-phase AC motor			
		200/208V	HP	25
		220/230V	HP	30
		460/480V	HP	60
		575/600V	HP	75
General USE				
	Contactor			
		AC current	Α	115
Short-circuit protection	n fuse, 600V			
•	High fault			
	•	Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
		. 200 0.000		-
	Standard fault			
	Standard fault	Short circuit current	kΔ	10
	Standard fault	Short circuit current	kA Δ	10 200
	Standard fault	Fuse rating	kA A	200
Ambient aanditiens	Standard fault			
	Standard fault	Fuse rating		200
		Fuse rating		200
Ambient conditions Temperature	Standard fault Operating temperature	Fuse rating Fuse class	A	200 RK5
		Fuse rating		200



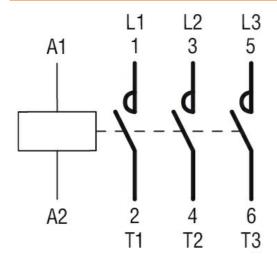
Storage temperature			
	min	°C	-60
	max	°C	80
		m	3000

Max altitude 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



BF9400E024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 94A, AC/DC COIL, 20...48VAC/DC

	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
ETIM elegations		

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching