



Product designation			Power contactor
Product type designation Contact characteristics			BF09
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		ΚV	0
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	25
Operational current le			
	AC-1 (≤40°C)	Α	25
	AC-1 (≤55°C)	Α	20
	AC-1 (≤70°C)	Α	18
	AC-3 (≤440V ≤55°C)	Α	9
	AC-4 (400V)	Α	4.9
Rated operational power AC-1 (T≤40°C)	, ,		
, , ,	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	15
	48V	Α	13
	75V	Α	12
	110V	Α	6
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	18
	48V	Α	18
	75V	Α	17
	110V	Α	12
	220V	Α	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	20
	48V	A	20
	75V	A	20
	110V	A	15
IFC many automatik in DC4 with 1/D < 4 with 4 1 '	220V	A	10
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	20.01	Α.	00
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V 220V	A	16
	22UV	Α	12



IEC max current le in l	DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
		≤24V	Α	10
		48V	Α	9
		75V	Α	8
		110V	Α	2
		220V	Α	_
IFC max current le in l	DC3-DC5 with L/R ≤ 15ms with 2 poles in series	2201	- ' '	
120 max carrent le im	DOO DOO WILL ETC = TOING WILL 2 POIGS IN SCHOO	≤24V	Α	13
		48V		
			A	11
		75V	A	10
		110V	Α	7
		220V	Α	2
IEC max current le in l	DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
		≤24V	Α	15
		48V	Α	15
		75V	Α	13
		110V	Α	11
		220V	Α	6
IFC max current le in l	DC3-DC5 with L/R ≤ 15ms with 4 poles in series			-
ILO MAX GUNERILIE III I	200 200 mai Litt = 10mb mai + poles in senes	≤24V	٨	15
			A	
		48V	A	15
		75V	Α	15
		110V	Α	12
=		220V	Α	7
Short-time allowable of	current for 10s (IEC/EN60947-1)		Α	150
Protection fuse				
		gG (IEC)	Α	25
		aM (IEC)	Α	10
Making capacity (RMS	value)		Α	90
Breaking capacity at vo				
breaking capacity at vi	onage	440V	Α	72
		500V	A	72
D'. (690V	Α	71
Resistance per pole (a			mΩ	2.5
Power dissipation per	pole (average value)			
		Ith	W	1.6
		AC-3	W	0.2
Tightening torque for to	erminals			
- •		min	Nm	1.5
		max	Nm	1.8
		min	lbin	1.1
		max	lbin	1.5
Tightening torque for c	onil terminal	Παλ	10111	1.0
riginiening lorque for C	on Girinal		N.I	0.0
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.8
		max	lbin	0.74
Max number of wires s	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section	тих		. •
	1 loxible W/o lug conductor section	min	mm²	1
		111111	111111	1





	max max	mm²	6
	Flexible c/w lug conductor section	ma va 2	4
	min	mm²	1
	Flexible with insulated spade lug conductor section	mm²	4
	min	mm²	1
	max	mm²	4
			IP20 when
Power terminal protect	tion according to IEC/EN 60529		properly wired
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
			35mm
Weight		g	502
Conductor section	ANAC (Incomit and destant and time		
	AWG/kcmil conductor section		10
Operations	max		10
Mechanical life		cycles	20000000
Electrical life		cycles	2000000
Safety related data		cycles	2000000
	Od according to EN/ISO 13489-1		
T CHOITHANGE ICVOLDIN	rated load	cycles	2000000
	mechanical load	cycles	2000000
Mirror contats according	ng to IEC/EN 609474-4-1	2,0.00	yes
EMC compatibility			yes
DC coil operating			,
DC rated control voltage	ge	V	24
DC operating voltage	-		
	pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	10
	max	%Us	40
Average coil consump			
	in-rush	W	2.4
	holding	W	2.4
Max cycles frequency		<i>"</i>	2000
Mechanical operation		cycles/h	3600
Operating times Average time for Us co	pontrol		
Average unite 101 US CC	in AC		
	Closing NO		
	Closing NO min	ms	8
	max	ms	24
	Opening NO	0	_ ·
	min	ms	10
	max	ms	20
	Closing NC		
	min	ms	14
	max	ms	28

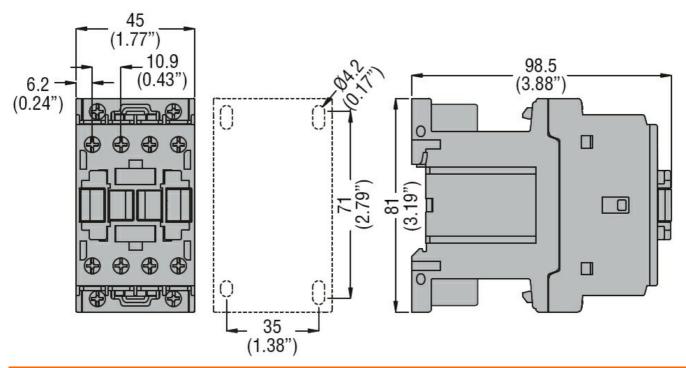




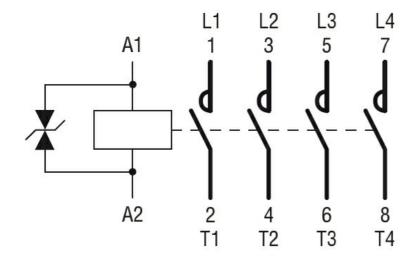
		Opening NC			
		Opening NO	min	ms	7
			max	ms	18
	in DC		max	1110	
	111 100	Closing NO			
		Closing 140	min	ms	75
			max	ms	91
		Opening NO	Παλ	1113	31
		Opening NO	min	ms	15
			max	ms	19
UL technical data			Παλ	1113	19
Full-load current (FLA)	for three-phase AC mot	or			
Tuli load carrett (LA)	ioi tilico pilaso Ao illot	Oi	at 480V	Α	7.6
			at 600V	A	0.375
Yielded mechanical per	rformanaa		at 000 v		0.373
rielded mechanical per		otor			
	for single-phase AC m	UIUI	110/120V	HP	0.75
			230V	пР HP	
	for three phase AC ma		230 V	ПР	2
	for three-phase AC mo	otor	000/0001/	LID	0
			200/208V	HP	3
			220/230V	HP	3
			460/480V	HP	5
0 11105			575/600V	HP	7.5
General USE	•				
	Contactor		• • • • • • • • • • • • • • • • • • • •		0.5
			AC current	Α	25
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	30
			Fuse class		
	Standard fault				
			Short circuit current	kA	5
			Fuse rating	Α	60
Ambient conditions					
Temperature					
	Operating temperature	•			
			min	°C	-50
			max	°C	70
	Storage temperature			_	
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	n				
Pollution degree					3
Dimensions					

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, DC COIL LOW CONSUMPTION, 24VDC



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

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching