





Product type designation			Power contactor
Contact characteristics			BF09
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		N V	0
Operational frequency	min	Ш-	25
	min	Hz	
IFC Conventional free air thermal assured life	max	Hz	400
IEC Conventional free air thermal current Ith		Α	25
Operational current le	AO 4 (440°O)		0.5
	AC-1 (≤40°C)	A	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-3 (T≤55°C)			
	230V	kW	2.2
	400V	kW	4.2
	415V	kW	4.5
	440V	kW	4.8
	500V	kW	5.5
	690V	kW	7.5
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	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V	/٦	1
	≤24V	٨	20
	≤24V 48V	A	
	48 V	Α	20
		٨	20
	75V 110V	A A	20 15





	220V	Α	10
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	16
	220V	Α	12
IEC max current le in 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	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	13
	48V	Α	11
	75V	A	10
	110V	A	7
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		
TEC max current le in DO3-DO3 with E/R > 13ms with 3 poles in series	≤24V	۸	15
	≤24 V 48 V	A	
		A	15
	75V	A	13
	110V	A	11
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		_	
	≤24V	Α	15
	48V	Α	15
	75V	Α	15
	110V	Α	12
	220V	Α	7
Short-time allowable 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 voltage			
	440V	Α	72
	500V	Α	72
	690V	Α	71
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			- -
. The storpasson por polo (arolago raido)	lth	W	1.6
	AC-3	W	0.2
Tightening torque for terminals	70 0	V V	V. <u>L</u>
rightening torque for terminals	min	Nm	1.5
		Nm	1.8
	max		
	min	lbin	1.1
Tightonian tourns for sail towning!	max	lbin	1.5
Tightening torque for coil terminal			0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8





		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A.M.O. #4			
	AWG/Kcmil			40
	Clavible w/a lum conductor acation	max		10
	Flexible w/o lug conductor section	min	mm²	1
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	111111	0
	r lexible 6/w lug corluction section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		•
	r loxiloto mar inculated opade lag contactor coolien	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	356
Conductor section				
	AWG/kcmil conductor section			
A 112		max		10
Auxiliary contact chara	acteristics			
The amount of the			۸	4.0
	aignation		Α	10
IEC/EN 60947-5-1 de	•		Α	10 A600 - P600
IEC/EN 60947-5-1 de	•	2201/		A600 - P600
IEC/EN 60947-5-1 de	•	230V	A	A600 - P600 3
IEC/EN 60947-5-1 de	•	400V	A A	A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	15		A	A600 - P600 3
IEC/EN 60947-5-1 de Operating current AC	15	400V 500V	A A A	3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V	A A	A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V	A A A	A600 - P600 3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Mechanical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operations Mechanical life Electrical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000 yes
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000



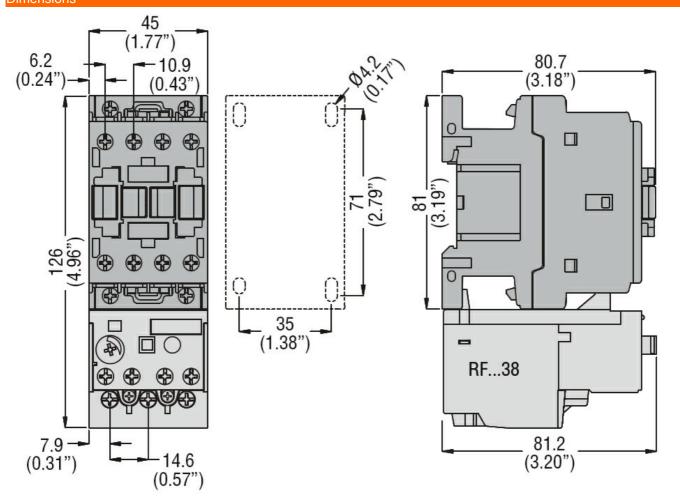


	Hz		V	120
AC operating voltage	10011			
	of 60Hz coil powered at 60Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	max	7003	110
	u.op 00.	min	%Us	20
		max	%Us	55
AC average coil consur	ทption at 20°C			
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤	20°C 50Hz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			
	Closing NO		m c	0
		min max	ms ms	8 24
	Opening NO	IIIdX	1115	4
	Opening NO	min	ms	10
		max	ms	20
	Closing NC	THOX		20
	e.com.g c	min	ms	14
		max	ms	28
	Opening NC			
		min	ms	7
		max	ms	18
JL technical data				
-ull-load current (FLA)	for three-phase AC motor	-1.400\/	Δ.	7.0
		at 480V	A	7.6
/iolded messbanised ma	rformanco	at 600V	Α	0.375
rielded mechanical pel	for single-phase AC motor			
rielded mechanical per	for single-phase AC motor	110/120\/	HP	0.75
neided mechanicai pei	for single-phase AC motor	110/120V 230V	HP HP	0.75 2
neided mechanicai pei		110/120V 230V	HP HP	0.75 2
neided mechanicai pei	for single-phase AC motor for three-phase AC motor			2
rielded mechanical pel		230V	HP	
neided mechanicai pei		230V 200/208V	HP HP	3
		230V 200/208V 220/230V	HP HP HP	3 3
		230V 200/208V 220/230V 460/480V	HP HP HP	3 3 5
		230V 200/208V 220/230V 460/480V 575/600V	HP HP HP	3 3 5 7.5
	for three-phase AC motor Contactor	230V 200/208V 220/230V 460/480V	HP HP HP	3 3 5
	for three-phase AC motor	230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP	2 3 3 5 7.5
	for three-phase AC motor Contactor	230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP	2 3 3 5 7.5 25
	for three-phase AC motor Contactor	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	HP HP HP HP V A	2 3 3 5 7.5 25 600 10
Yielded mechanical per	for three-phase AC motor Contactor	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current DC voltage	HP HP HP HP V A	2 3 3 5 7.5 25 600 10 250
	for three-phase AC motor Contactor Auxiliary contacts	230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	HP HP HP HP V A	2 3 3 5 7.5 25 600 10



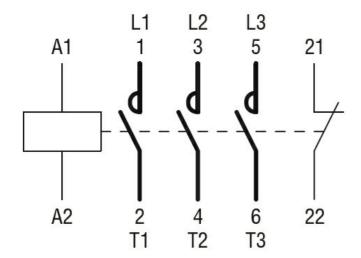


	Short circuit current	kA	100
	Fuse rating	Α	30
	Fuse class		J
Standard fault			
	Short circuit current	kA	5
	Fuse rating	Α	60
Contact rating of auxiliary contacts acco	ording to UL		A600 - P600
Ambient conditions			
Temperature			
Operating temp	perature		
	min	°C	-50
	max	°C	70
Storage tempe	rature		
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
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

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching