



Product designation			Power contactor
Product type designation Contact characteristics			BF160
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency		IX V	
Operational mediciney	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	250
Operational current le			
operational current to	AC-1 (≤40°C)	Α	250
	AC-1 (≤55°C)	A	210
	AC-1 (≤70°C)	Α	180
	AC-3 (≤440V ≤55°C)	Α	160
	AC-4 (400V)	Α	75
Rated operational power AC-1 (T≤40°C)	710 1 (1001)		
raisa sporational power rice i (1=10-0)	230V	kW	95
	400V	kW	165
	500V	kW	181
	690V	kW	284
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	250
	48V	Α	250
	75V	Α	250
	110V	Α	110
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
'	≤24V	Α	250
	48V	Α	250
	75V	Α	250
	110V	Α	150
	220V	Α	130
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
·	≤24V	Α	250
	48V	Α	250
	75V	Α	250
	110V	Α	160
	220V	Α	150
	330V	Α	130
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	250
	48V	Α	250
	75V	Α	250
	110V	Α	250



BF160T4E230

	220V	Α	250
EC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	250
	48V	Α	250
	75V	Α	160
	110V	Α	80
	220V	Α	_
EC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	250
	48V	Α	250
	75V	Α	160
	110V	Α	120
	220V	Α	90
EC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	250
	48V	Α	250
	75V	A	160
	110V	A	140
	220V	A	120
	330V	A	90
EC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	330 V		90
ECHIAX current le in DC3-DC3 with L/N 3 13ms with 4 poles in series	≤24V	Α	250
	48V	A	250
	75V	A	160
	110V 220V	A	140
		A	140
	330V	A	140
Chart time allowable assurant for 10a (IFO/FNC0047.1)	460V	A	90
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1280
Protection fuse	0 ((50)		0.15
	gG (IEC)	Α	315
	aM (IEC)	Α	200
Making capacity (RMS value)		Α	1360
reaking capacity at voltage			
	440V	Α	1360
	500V	Α	1326
	690V	Α	1139
Resistance per pole (average value)		mΩ	0.18
ower dissipation per pole (average value)			
	Ith	W	11
	AC3	W	4.5
ightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	lbin	159
ightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529	max	. 4111	IP00
Mechanical features			11 00
Operating position			
peraling position	narmal		Vertical plan
	normal		Vertical plan



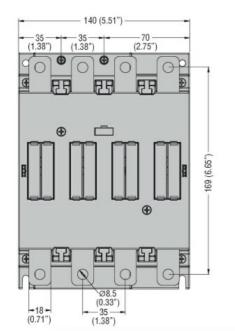
	allowable		±30°
Fixing			Screw
Weight		g	4000
Operations			
Mechanical life		cycles	10000000
Electrical life		cycles	1000000
Safety related data		·	
Performance level B10d according to EN/ISO 13489-1			
•	rated load	cycles	1000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
,	min	V	100
	max	V	250
AC operating voltage		-	
of 50/60Hz coil powered at 50Hz			
pick-up			
ριοίτ αρ	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out	Παλ	7003	110 03 1114
αιορ-οαι	max	%Us	≤70 Us min
of 50/60Hz coil powered at 60Hz	IIIdA	/003	_, o os iiiii
pick-up			
ριοκ-αρ	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out	Παλ	/003	110 05 max
drop-out	max	%Us	≤70 Us min
AC average coil consumption at 20°C	IIIax	/003	370 03 11111
of 50/60Hz coil powered at 50Hz			
of 50/00112 coll powered at 50112	in-rush	VA	160230
		VA VA	1.53.0
of EO/COLLT and powered at COLLT	holding	VA	1.55.0
of 50/60Hz coil powered at 60Hz	in ruch	١/٨	160230
	in-rush	VA	
. (0011	holding	VA	1.53.0
of 60Hz coil powered at 60Hz		١/٨	160 000
	in-rush	VA	160230
Disability of the Albertain of 2000 COLD	holding	VA	1.53.0
Dissipation at holding ≤20°C 50Hz		W	1.53.0
OC coil operating			
DC rated control voltage			400
	min	V	100
	max	V	250
DC operating voltage			
pick-up			
	min	%Us	85 Us min
	max	%Us	110 Us max
drop-out			
	max	%Us	≤70 Us min
Average coil consumption ≤20°C			
	in-rush	W	160230
	holding	W	1.53.0
	3		
Max cycles frequency			

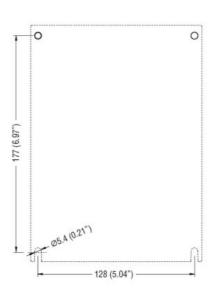


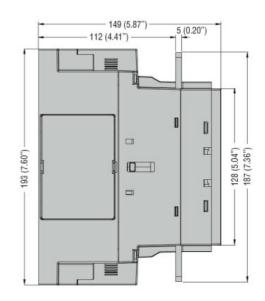
Average time for Us control in AC Closing NO min ms 50 max ms 100	Operating times				
Closing NO		ontrol			
Min max ms 50 max ms 100	•	in AC			
Min max ms 50 max ms 100		Closing NO			
Opening NO		· ·	min	ms	50
Opening NO			max	ms	100
Min min ms 35 ms 75		Opening NO			
Max		, ,	min	ms	35
Vielded mechanical performance for three-phase AC motor			max	ms	
Yielded mechanical performance for three-phase AC motor 200/208V HP 50 220/230V HP 60 460/480V HP 125 575/600V HP 150 575/600V HP 150 General USE Contactor AC current A 250 Short-circuit protection fuse, 600V High fault Short circuit current kA 100 Fuse class J Standard fault Short circuit current kA 10 Fuse class RK5 A 400	UL technical data				
For three-phase AC motor 200/208V HP 50 220/230V HP 60 60 60 60 60 60 60 6		erformance			
Contactor AC current A 250	•				
Contactor		•	200/208V	HP	50
A60/480V					
S75/600V					
Contactor					
Contactor AC current A 250	General USE				
AC current		Contactor			
Short-circuit protection fuse, 600V High fault Short circuit current KA 100 Fuse rating A 400 Fuse class J Standard fault Short circuit current KA 10 Fuse rating A 400 Fuse class RK5			AC current	Α	250
High fault	Short-circuit protection	n fuse, 600V			
Short circuit current	'				
Fuse rating A 400 Fuse class J		3	Short circuit current	kA	100
Fuse class J					
Standard fault					
Short circuit current Fuse rating Fuse rating Fuse rating Fuse class RK5		Standard fault			
Fuse rating Fuse class RK5			Short circuit current	kA	10
Fuse class RK5					
Ambient conditions					
Operating temperature	Ambient conditions				
Operating temperature min °C -40 max °C 70 Storage temperature min °C -50 max °C 80 Max altitude m 3000 Resistance & Protection 3					
min min max °C -40 max -40 max Storage temperature min °C -50 max °C 80 Max altitude m 3000 Resistance & Protection 9 3	•	Operating temperature			
max °C 70 Storage temperature min °C -50 max °C 80 Max altitude m 3000 Resistance & Protection 3			min	°C	-40
Storage temperature min or company or c					
min max °C -50 max -50 max Max altitude m 3000 Resistance & Protection 3 Pollution degree 3		Storage temperature			
Max altitudemax°C80Resistance & Protectionm3000Pollution degree3			min	°C	-50
Max altitude m 3000 Resistance & Protection Pollution degree 3					
Resistance & Protection Pollution degree 3	Max altitude			m	
Pollution degree 3		on			
					3
	Dimensions				

ENERGY AND AUTOMATION

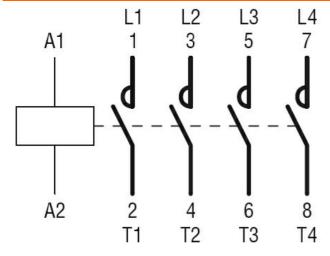
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 250A, AC/DC COIL, 100...250VAC/DC







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

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching