



Product designation Power contactor Product type designation **BF80** Contact characteristics Nr. 3 Number of poles Rated insulation voltage Ui IEC/EN ٧ 1000 k۷ Rated impulse withstand voltage Uimp 8 Operational frequency min Н 25 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 80 AC-4 (400V) 38 Rated operational power AC-3 (T≤55°C) kW 22 230V 400V kW 45 415V kW 45 440V kW 45 500V kW 55 690V kW 55 1000V kW 37 Rated operational current AC-3 (T≤55°C) 230V Α 80 400V Α 80 415V 80 Α 440V Α 80 500V 78 690V 57 Α 1000V Α 28 Rated operational power AC-1 (T≤40°C) 230V kW 43 400V kW 76 500V kW 95 690V kW 120 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V 70 Α 48V Α 60 75V Α 60 110V Α 8 220V Α IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 100



	48V	Α	100
	75V	Α	100
	110V	Α	80
	220V	Α	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	2201		
120 max current le in 201 with 2/1 = mis with 3 poles in series	≤24V	۸	100
		A	
	48V	Α	100
	75V	Α	100
	110V	Α	85
	220V	Α	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	110V	A	100
	220V	Α	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	40
	48V	Α	30
	75V	Α	30
	110V	Α	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
TEC max current le in DC3-DC3 with L/N = 13ms with 2 poles in series	40 AV /		0.0
	≤24V	Α	60
	48V	Α	50
	75V	Α	50
	110V	Α	40
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
•	≤24V	Α	80
	48V	A	70
	75V		
		A	70
	110V	Α	60
	220V	Α	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	90
	48V	Α	90
	75V	Α	90
	110V	Α	75
	220V	Α	80
Short-time allowable current for 10s (IEC/EN60947-1)	220 V	A	640
·			040
Protection fuse	~O (IFO)	Λ	405
	gG (IEC)	Α	125
	aM (IEC)	A	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	A	456
Resistance per pole (average value)	030 v	mΩ	0.6
Resistance per pole (average value)		11122	0.0
Power dissipation per pole (average value)	• • •		7.0
	Ith	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			





		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section	<u> </u>			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	THOX		
	s.asic s, it lay contactor couldn	min	mm²	1.5
		max	mm²	35
Power terminal protect	ction according to IEC/EN 60529	IIIdA	171111	IP20 front
Mechanical features	ction according to IEC/EN 60329			IPZU IIUIII
Operating position		ا مسم ما		\/antical mlan
		normal		Vertical plan ±30°
-		allowable		
Fixing				Screw / DIN rail
Weight				35mm 1020
VVEIGHT				
			g	1020
Conductor section	ANYO 11		<u>g</u>	1020
	AWG/kcmil conductor section		<u>g</u>	
Conductor section	AWG/kcmil conductor section	max	g	2
Conductor section Operations	AWG/kcmil conductor section	max	-	2
Conductor section Operations Mechanical life	AWG/kcmil conductor section	max	cycles	2 15000000
Operations Mechanical life Electrical life	AWG/kcmil conductor section	max	-	2
Operations Mechanical life Electrical life Safety related data		max	cycles	2 15000000
Operations Mechanical life Electrical life Safety related data	AWG/kcmil conductor section 10d according to EN/ISO 13489-1		cycles cycles	2 15000000 1300000
Operations Mechanical life Electrical life Safety related data		rated load	cycles cycles	2 15000000 1300000
Operations Mechanical life Electrical life Safety related data Performance level B1	10d according to EN/ISO 13489-1		cycles cycles	2 15000000 1300000
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1		rated load	cycles cycles	2 15000000 1300000
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1	10d according to EN/ISO 13489-1	rated load	cycles cycles	2 15000000 1300000 1300000 15000000
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1	10d according to EN/ISO 13489-1	rated load	cycles cycles	2 15000000 1300000 1300000 15000000 yes
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1	rated load	cycles cycles	2 15000000 1300000 1300000 15000000 yes
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1	rated load	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level Bandar accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1	rated load	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes
Conductor section Operations Mechanical life Electrical life Safety related data Performance level Br Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1	rated load	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level Bandar accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes
Conductor section Operations Mechanical life Electrical life Safety related data Performance level Br Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load mechanical load	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes
Operations Mechanical life Electrical life Safety related data Performance level Bandar accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz pick-up	rated load mechanical load min	cycles cycles cycles cycles	2 15000000 1300000 1300000 15000000 yes yes 120
Operations Mechanical life Electrical life Safety related data Performance level Bandar accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	rated load mechanical load min	cycles cycles cycles v	2 15000000 1300000 1300000 15000000 yes yes 120
Operations Mechanical life Electrical life Safety related data Performance level Bandar accord EMC compatibility AC coil operating Rated AC voltage at 6	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz pick-up	rated load mechanical load min max min	cycles cycles cycles v V %Us %Us %Us	2 15000000 1300000 1300000 15000000 yes yes 120 80 110 20
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	of 60Hz coil powered at 60Hz pick-up	rated load mechanical load min max	cycles cycles cycles v	2 15000000 1300000 1300000 15000000 yes yes 120
Conductor section Operations Mechanical life Electrical life Safety related data Performance level Br Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6	of 60Hz coil powered at 60Hz pick-up drop-out	rated load mechanical load min max min	cycles cycles cycles v V %Us %Us %Us	2 15000000 1300000 1300000 15000000 yes yes 120 80 110 20
Conductor section Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	of 60Hz coil powered at 60Hz pick-up	rated load mechanical load min max min max	cycles cycles cycles v Wus %Us %Us %Us %Us	2 15000000 1300000 1300000 15000000 yes yes 120 80 110 20 55
Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	of 60Hz coil powered at 60Hz pick-up drop-out	rated load mechanical load min max min	cycles cycles cycles v V %Us %Us %Us	2 15000000 1300000 1300000 15000000 yes yes 120 80 110 20

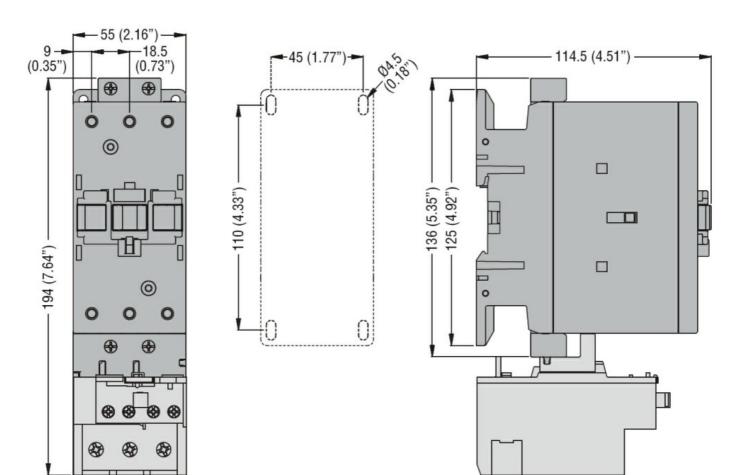




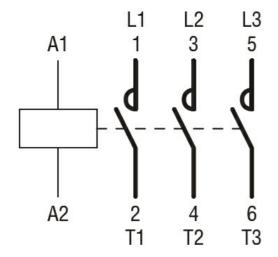
Dissipation at holding	≤20°C 50Hz			W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co					
	in AC	Clasing NO			
		Closing NO	min	mo	12
			min max	ms	28
		Opening NO	IIIax	ms	20
		Opening NO	min	ms	8
			max	ms	22
	in DC		IIIdA	1113	22
	III DC	Closing NO			
		Olosing NO	min	ms	40
			max	ms	85
		Opening NO	IIIAX	1113	00
		Sporing 140	min	ms	20
			max	ms	55
JL technical data			MOX		
Full-load current (FLA)) for three-phase A	C motor			
	,		at 480V	Α	77
			at 600V	Α	77
rielded mechanical pe	erformance				
'	for three-phase A	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
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	200
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating tempe	rature			
	-		min	°C	-50
			max	°C	70
	Storage tempera	ture			
			min	°C	-60
			max	°C	80
Max altitude				m	3000
Resistance & Protection	on				
Pollution degree					3
Dimensions					



ENERGY AND AUTOMATION



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



BF8000A12060

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 60HZ,

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching