



Product designation Product type designation			Power contactor BF80
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	115
Operational current le			
	AC-1 (≤40°C)	А	115
	AC-1 (≤55°C)	А	95
	AC-1 (≤70°C)	A	80
	AC-3 (≤440V ≤55°C)	A	80
	AC-4 (400V)	A	38
Rated operational power AC-3 (T≤55°C)			
	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55 55
	690V 1000V	kW kW	55 37
Rated operational power AC-1 (T≤40°C)	1000 v	K V V	57
	230V	kW	43
	230V 400V	kW	76
	400V 500V	kW	95
	690V	kW	120
IEC max current le in DC1 with L/R $\leq$ 1ms with 1 poles in series	0001		120
	≤24V	А	70
	48V	A	60
	75V	A	60
	110V	А	8
	220V	А	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	100
	48V	А	100
	75V	А	100
	110V	А	80
	220V	А	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	А	100
	48V	А	100
	75V	А	100



## **BF8000A024** Three-pole contactor, IEC operating current le (AC3) = 80A, AC coil 50/60Hz, 24VAC

	110V	А	85
	220V	Α	95
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	100
	48V	А	100
	75V	A	100
	110V	A	100
	220V	Α	115
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 1 poles in series	10 M I		40
	≤24V	A	40
	48V	A	30
	75V	A	30
	110V	A	3
	220V	A	_
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series	<2417	^	<u> </u>
	≤24V	A	60 50
	48V 75V	A	50 50
	75V 110V	A A	50 40
	220V	A	40 5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V	A	5
TEC max current le in DC5-DC5 with E/R 2 15ms with 5 poles in series	≤24V	А	80
	48V	A	70
	48V 75V	A	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	2201		01
	≤24V	А	90
	48V	A	90
	75V	А	90
	110V	А	75
	220V	А	80
Short-time allowable current for 10s (IEC/EN60947-1)		А	640
Protection fuse			
	gG (IEC)	А	125
	aM (IEC)	А	80
Making capacity (RMS value)		А	800
Breaking capacity at voltage			
	440V	А	640
	500V	А	625
	690V	А	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	Ith	W	7.9
	AC3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1



			Un tra	0.0
		min max	lbin Ibin	0.8 0.74
Max number of wires	simultaneously connectable	IIIdA	Nr.	2
Conductor section				-
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section		2	
		min	mm²	1.5 35
Dower terminal prote	ation according to IEC/EN 60520	max	mm²	IP20 front
Mechanical features	ction according to IEC/EN 60529			IP20 II0IIL
Operating position				
oporating poolition		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
Fixing				35mm
Weight			g	1020
Conductor section				
	AWG/kcmil conductor section			_
O		max		2
Operations				4500000
Mechanical life Electrical life			cycles cycles	15000000 1300000
Electrical life			cvcies	1300000
Safety related data			0)0100	
	10d according to EN/ISO 13489-1		0,0.00	
Safety related data Performance level B <sup>2</sup>	10d according to EN/ISO 13489-1	rated load		
	10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1300000 1500000
Performance level B	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1			1300000
Performance level B			cycles	1300000 15000000
Performance level B Mirror contats accord EMC compatibility			cycles	1300000 15000000 yes
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz		cycles	1300000 15000000 yes
Performance level B	ling to IEC/EN 609474-4-1 50/60Hz		cycles cycles	1300000 15000000 yes yes
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz		cycles cycles	1300000 15000000 yes yes
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz	mechanical load	cycles cycles V	1300000 15000000 yes yes 24
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles V	1300000 15000000 yes yes 24 80
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles V	1300000 15000000 yes yes 24
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles V V %Us %Us	1300000 15000000 yes yes 24 80 110
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles V %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load	cycles cycles V V %Us %Us	1300000 15000000 yes yes 24 80 110
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles V %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load	cycles cycles V %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load	cycles cycles ∨ %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 8	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load	cycles cycles V %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	mechanical load	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85 110 40
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 9 AC operating voltage	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85 110
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 9 AC operating voltage	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85 110 40
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 9 AC operating voltage	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85 110 40 55
Performance level B Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at \$	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles ∨ %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 24 80 110 20 55 85 110 40



	of 50/60Hz coil power	ed at 60Hz			
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered	at 60Hz	J		
			in-rush	VA	210
			holding	VA	15
Dissipation at holding :	<20°C 50H7		libiding	W	5
Max cycles frequency				vv	5
				ov relea /h	2000
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
		-1-5-	min	ms	20
			max	ms	55
UL technical data			Шах	mo	00
	for three-phase AC mo	tor			
			at 480V	А	77
			at 600V	A	77
			at 000 v	A	11
Yielded mechanical pe		- 4			
	for three-phase AC m	otor	000/0001/		0.5
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
			575/600V	HP	75
General USE					
	Contactor				
			AC current	А	115
Short-circuit protection	n fuse, 600V				
	High fault				
			Short circuit current	kA	100
			Fuse rating	А	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	A	200
			Fuse class		RK5
Ambient conditions					
Temperature					
remperature	Operating temperature	0			
	Operating temperature	C .		°C	50
			min		-50
			max	°C	70
	Storage temperature				
			min	°C	-60

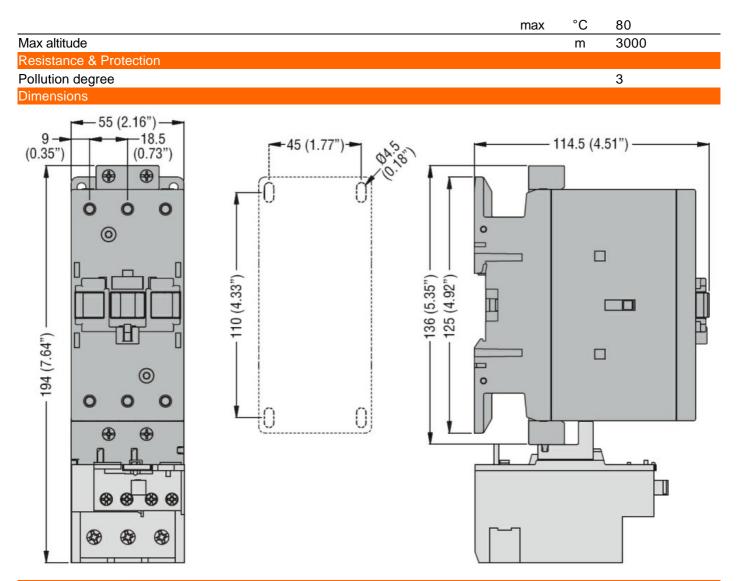
BF8000A024

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

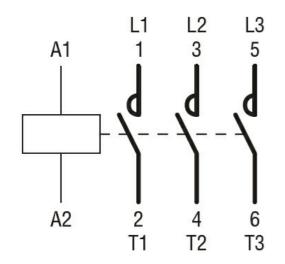


# BF8000A024

Three-pole contactor, IEC operating current le (AC3) = 80A, AC coil 50/60Hz, 24VAC



#### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1

BF8000A024

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



	IEC/EN 60947-4-1	
	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
ETIM classification		
		EC000066 -

ETIM 8.0

Power contactor, AC switching