



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 ²	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

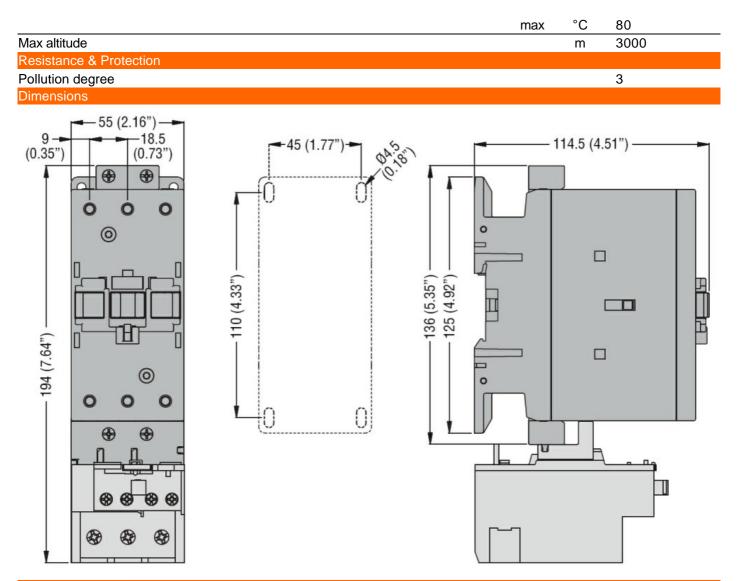
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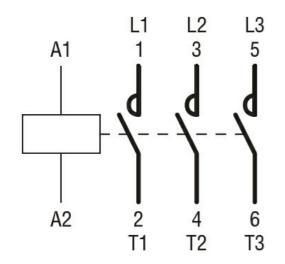


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Three-pole contactor, IEC operating current le (AC3) = 80A, AC coil 50/60Hz, 24VAC



Wiring diagrams



Certifications and compliance

Compliance

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

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	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