



Product designation			Power contactor
Product type designation			BF80
Contact characteristics			
Number of poles		Nr.	4
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 current AC-3 (T≤55°C)			
	230V	A	80
	400V	A	80
	415V	A	80
	440V	A	80
	500V	A	78 57
	690V 1000V	A A	57 28
Rated operational power AC-1 (T≤40°C)	1000 v	A	20
	230V	kW	43
	230V 400V	kW	43 76
	400V 500V	kW	95
	690V	kW	120
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series	0001		120
	≤24V	А	70
	48V	A	60
	75V	А	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 $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	100
	48V	А	100
	75V	А	100

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	110V	А	85
	220V	А	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	А	100
	48V	А	100
	75V	А	100
	110V	А	100
	220V	А	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	А	40
	48V	А	30
	75V	А	30
	110V	А	3
	220V	А	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	А	60
	48V	A	50
	75V	A	50
	110V	A	40
	220V	A	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V	Λ	0
Le max current le in Des-Des with Err = 15ms with 5 poles in series	≤24V	А	80
	48V	A	70
	48V 75V	A	70
	110V	A	60
	220V		64
150 may summat be in D02 D05 with $1/D < 45$ may with 4 malas in series	2200	A	04
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series	<0.4) (۸	00
	≤24V	A	90
	48V	A	90
	75V	A	90
	110V	A	75
	220V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		A	640
Protection fuse			
	gG (IEC)	А	125
	aM (IEC)	A	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	А	640
	500V	А	625
	690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	lth	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
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			المأنع	0.50
		min max	lbin Ibin	0.59 0.74
Max number of wires	simultaneously connectable	Παλ	Nr.	2
Conductor section			INI.	2
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	-	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rai
Fixing				35mm
Weight			g	1280
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data				
Performance level B	10d according to EN/ISO 13489-1	roted load	ov reliese	1200000
		rated load mechanical load	cycles cycles	1300000 15000000
Mirror contats accord	ling to IEC/EN 609474-4-1	mechanicarioau	Cycles	yes
EMC compatibility				yes
AC coil operating				yoo
Rated AC voltage at s	50/60Hz, 60Hz			
0	<i>,</i>	min	V	20
		max	V	48
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out		0/11-	<70 L '
		max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out	max	,000	110 00 110
		max	%Us	≤70 Us min
AC average coil cons	sumption at 20°C			
<u><u> </u></u>	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	35120
		holding	VA	1.53.7
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ENERGY AND AUTOMATION					24170/00
	of 50/60Hz coil	powered at 60Hz			
	01 00/001 12 0011		in-rush	VA	35120
			holding	VA	1.53.7
	of 60Hz coil pov	vered at 60Hz			
			in-rush	VA	210
			holding	VA	15
Dissipation at holding	≤20°C 50Hz		_	W	12.5
DC coil operating					
DC rated control voltage	ge				
	-		min	V	20
			max	V	48
DC operating voltage					
	pick-up				
			min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out				
			max	%Us	≤70 Us min
Average coil consump	otion ≤20°C				
			in-rush	W	2368
			holding	W	1.21.9
Max cycles frequency					
Mechanical operation				cycles/h	1500
Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
Full-load current (FLA)) for three-phase A	AC motor			
			at 480V	А	77
			at 600V	А	77
			al 000 v		
Yielded mechanical pe	erformance		at 600 v		
Yielded mechanical pe	erformance for three-phase	AC motor	at 600V		
Yielded mechanical pe		AC motor	200/208V	HP	25

The characteristics described in this document are subject				
	Short circuit current	kA	100	
High fault				
it protection fuse, 600V				
	AC current	А	115	
Contactor				
SE				
	575/600V	HP	75	
	460/480V	HP	60	
	Contactor it protection fuse, 600V	SE Contactor AC current it protection fuse, 600V	SE Contactor AC current A	575/600V HP 75 Contactor AC current A 115 it protection fuse, 600V

220/230V

ΗP

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ENERGY AND AUTOMATION				
		Fuse rating Fuse class	A	200 J
	Standard fault	Short circuit current Fuse rating Fuse class	kA A	10 200 RK5
Ambient conditions				
Temperature	Operating temperature	min max	℃ ℃	-40 70
	Storage temperature	min max	0° 0° 0°	-50 80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree Dimensions				3
		126 (5.35")		
Wiring diagrams	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			

Certifications and compliance

T1

T2

T3

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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

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Compliance

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	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	
ETIM classification		
		EC000066 -

ETIM 8.0

EC000066 -Power contactor, AC switching