



Product designation Product type designation			Power contactor BF80
Contact characteristics			DI 00
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		А	115
Operational current le			
	AC-1 (≤40°C)	А	115
	AC-1 (≤55°C)	А	95
	AC-1 (≤70°C)	А	80
	AC-3 (≤440V ≤55°C)	А	80
	AC-4 (400V)	А	38
Rated operational current AC-3 (T≤55°C)			
	230V	А	80
	400V	А	80
	415V	А	80
	440V	А	80
	500V	А	78
	690V	А	57
	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 $L/R \le 1$ ms with 1 poles in series			
	≤24V	A	70
	48V	A	60
	75V	A	60
	110V	А	8
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	A	100
	48V	A	100
	75V	A	100
	110V	A	80
	220V	A	9
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			100
	≤24V	A	100
	48V	A	100
	75V	A	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	Α	115
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 1 poles in series			
	≤24V	А	40
	48V	А	30
	75V	А	30
	110V	А	3
	220V	A	-
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series			
	≤24V	А	60
	48V	А	50
	75V	А	50
	110V	А	40
	220V	A	5
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series			
	≤24V	A	80
	48V	А	70
	75V	A	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series			
	≤24V	A	90
	48V	A	90
	75V	A	90
	110V	A	75
Object times allowed to surrout (as 40s (IEO/EN00047.4)	220V	<u>A</u>	80
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse		•	105
	gG (IEC)	A	125
	aM (IEC)	<u>A</u>	80
Making capacity (RMS value)		А	800
Breaking capacity at voltage	44017	۸	640
	440V	A	640 625
	500V	A	625
Posistance per polo (averago valuo)	690V	A 	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)	146	14/	7.0
	lth	W	7.9 2.8
Tightoning torque for terminole	AC-3	W	3.8
Tightening torque for terminals		Nime	٨
	min	Nm Nm	4
	max	Nm	5
	min	lbin Ibin	2.95
Tightening torque for coil terminal	max	Ibin	3.69
Tightening torque for coil terminal	min	Nm	0.9
	min	Nm Nm	0.8
	max	Nm	1

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				0.50
		min	lbin Ibin	0.59
Max number of wires	simultaneously connectable	max	lbin Nr.	0.74
Conductor section			INI.	2
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	<u> </u>	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
		normal allowable		Vertical plan ±30°
		allowable		Screw / DIN rai
Fixing				35mm
Weight			g	1280
Conductor section			<u> </u>	
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data				
Performance level B1	10d according to EN/ISO 13489-1			
		rated load	cycles	1300000
Mirror contato accord		mechanical load	cycles	1500000
	ling to IEC/EN 609474-4-1			yes
EMC compatibility				yes
Rated AC voltage at {	50/60Hz 60Hz			
Rated AO Voltage at C		min	V	100
		max	v	250
AC operating voltage				
1 0 0	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up	<u>.</u>	0/11	00.1.1 ·
		min	%Us	80 Us min
	dran out	max	%Us	110 Us max
	drop-out	mov	%  c	≤70 Us min
AC average coil cons	umption at 20°C	max	%Us	210 05 11111
no average coll colls	of 50/60Hz coil powered at 50Hz			
	or soroon z con powered at soriz	in-rush	VA	35120
		holding	VA VA	1.53.7
		nording		

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	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	35120
		holding	VA	1.53.7
	of 60Hz coil powered at 60Hz	noiding		1.00.7
		in-rush	VA	210
		holding	VA	15
Dissipation at holding :	<20°C 50Hz	noiding	W	12.5
DC coil operating			VV	12.5
DC rated control voltag	ye			400
		min	V	100
		max	V	250
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	tion ≤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			
	5.00.19.10	min	ms	40
		max	ms	85
	Opening NO	max		
	5 F 2	min	ms	20
		max	ms	55
UL technical data			110	~~
	) for three-phase AC motor			
		at 480V	А	77
		at 600V	A	77
Yielded mechanical pe	arformance	ai 000V		11
neideu mechanical pe				
	for three-phase AC motor	200/2001	ПП	25
		200/208V	HP up	25 20
		220/230V	HP	30 60
		460/480V	HP	60
		575/600V	HP	75
General USE				
	Contactor			
		AC current	А	115
Short-circuit protection	n fuse, 600V			
	High fault			

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FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC/DC COIL, 230VAC/DC

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ENERGY AND AUTOMATION					
		Euco roting	А	200	
		Fuse rating Fuse class	A	200 J	
	Standard fault	FUSE CIASS		J	
	Standard Tault	Chart airquit aurrant	LA	10	
		Short circuit current	kA	10	
		Fuse rating	А	200	
		Fuse class		RK5	
Ambient conditions					
Temperature					
	Operating temperature				
		min	°C	-40	
		max	°C	70	
	Storage temperature				
		min	°C	-50	
		max	°C	80	
Max altitude			m	3000	
Resistance & Protection	on				
Pollution degree				3	
Dimensions					
70 (0.07")	-				
	- 0 - 45 (1 77") - (		-114.6 (4	1 51")	-
18 (0.71")	(0.35") = 45 (1.77") = 0 5 %		-114.0 (*	+.51)	
	(0.00)				
		(3)	-		
0					
n _ n			C		
╚┎╾┓┎┻┑┏╌╌╝	3)				
	110 (4.33")	- 136 (5.35") - - 125 (4.92") -			
	0	22 (0			
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Wiring diagrams					
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A2 2	2 4 6 8				

## Certifications and compliance

T1

T2

T3

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## 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	
	cULus	
ETIM classification		
		EC000066 -

**ETIM 8.0** 

EC000066 -Power contactor, AC switching