

Product designation				Power contactor
Product type designation				BF115
<b>Contact characteristics</b>				
Number of poles	Nr.			3
Rated insulation voltage $U_i$ IEC/EN	V			1000
Rated impulse withstand voltage $U_{imp}$	kV			8
Operational frequency	min	Hz	25	
	max	Hz	400	
IEC Conventional free air thermal current $I_{th}$	A			160
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	160	
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	130	
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	115	
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	115	
	AC-4 (400V)	A	54	
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW	37	
	400V	kW	55	
	415V	kW	55	
	440V	kW	55	
	500V	kW	75	
	690V	kW	110	
	1000V	kW	55	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	160	
	48V	A	160	
	75V	A	120	
	110V	A	10	
	220V	A	–	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	160	
	48V	A	160	
	75V	A	160	
	110V	A	130	
	220V	A	14	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	160	
	48V	A	160	
	75V	A	160	
	110V	A	140	
	220V	A	145	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	160	
	48V	A	160	
	75V	A	160	
	110V	A	160	
	220V	A	160	
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	160	
	48V	A	50	
	75V	A	40	
	110V	A	6	

	220V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	160
	48V	A	150
	75V	A	100
	110V	A	100
	220V	A	92
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	≤24V	A	160
	48V	A	120
	75V	A	120
	110V	A	125
	220V	A	115
Short-time allowable current for 10s (IEC/EN60947-1)		A	920
Protection fuse	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1500
Breaking capacity at voltage	440V	A	1200
	500V	A	850
	690V	A	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)	I <sub>th</sub>	W	11.5
	AC3	W	6.0
Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	I <sub>bin</sub>	4.4
	max	I <sub>bin</sub>	5.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	Prodotti finiti
	max	I <sub>bin</sub>	Prodotti finiti
Conductor section			
Flexible w/o lug conductor section	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
Power terminal protection according to IEC/EN 60529			IP20 front
<b>Mechanical features</b>			
Operating position	normal		Vertical plan

		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight		g		2020
<b>Operations</b>				
Mechanical life		cycles		15000000
Electrical life		cycles		1200000
Rated AC voltage at 60Hz		V		120
<b>AC coil operating</b>				
AC operating voltage				
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
<b>Max cycles frequency</b>				
Mechanical operation		cycles/h		1500
<b>Operating times</b>				
Average time for Us control				
	in AC			
	Closing NO			
		min	ms	16
		max	ms	32
	Opening NO			
		min	ms	9
		max	ms	24
<b>UL technical data</b>				
Yielded mechanical performance				
	for three-phase AC motor			
		200/208V	HP	40
		220/230V	HP	40
		460/480V	HP	75
		575/600V	HP	100
<b>General USE</b>				
Contactor		AC current	A	165
<b>Short-circuit protection fuse, 600V</b>				
High fault		Short circuit current	kA	100
		Fuse rating	A	200
		Fuse class		J
Standard fault		Short circuit current	kA	10
		Fuse rating	A	250
		Fuse class		RK5
<b>Ambient conditions</b>				
<b>Temperature</b>				
Operating temperature				
		min	°C	-50
		max	°C	70
Storage temperature				
		min	°C	-60

	max	°C	+80
Max altitude		m	3000

**Dimensions**

**Wiring diagrams**

**Certifications and compliance**

Compliance

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

Certificates

CCC
cULus

**ETIM classification**

ETIM 8.0	EC000066 - Power contactor, AC switching
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