

Product designation				Power contactor
Product type designation				BF95
Contact characteristics				
Number of poles	Nr.			4
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			140
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	140	
	AC-1 ($\leq 55^\circ\text{C}$)	A	115	
	AC-1 ($\leq 70^\circ\text{C}$)	A	100	
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	95	
	AC-4 (400V)	A	45	
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	140	
	48V	A	140	
	75V	A	100	
	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	140	
	48V	A	140	
	75V	A	140	
	110V	A	110	
	220V	A	12	
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	140	
	48V	A	140	
	75V	A	155	
	110V	A	120	
	220V	A	125	
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	140	
	48V	A	140	
	75V	A	155	
	110V	A	140	
	220V	A	140	
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	140	
	48V	A	44	
	75V	A	36	
	110V	A	6	
	220V	A	–	
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	140	
	48V	A	63	
	75V	A	60	
	110V	A	55	
	220V	A	7	
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series				

	≤24V	A	140
	48V	A	115
	75V	A	90
	110V	A	85
	220V	A	76
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	140
	48V	A	110
	75V	A	110
	110V	A	105
	220V	A	95
Short-time allowable current for 10s (IEC/EN60947-1)		A	760
Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	100
Making capacity (RMS value)		A	1200
Breaking capacity at voltage			
	440V	A	1100
	500V	A	775
	690V	A	745
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	I _{th}	W	8.8
	AC3	W	4.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	Prodotti finiti
	max	I _{bin}	Prodotti finiti
Conductor section			
Flexible w/o lug conductor section			
	min	mm ²	1.5
	max	mm ²	70
Flexible c/w lug conductor section			
	min	mm ²	1.5
	max	mm ²	70
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight			g 2460
Auxiliary contact characteristics			
Thermal current I _{th}			A 140
Operations			
Mechanical life			cycles 15000000

Electrical life				cycles	1400000
AC coil operating					
Rated AC voltage at 50/60Hz, 60Hz		min	V		60
		max	V		110
Rated AC voltage at 50/60Hz			V		110
AC operating voltage					
	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	min	%Us		80 Us min
		max	%Us		110 Us max
	drop-out			max	%Us ≤70 Us min
AC average coil consumption at 20°C					
	of 50/60Hz coil powered at 50Hz				
		in-rush	VA		70...175
		holding	VA		1.7...3.5
	of 50/60Hz coil powered at 60Hz				
		in-rush	VA		70...175
		holding	VA		1.7...3.5
	of 60Hz coil powered at 60Hz				
		in-rush	VA		70...175
		holding	VA		1.7...3.5
Dissipation at holding ≤20°C 50Hz				W	1.3...1,5
DC coil operating					
DC rated control voltage		min	V		60
		max	V		110
DC rated control voltage			V		110
DC operating voltage					
	pick-up	min	%Us		80 Us min
		max	%Us		110 Us max
	drop-out			max	%Us ≤70 Us min
Average coil consumption ≤20°C					
		in-rush	W		70...80
		holding	W		1.3...1.5
Max cycles frequency					
Mechanical operation				cycles/h	1500
Operating times					
Average time for Us control					
	in AC				
				Closing NO	
		min	ms		45
		max	ms		90
				Opening NO	

		min	ms	24
		max	ms	60
in DC				
	Closing NO	min	ms	45
		max	ms	85
	Opening NO	min	ms	24
		max	ms	60

UL technical data

General USE

Contactor

AC current A 150

Short-circuit protection fuse, 600V

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

Ambient conditions

Temperature

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
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching