

Product designation				Power contactor
Product type designation				BF95
Contact characteristics				
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			140
Operational current I _e	AC-1 (≤40°C)	A	140	
	AC-1 (≤55°C)	A	115	
	AC-1 (≤70°C)	A	100	
	AC-3 (≤440V ≤55°C)	A	95	
	AC-4 (400V)	A	45	
Rated operational power AC-3 (T≤55°C)	230V	kW	30	
	400V	kW	55	
	415V	kW	55	
	440V	kW	55	
	500V	kW	75	
	690V	kW	90	
	1000V	kW	45	
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A	140	
	48V	A	140	
	75V	A	100	
	110V	A	10	
	220V	A	–	
IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A	140	
	48V	A	140	
	75V	A	140	
	110V	A	110	
	220V	A	12	
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A	140	
	48V	A	140	
	75V	A	155	
	110V	A	120	
	220V	A	125	
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	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 ≤ 15ms with 1 poles in series	≤24V	A	140	
	48V	A	44	
	75V	A	36	
	110V	A	6	

	220V	A	–
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	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 ≤ 15ms 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	2060	
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

Yielded mechanical performance

for three-phase AC motor

200/208V	HP	30
220/230V	HP	30
460/480V	HP	60
575/600V	HP	75

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

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching