



Product designation

Power contactor

Product type designation

BF195

**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	275
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 275
	AC-1 ( $\leq 55^\circ\text{C}$ )	A 230
	AC-1 ( $\leq 70^\circ\text{C}$ )	A 200
	AC-3 ( $\leq 440\text{V } \leq 55^\circ\text{C}$ )	A 195
	AC-4 (400V)	A 95
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW 55
	400V	kW 90
	415V	kW 110
	440V	kW 110
	500V	kW 132
	690V	kW 160
	1000V	kW 90
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW 104
	400V	kW 181
	500V	kW 199
	690V	kW 312
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A 275
	48V	A 275
	75V	A 275
	110V	A 120
	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 275
	48V	A 275
	75V	A 275
	110V	A 170
	220V	A 150
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A 275
	48V	A 275
	75V	A 275

	110V	A	170
	220V	A	150
	330V	A	150
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	275
	220V	A	275
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	90
	220V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	140
	330V	A	100
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	160
	330V	A	160
	460V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1560
Protection fuse			
	gG (IEC)	A	315
	aM (IEC)	A	250
Making capacity (RMS value)		A	1658
Breaking capacity at voltage			
	440V	A	1658
	500V	A	1326
	690V	A	1377
Resistance per pole (average value)		m?	0.18
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	13
	AC3	W	6.7
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	lbin	159
	max	lbin	159

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1

Power terminal protection according to IEC/EN 60529

IP00

### Mechanical features

Operating position

normal allowable	Vertical plan ±30°
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Fixing

Screw

Weight

g	3000
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### Operations

Mechanical life

cycles	10000000
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Electrical life

cycles	1000000
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### Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1000000
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EMC compatibility

yes

### AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

min	V	100
max	V	250

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
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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
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AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

of 50/60Hz coil powered at 60Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

of 60Hz coil powered at 60Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

Dissipation at holding ≤20°C 50Hz

W	1.5...3.0
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### DC coil operating

DC rated control voltage

min	V	100
max	V	250

DC operating voltage

pick-up

min	%Us	85 Us min
max	%Us	110 Us max

drop-out		max	%Us	≤70 Us min	
Average coil consumption ≤20°C		in-rush holding	W W	160...230 1.5...3.0	
Max cycles frequency					
Mechanical operation			cycles/h	1000	
Operating times					
Average time for Us control in AC		Closing NO	min max	ms ms	50 100
		Opening NO	min max	ms ms	35 75
UL technical data					
Yielded mechanical performance for three-phase AC motor		200/208V 220/230V 460/480V 575/600V	HP HP HP HP	60 75 150 150	
General USE					
Contactor		AC current	A	275	
Short-circuit protection fuse, 600V High fault		Short circuit current Fuse rating Fuse class	kA A	100 400 J	
Standard fault		Short circuit current Fuse rating Fuse class	kA A	10 400 RK5	
Ambient conditions					
Temperature		Operating temperature	min max	°C °C	-40 70
		Storage temperature	min max	°C °C	-50 80
Max altitude			m	3000	
Resistance & Protection					
Pollution degree				3	
ETIM classification					
ETIM 8.0				EC000066 - Power contactor, AC switching	