

Product designation	Power contactor		
Product type designation	BF195		
<b>Contact characteristics</b>			
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	A 275		
Operational current Ie	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-1 ( $T \leq 40^{\circ}\text{C}$ )	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current Ie 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 Ie 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 Ie 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 Ie in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	275
	48V	A	275
	75V	A	275
	110V	A	275
	220V	A	350
IEC max current Ie in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	275
	48V	A	275
	75V	A	180
	110V	A	90
	220V	A	—
IEC max current Ie in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			

	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ 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 $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ 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°
Fixing			Screw
Weight	g	4000	
Operations			
Mechanical life	cycles	10000000	
Electrical life	cycles	1000000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1			

	rated load	cycles	1000000
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min	V	250
	max	V	500
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	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
DC coil operating			
DC rated control voltage	min	V	250
	max	V	500
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	W	160...230
	holding	W	1.5...3.0
Max cycles frequency			
Mechanical operation	cycles/h		1000
Operating times			
Average time for Us control			
in AC			
Closing NO	min	ms	50
	max	ms	100
Opening NO	min	ms	35
	max	ms	75

**UL technical data**

Yielded mechanical performance  
for three-phase AC motor

200/208V	HP	60
220/230V	HP	75
460/480V	HP	150
575/600V	HP	150

**General USE**

Contactor	AC current	A	275
Short-circuit protection fuse, 600V			
High fault	Short circuit current	kA	100
	Fuse rating	A	400
	Fuse class	J	
Standard fault	Short circuit current	kA	10
	Fuse rating	A	400
	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				
Pollution degree				3
ETIM classification				
ETIM 8.0				EC000066 - Power contactor, AC switching