



			at the
Product designation			Power contactor
Product type designation			BF195
Contact characteristics			
Number of poles		Nr.	3
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	max	A	275
Operational current le			210
	AC-1 (≤40°C)	А	275
	AC-1 (≤55°C)	A	230
	AC-1 (≤55°C) AC-1 (≤70°C)		200
	AC-3 (≤440V ≤55°C)	A	195
	. , , , , , , , , , , , , , , , , , , ,	A	
Deted energianel neuron AC 2 (T <ee°c)< td=""><td>AC-4 (400V)</td><td>A</td><td>95</td></ee°c)<>	AC-4 (400V)	A	95
Rated operational power AC-3 (T≤55°C)	000)/	1.1.47	
	230V	kW	55
	400V	kW	90
	415V	kW	110
	440V	kW	110
	500V	kW	132
	690V	kW	160
	1000V	kW	90
Rated operational current AC-3 (T≤55°C)			
	230V	А	195
	400V	А	195
	415V	А	195
	440V	А	195
	500V	А	184
	690V	А	165
	1000V	Α	85
Rated operational power AC-1 (T≤40°C)			
	230V	kW	104
	400V	kW	181
	500V	kW	199
	690V	kW	312
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	275
	48V	А	275
	75V	A	275
	110V	A	120
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series		-	

≤24V

275

А



3-POLIGES SCHÜTZ, IEC BETRIEBSSTROM LE (AC3) = 195A, AC/DC-SPULE, 60... 130VAC/DC

	48V	А	275
	75V	А	275
	110V	А	170
	220V	А	150
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	275
	110V	А	170
	220V	А	150
	330V	Α	150
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	275
	110V	А	275
	220V	Α	275
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	180
	110V	А	90
	220V	А	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	180
	110V	А	140
	220V	А	100
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	180
	110V	А	160
	220V	А	140
	330V	А	100
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series			
	≤24V	А	275
	48V	А	275
	75V	А	180
	110V	А	160
	220V	А	160
	330V	А	160
	460V	Α	100
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1560
Protection fuse			
	gG (IEC)	А	315
	aM (IEC)	А	250
Making capacity (RMS value)		А	1658
Breaking capacity at voltage		_	
	440V	А	1658
	500V	А	1326
	690V	А	1377
Resistance per pole (average value)		mΩ	0.18

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Power dissipation per pole (average value)			
	Ith	W	13
	AC-3	W	6.7
Fightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159
Fightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
Power terminal protection according to IEC/EN 60529	Παλ	1 111	IP00
Aechanical features			11 00
Derating position			
operating position			Montheal along
	normal		Vertical plan
	allowable		±30°
Fixing			Screw
Veight		g	3000
Dperations			
Mechanical life		cycles	10000000
Electrical life		cycles	1000000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
			1000000
5	rated load	cycles	1000000
EMC compatibility	rated load	cycles	yes
EMC compatibility	rated load	cycles	
EMC compatibility AC coil operating	rated load	cycles	
EMC compatibility		•	yes
EMC compatibility AC coil operating	min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz		•	yes
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage	min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz	min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage	min max	V V	yes 60 130
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz	min max min	V V WS	yes 60 130 80 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up	min max	V V	yes 60 130
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz	min max min max	V V %Us %Us	yes 60 130 80 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min	V V WS	yes 60 130 80 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max	V V %Us %Us	yes 60 130 80 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min max max	V V %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max	V V %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 80 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	min max min max max	V V %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max max max	V V VUs %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	min max min max max max	V V %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 80 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	min max min max max max	V V VUs %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	min max min max max max	V V VUs %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C	min max min max max max	V V VUs %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C	min max min max max max max max	V V WUs %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max 100230
AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	min max min max max max max	V V VUs %Us %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C	min max min max max max max max max	V V V %Us %Us %Us %Us %Us %Us VA VA	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	min max min max max max max max max max max	V V V %Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max 100230 1.53.0
AC coll operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 50Hz	min max min max max max max max max	V V V %Us %Us %Us %Us %Us %Us VA VA	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC coil operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	min max min max max max max max max max max	V V V %Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0 160230 1.53.0
AC coll operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 50Hz	min max min max max max max max max max max max	V V V %Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0 160230 1.53.0
AC coll operating Rated AC voltage at 50/60Hz, 60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 50Hz	min max min max max max max max max max max	V V V %Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	yes 60 130 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0 160230 1.53.0



DC coil operating					
DC rated control voltage	ge				
	-		min	V	60
			max	V	130
DC operating voltage					
De operating venage	pick-up				
	pick-up		min	%Us	85 Us min
				%Us	110 Us max
			max	%US	TTO US Max
	drop-out			0/11	
			max	%Us	≤70 Us min
Average coil consump	tion ≤20°C				
			in-rush	W	160230
			holding	W	1.53.0
Max cycles frequency					
Mechanical operation				cycles/h	1000
Operating times					
Average time for Us co	ontrol				
.	in AC				
		Closing NO			
		clocking it c	min	ms	50
			max	ms	100
		Opening NO	IIIdX	1115	100
		Opening NO			25
			min	ms	35
Literature to the Later			max	ms	75
UL technical data					
Yielded mechanical pe					
	for three-phase AC mo	otor			
			200/208V	HP	60
			220/230V	HP	75
			460/480V	HP	150
			575/600V	HP	150
General USE					
	Contactor				
			AC current	А	275
Short-circuit protection	fuse 6001/				210
	High fault		Short circuit current	kA	100
			Fuse rating	A	400
	<u></u>		Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	А	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			Παλ	 	3000
Resistance & Protection	n			111	
					2
Pollution degree					3

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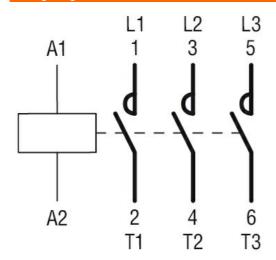
ENERGY AND AUTOMATION

Dimensions

3-POLIGES SCHÜTZ, IEC BETRIEBSSTROM LE (AC3) = 195A, AC/DC-SPULE, 60... 130VAC/DC

105 (4.13") 149 (5.87") 5 (0.20") (1.38") 112 (4.41") 0 • 0 0 C 0 0 Œ Ð FR FF 0 E 128 (5.04") 187 (7.36") 169 (6.65") 177 (6.97") 193 (7.60") E • [] Ø5.4 (0.21") 62 F Œ Ð 0 Ø8.Š(0.33") 18 (0.71") 93 (3.66")

Wiring diagrams



_____35___ (1.38")

Certifications and compliance

Compliance		
	CSA C22.2 n° 60947-1	
	CSA C22.2 n° 60947-4-1	
	IEC/EN/BS 60947-1	
	IEC/EN/BS 60947-4-1	
	UL 60947-1	
	UL 60947-4-1	
Certificates		
	cULus	
ETIM classification		
ETIM 8.0		EC000066 - Power contactor, AC switching

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