



Power contactor
BF195

Product designation

Product type designation

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	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-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_e 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	275
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	275
	48V	A	275
	75V	A	180
	110V	A	90
	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	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			
	$\leq 24\text{V}$	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			
	$\leq 24\text{V}$	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 Ω	0.18
Power dissipation per pole (average value)			
	I _{th}	W	13
	AC3	W	6.7
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	I _{bin}	159
	max	I _{bin}	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		Vertical plan

	allowable		±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	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
	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	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	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
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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

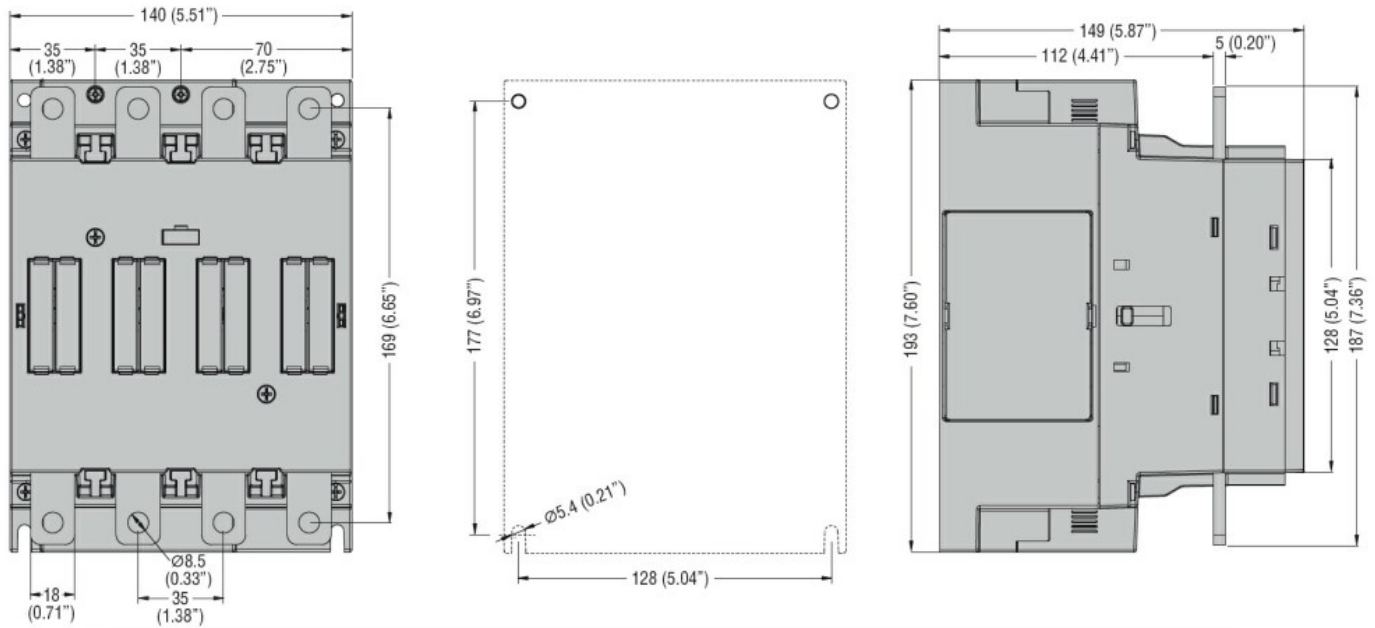
m	3000
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Resistance & Protection

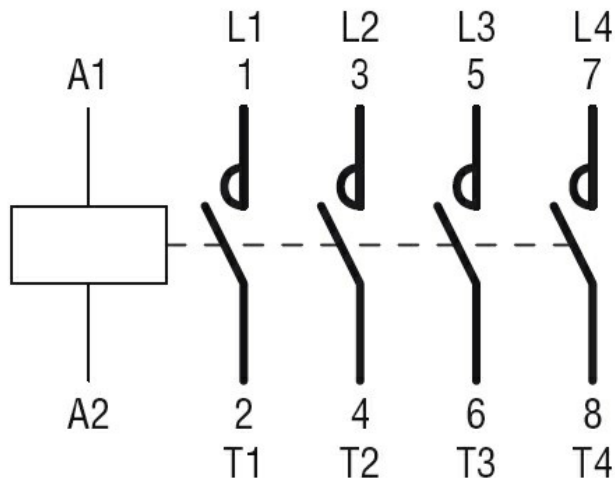
Pollution degree

3

Dimensions [mm (in)]



Wiring diagrams



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