



Product designation
Product type designation

Power contactor
BF230

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	350
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 350
	AC-1 ($\leq 55^\circ\text{C}$)	A 290
	AC-1 ($\leq 70^\circ\text{C}$)	A 250
	AC-3 ($\leq 440\text{V } \leq 55^\circ\text{C}$)	A 230
	AC-4 (400V)	A 110
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW 55
	400V	kW 110
	415V	kW 110
	440V	kW 132
	500V	kW 132
	690V	kW 160
	1000V	kW 110
Rated operational current AC-3 ($T \leq 55^\circ\text{C}$)	230V	A 230
	400V	A 230
	415V	A 230
	440V	A 230
	500V	A 184
	690V	A 165
	1000V	A 100
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 132
	400V	kW 230
	500V	kW 253
	690V	kW 397
IEC max current $I_e</$		

	48V	A	350
	75V	A	350
	110V	A	270
	220V	A	225
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	350
	110V	A	270
	220V	A	270
	330V	A	225
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	350
	110V	A	350
	220V	A	350
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	250
	110V	A	135
	220V	A	—
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	250
	110V	A	225
	220V	A	180
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	250

Power dissipation per pole (average value)

Ith	W	21
AC-3	W	9.3

Tightening torque for terminals

min	Nm	18
max	Nm	18
min	Ibin	159
max	Ibin	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

Operations

Mechanical life

cycles 10000000

Electrical life

cycles 1000000

Safety related data

Performance level B10d according to EN/ISO 13489-1

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
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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

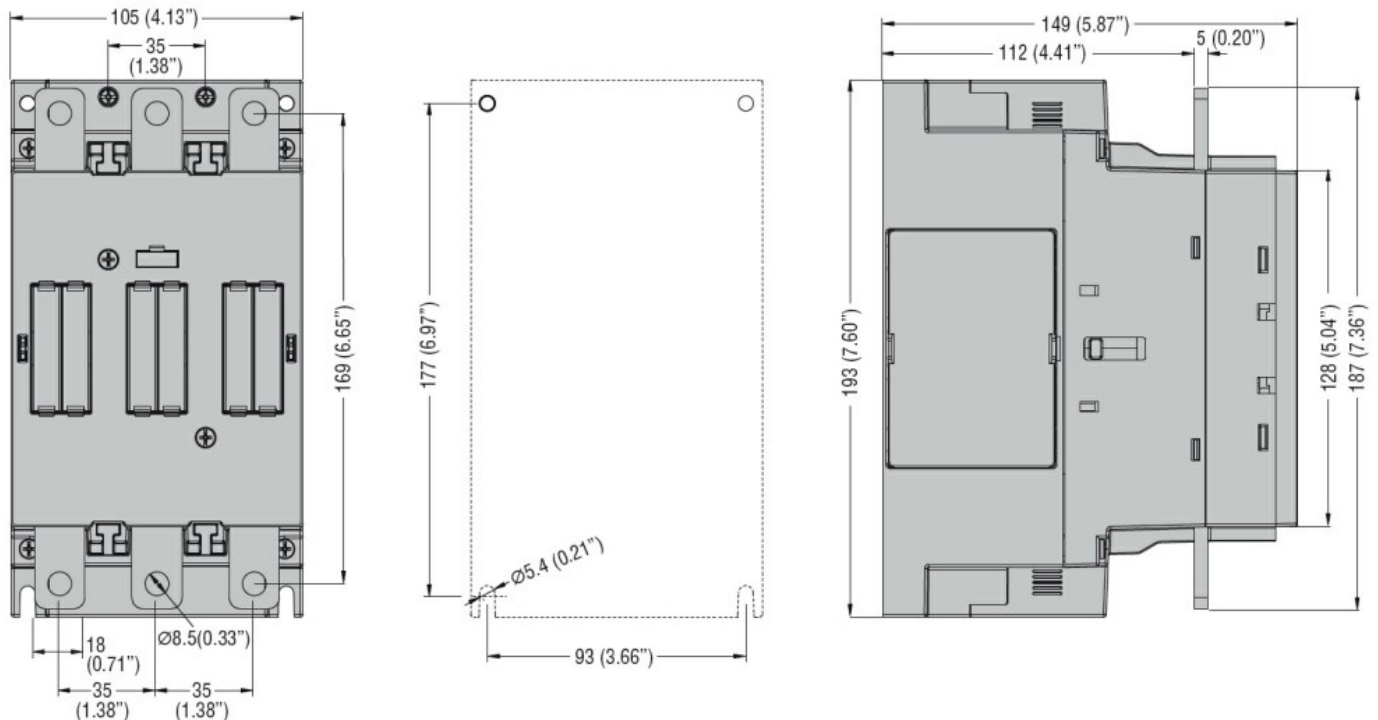
Opening NO

min	ms	30
max	ms	75

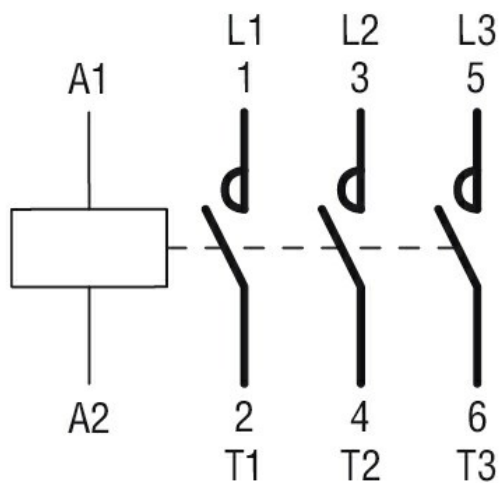
UL technical data

Yielded mechanical performance

Dimensions



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