



Product designation	Power contactor		
Product type designation	B500		
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	700	
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	700
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	520
	AC-4 (400V)	A	175
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	230V	kW	156
	400V	kW	290
	415V	kW	306
	440V	kW	328
	500V	kW	367
	690V	kW	416
	1000V	kW	312
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW	252
	400V	kW	438
	500V	kW	575
	690V	kW	755
Short-time allowable current for 10s (IEC/EN60947-1)	A	4050	
Protection fuse	gG (IEC)	A	800
	aM (IEC)	A	500
Making capacity (RMS value)	A	6300	
Breaking capacity at voltage	440V	A	6300
	500V	A	5600
	690V	A	5000
Resistance per pole (average value)	m Ω	0.14	
Power dissipation per pole (average value)	I_{th}	W	68.6
	AC3	W	35
Tightening torque for terminals	min	Nm	35
	max	Nm	35
	min	lbin	25.8
	max	lbin	25.8

Tightening torque for coil terminal

min	Nm	1
max	Nm	1
min	lbft	0.74
max	lbft	0.74

Max number of wires simultaneously connectable

nr. 2

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 1808

Operations

Mechanical life

cycles 5000000

Electrical life

cycles 700000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	700000
mechanical load	cycles	5000000

Mirror contacts according to IEC/EN 60947-4-1

yes

EMC compatibility

yes

AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

min	V	48
max	V	480

AC operating voltage

of 50/60Hz coil powered at 50Hz
pick-up

min	%Us	80
max	%Us	110

drop-out

min	%Us	20
max	%Us	60

of 50/60Hz coil powered at 60Hz
pick-up

min	%Us	80
max	%Us	110

drop-out

min	%Us	20
max	%Us	60

of 60Hz coil powered at 60Hz
pick-up

min	%Us	80
max	%Us	110

drop-out

min	%Us	20
max	%Us	60

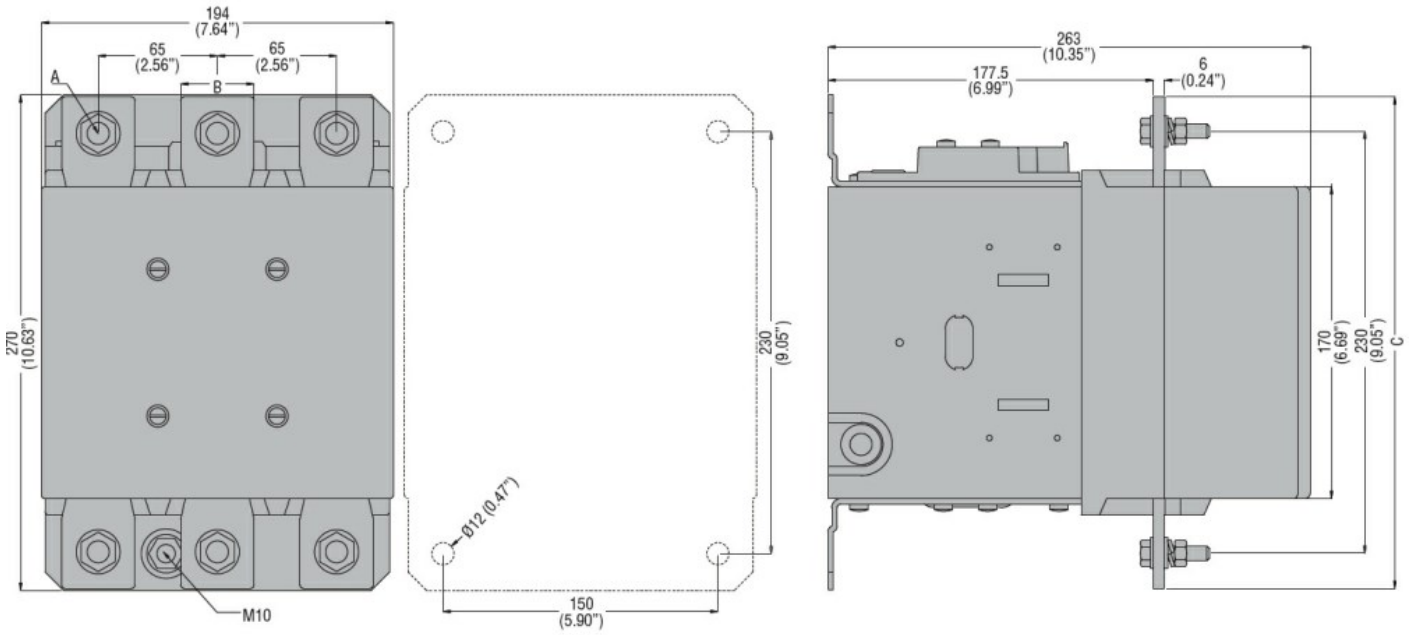
AC operating voltage at 20°C

of 50/60Hz coil powered at 50Hz

in-rush	VA	400
holding	VA	18

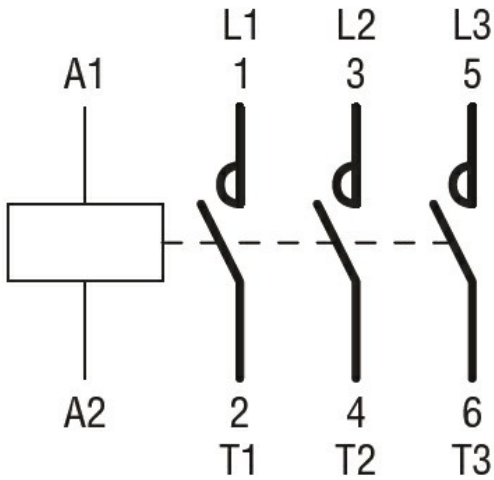
of 50/60Hz coil powered at 60Hz

		in-rush	VA	400
		holding	VA	18
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz				
			W	18
DC coil operating				
DC rated control voltage				
		min	V	24
DC operating voltage				
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	60
Average coil consumption $\leq 20^{\circ}\text{C}$				
		in-rush	W	400
		holding	W	18
Max cycles frequency				
Mechanical operations				cycles/h 1200
Operating times				
Average time for Us control				
	in AC			
		Closing NO		
		min	ms	110
		max	ms	180
		Opening NO		
		min	ms	60
		max	ms	100
	in DC			
		Closing NO		
		min	ms	110
		max	ms	180
		Opening NO		
		min	ms	60
		max	ms	100
UL technical data				
General USE				
	Contactor			
		AC current	A	700
Ambient conditions				
Temperature				
	Operating temperature			
		min	$^{\circ}\text{C}$	-50
		max	$^{\circ}\text{C}$	70
	Storage temperature			
		min	$^{\circ}\text{C}$	-60
		max	$^{\circ}\text{C}$	80
Max altitude				m 3000
Resistance & Protection				
Pollution degree				3
Dimensions				



CONTACTOR TYPE	A	B	C
B500	M10	35 (1.38")	265 (10.43")
B630	M12	40 (1.57")	270 (10.63")

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
 CSA C22.2 n° 60947-4-1
 IEC/EN 60947-1
 IEC/EN 60947-4-1
 UL 60947-1
 UL 60947-4-1

Certificates

CCC
 cULus
 EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching