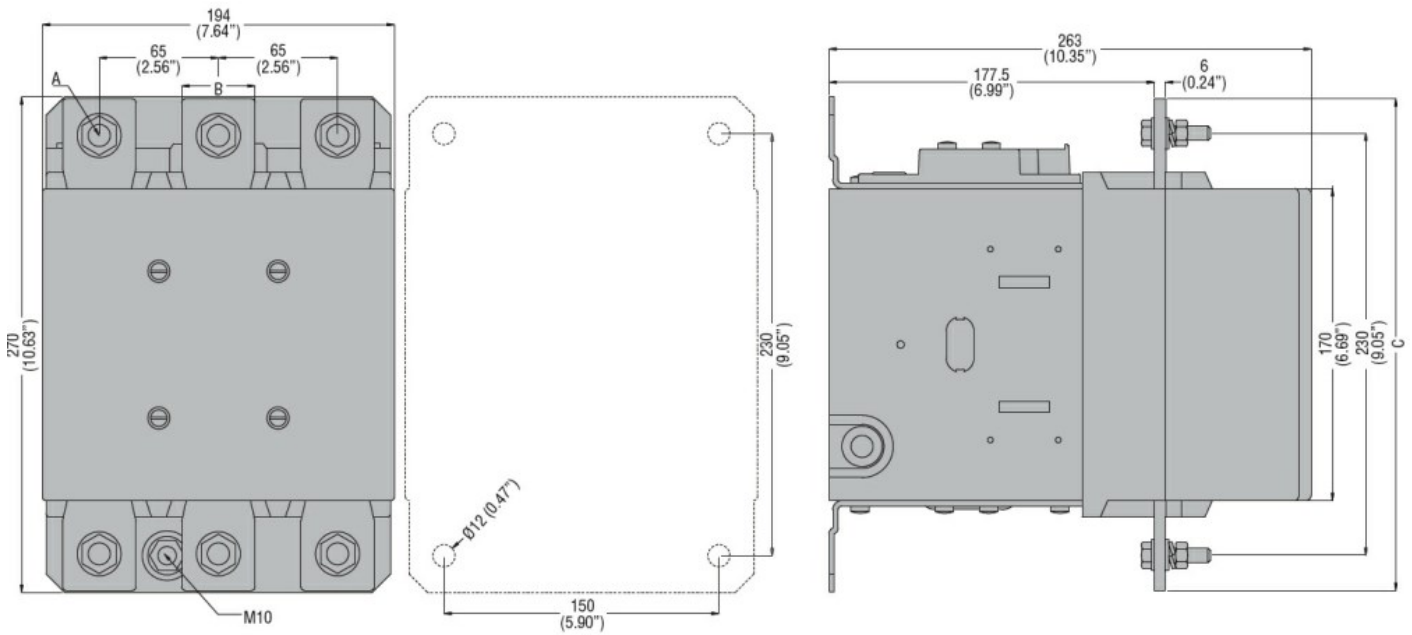




Product designation	Power contactor		
Product type designation	B500		
Contact characteristics			
Number of poles	nr.	3	
Rated insulation voltage U_i	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operating frequency	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current I_{th}	A	700	
Operating current	Operational current AC1 ($\leq 40^\circ\text{C}$)	A	700
	Operational current AC3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	520
	Operational current AC4 (400V)	A	175
Rated operational power AC1 ($T \leq 40^\circ\text{C}$)	230V	kW	252
	400V	kW	438
	500V	kW	575
	690V	kW	755
Rated operational power AC3 ($T \leq 55^\circ\text{C}$)	230V	kW	156
	400V	kW	290
	415V	kW	306
	440V	kW	328
	500V	kW	367
	690V	kW	416
1000V	kW	312	
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	Breaking capacity 440V	A	6300
	Breaking capacity 500V	A	5600
	Breaking capacity 690V	A	5000
Resistance per pole (average value)	m Ω	0.14	
Power dissipation per pole (average value)	Power dissipation pole (average value) I_{th}	W	68.6
	AC3	W	35
Tightening torque for terminals	min	Nm	35
	max	Nm	35
	min	lbft	25.8
	max	lbft	25.8

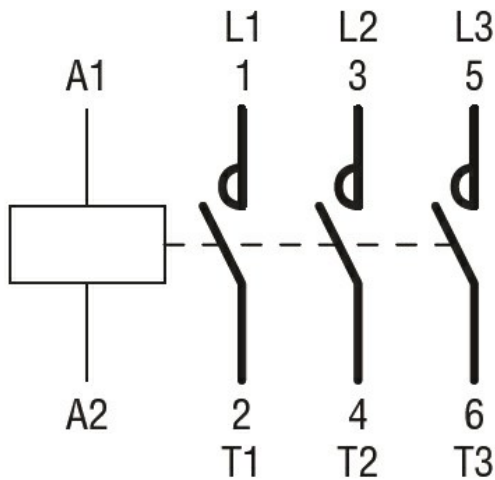
max number of wires simultaneously connectable		nr.	2
Conductor section	AWG	max	2x 500 kcmil
Power terminal protection according to IEC/EN 60529			IP00
Auxiliary contact characteristics			
Operational current AC1 ($\leq 40^{\circ}\text{C}$)		A	700
Operating current DC13		110V	A Screw
Ambient conditions			
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
Operating position		normal allowable	Vertical plan $\pm 30^{\circ}$
Mounting			Screw
Weight		g	18.06
Operations			
Mechanical life		Cycles	5000000
Electrical life		Cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1		rated load mechanical load	Cicli 700000 Cicli 5000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
AC coil operating			
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up	min	%Us 0.8
		max	%Us 1.1
	drop-out	min	%Us 0.2
		max	%Us 0.6
	of 50/60Hz coil powered at 60Hz		
	pick-up	min	%Us 0.8
		max	%Us 1.1
	drop-out	min	%Us 0.2
		max	%Us 0.6
AC operating voltage	of 50/60Hz coil powered at 50Hz	in-rush holding	VA 400 VA 18
	of 50/60Hz coil powered at 60Hz		

		in-rush	VA	400
		holding	VA	18
Dissipation at holding ≤20°C 50Hz				
			W	18
DC coil operating				
DC rated control voltage				
		min	V	24
DC operating voltage				
	pick-up			
		min	%Us	0.8
		max	%Us	1.10
	drop-out			
		min	%Us	0.2
		max	%Us	0.60
Average coil consumption ≤20°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
Other features				
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

Certifications

- 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

Compliance

- CCC
- cULus
- EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching