

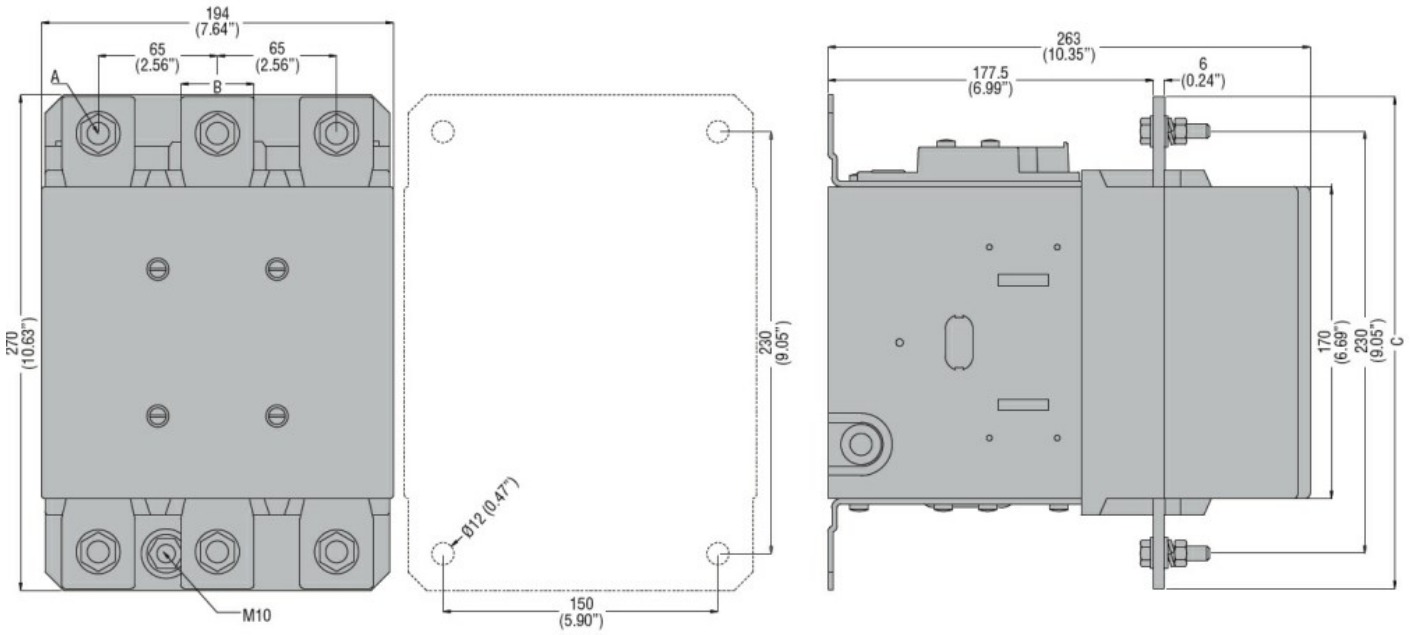


Product designation	Power contactor		
Product type designation	B500		
Contact characteristics			
Number of poles	Nr.	3	
Rated insulation voltage U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I_{th}	A	700	
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A	700
	AC-1 ($\leq 55^\circ\text{C}$)	A	550
	AC-1 ($\leq 70^\circ\text{C}$)	A	500
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	520
	AC-4 (400V)	A	240
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
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	75V	A	650
	110V	A	320
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	75V	A	650
	110V	A	550
	220V	A	450
	330V	A	--
	460V	A	--
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	75V	A	650
	110V	A	600
	220V	A	600

	330V	A	450
	460V	A	--
IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	A	650
	110V	A	600
	220V	A	600
	330V	A	600
	460V	A	450
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	75V	A	550
	110V	A	320
	220V	A	--
	330V	A	--
	460V	A	--
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	75V	A	550
	110V	A	550
	220V	A	450
	330V	A	--
	460V	A	--
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	A	550
	110V	A	550
	220V	A	550
	330V	A	450
	460V	A	--
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	75V	A	550
	110V	A	550
	220V	A	550
	330V	A	450
	460V	A	450
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	5000
Breaking capacity at voltage			
	440V	A	5000
	500V	A	4500
	690V	A	4000
Resistance per pole (average value)		mΩ	0.14
Power dissipation per pole (average value)			
	I _{th}	W	68.6
	AC-3	W	35
Tightening torque for terminals			
	min	Nm	35
	max	Nm	35
	min	I _{bin}	25.8
	max	I _{bin}	25.8
Tightening torque for coil terminal			
	min	Nm	1
	max	Nm	1

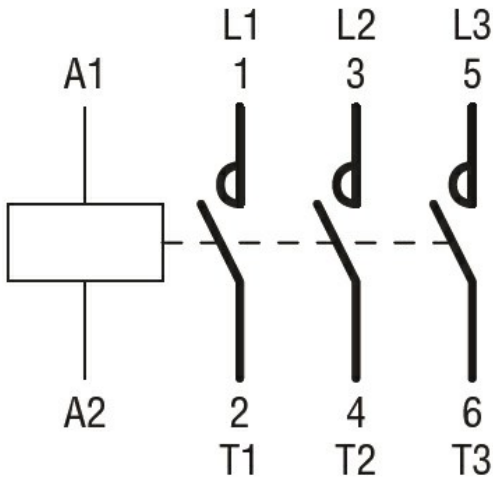
	min	I _{bin}	0.74
	max	I _{bin}	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
		AWG/Kcmil	
		max	2x 500 kcmil
Power terminal protection according to IEC/EN 60529			IP00
Mechanical features			
Operating position			
		normal allowable	Vertical plan ±30°
Fixing			Screw
Weight		g	1798
Operations			
Mechanical life		cycles	5000000
Electrical life		cycles	700000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
		rated load	cycles
		mechanical load	cycles
			700000
			5000000
Mirror contacts according to IEC/EN 60947-4-1			Yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	48
AC operating voltage			
			of 50/60Hz coil powered at 50Hz
			pick-up
	min	%U _s	80
	max	%U _s	110
			drop-out
	min	%U _s	20
	max	%U _s	60
			of 50/60Hz coil powered at 60Hz
			pick-up
	min	%U _s	80
	max	%U _s	110
			drop-out
	min	%U _s	20
	max	%U _s	60
			of 60Hz coil powered at 60Hz
			pick-up
	min	%U _s	80
	max	%U _s	110
			drop-out
	min	%U _s	20
	max	%U _s	60
AC average coil consumption at 20°C			
			of 50/60Hz coil powered at 50Hz
		in-rush	VA
		holding	VA
			400
			18
			of 50/60Hz coil powered at 60Hz
		in-rush	VA
		holding	VA
			400
			18

Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	18
DC coil operating			
DC rated control voltage		V	48
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 operation		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			
Rated operational voltage AC (UL)		V	600
General USE			
Contactor		AC current	A 700
Short-circuit protection fuse, 600V			
Standard fault		Short circuit current	kA 18
		Fuse rating	A 1200
		Fuse class	L
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 classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching