



Product designation Product type designation			Power contactor B500
Contact characteristics			D 000
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
C por another in equation	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	700
Operational current le			
	AC-1 (≤40°C)	Α	700
	AC-1 (≤55°C)	Α	550
	AC-1 (≤70°C)	Α	500
	AC-3 (≤440V ≤55°C)	Α	520
	AC-4 (400V)	Α	240
Rated operational power AC-3 (T≤55°C)	7.0 . (.001)		
rtated speraderial perior / to o (1-55 o)	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≤40°C)			
,	230V	kW	252
	400V	kW	438
	500V	kW	575
	690V	kW	755
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
·	75V	Α	650
	110V	Α	320
	220V	Α	
	330V	Α	
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
'	75V	Α	650
	110V	Α	550
	220V	Α	450
	330V	Α	
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
'	75V	Α	650
	110V	Α	600



	330V	Α	450
	460V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	75V	Α	650
	110V	Α	600
	220V	Α	600
	330V	Α	600
	460V	Α	450
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	1001	- / \	100
120 max out on 10 m 200 200 with 2/11 = 10 mo with 1 poles in series	75V	Α	550
	110V	A	320
	220V	A	
		A	
	330V		
150 DOS DOS WILLIAM WILLIAM IN CO. 1. 1. 1.	460V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series		_	
	75V	Α	550
	110V	Α	550
	220V	Α	450
	330V	Α	
	460V	Α	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	75V	Α	550
	110V	Α	550
	220V	Α	550
	330V	Α	450
	460V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	1001	,,	
120 max current to in 200-200 with 2/1 2 forms with 4 poics in series	75V	Α	550
	110V		550
		A	
	220V	A	550
	330V	Α	450
	460V	Α .	450
Short-time allowable current for 10s (IEC/EN60947-1)		Α	4050
Protection fuse			
	gG (IEC)	Α	800
	aM (IEC)	Α	500
Making capacity (RMS value)		Α	5000
Breaking capacity at voltage			
	440V	Α	5000
	500V	Α	4500
	690V	Α	4000
Resistance per pole (average value)		mΩ	0.14
Power dissipation per pole (average value)			
1 1 1 (3)	Ith	W	68.6
	AC-3	W	35
Tightening torque for terminals	, 10 0	••	
ng.no.mg torquo for torrimitato	min	Nm	35
		Nm	35 35
	max		25.8
	min	lbin	
Tightening towns for call to resist	max	Ibin	25.8
Tightening torque for coil terminal			4
	min	Nm	1
	max	Nm	1



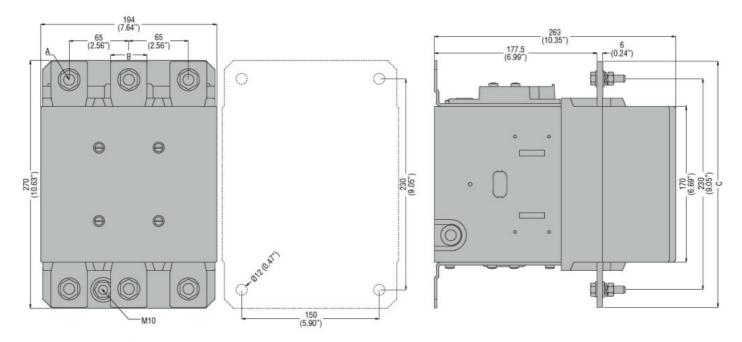
Max number of wires simultaneously connectable max lbin 0.74 Conductor section AWG/Kcmil max 2x 500 kcmil Power terminal protection according to IEC/EN 60529 max 2x 500 kcmil Power terminal protection according to IEC/EN 60529 mormal features Deparating position normal allowable yertical plan allowable ± 30° Fixing g 1798 Deparations Wechanical life cycles 5000000 Electrical life cycles 5000000 Electrical life cycles 700000 Safety related data rated load cycles 700000 Performance level B10d according to EN/ISO 13489-1 rated load cycles 700000 Wirror contats according to IEC/EN 609474-4-1 Yes EMC compatibility yes			min	Ibin	0.74
Conductor section AWG/Kcmil max 2x 500 kcmil P00					
AWG/Kcmil Prover terminal protection according to IEC/EN 60529 IPO0 IPO	Max number of wires simultaneo	ously connectable		Nr.	2
Process Proc	Conductor section				
Pool	AWG/K	cmil			
Negretating position Section S			max		2x 500 kcmil
Departing position	Power terminal protection accor	ding to IEC/EN 60529			IP00
Name	Mechanical features				
String S	Operating position				
Screw Neight Screw Screw Neight Screw Sc			normal		Vertical plan
Neight			allowable		±30°
Cycles S000000	Fixing				Screw
Mechanical life Cycles 5000000	Weight			g	1798
Performance level B10d according to EN/ISO 13489-1	Operations				
Performance level B10d according to EN/ISO 13489-1 rated load ra	Mechanical life			cycles	5000000
Performance level B10d according to EN/ISO 13489-1 rated load cycles 700000 mechanical load cycles 5000000 Mirror contats according to IEC/EN 609474-4-1 First EMC compatibility Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up first Pick-up first Pick-up first Pick-up min will wills 80 max wills 110 drop-out min wills 80 max wills 100 for 50/60Hz coil powered at 60Hz pick-up first Pick-up min wills 80 max wills 110 drop-out min wills 80 max wills 100 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz first pick-up min wills 80 max wills 100 min wills 80 max wills 100 min wills 80 max wills 100 min wills 80 max wills 10 drop-out min wills 80 max wills 100 according wills 100 min wills 80 max wills 100 according wills 100 according wills 100 min w	Electrical life			cycles	700000
rated load mechanical load cycles 700000 50000000 700000 700000 700000 700000 700000 700000 700000 700000000	Safety related data				
Mirror contats according to IEC/EN 609474-4-1 Yes	Performance level B10d accord	ling to EN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1				-	
Marcon Section Secti			mechanical load	cycles	
AC ooll operating V	_	'EN 609474-4-1			Yes
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 Mus 60 max %Us 60 max %Us 110 Mus 60 max min %Us 80 max %Us 60 max min %Us 80 max %Us 60 max min %Us 80 max %Us 110 Mus 80 max %Us 110 Mus 80 max %Us 110 Mus 80 max %Us 80 max %Us 60 Mus 60 Mu					yes
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min	AC coil operating				
of 50/60Hz coil powered at 50Hz pick-up min				V	48
Pick-up min	AC operating voltage				
Max Mus 110 Mus 80 Max Mus 110 Mus Mus 110 Mus Mus 110 Mus Mus 60 Mus Mus 60 Mus Mus 60 Mus Mus 60 Mus Mus Mus 60 Mus	of 50/60)Hz coil powered at 50Hz			
Max Wus 110		pick-up			
drop-out min %Us 20 max %Us 60			min		
min %Us 20 max %Us 60			max	%Us	110
max %Us 60		drop-out			
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 60 of max %Us 110 drop-out min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 10 drop-out min %Us 20 max %Us 60 AC average coil consumption 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 in-rush VA			min		
Pick-up min %Us 80 max %Us 110 Max Mus 110 Mus			max	%Us	60
Min Mus 80 Max Mus 110 Mus 110 Mus Mus 20 Mus Mus 60 Mus Mus 60 Mus Mus 60 Mus Mus Mus 60 Mus	of 50/60	·			
Max %Us 110		pick-up			
drop-out min %Us 20 max %Us 60					
min %Us 20 max %Us 60			max	%Us	110
max %Us 60		drop-out		0/17	00
of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 AC average coil consumption 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					
pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 60 AC average coil consumption 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 400	1001	anil navigrad -t COLL	max	%US	00
min %Us 80 max %Us 110	of 60Hz	-			
Max %Us 110		ріск-ир		0/11-	90
drop-out min %Us 20 max %Us 60 AC average coil consumption 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					
min %Us 20 max %Us 60 AC average coil consumption 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		dran aut	inax	%US	110
MC average coil consumption 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		arop-out	min	0/110	20
AC average coil consumption 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					
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	AC average coil consumption of	30°C	IIIdX	/0US	00
in-rush VA 400 holding VA 18 of 50/60Hz coil powered at 60Hz in-rush VA 400					
of 50/60Hz coil powered at 60Hz in-rush VA 400	01 50/60	л iz coii powereu at эопz	in ruch	\/^	400
of 50/60Hz coil powered at 60Hz in-rush VA 400					
in-rush VA 400	of E0/60)Hz coil powered at 60Hz	noluling	٧A	10
	01 30/60	7 12 con powered at 00Hz	in ruch	١/٨	400
noiding va 18					
			noluling	٧A	10



DC Tated control voltage Pick-up Pick-u	Dissipation at holding ≤	20°C 50Hz			W	18
DC operating voltage pick-up min max wus 80 max wus 100 max wus wu	DC coil operating	•			V	40
Pick-up		U			V	40
min	Do operating voltage	nick-un				
Max Max		pion ap		min	%Us	80
Marka Mar						
Average coil consumption ≤20°C in-rush holding w 400 holding w 18		drop-out				
Average coil consumption ≤20°C in-rush W 400 holding W 18 Max cycles frequency				min		
In-rush W 400 holding W 18				max	%Us	60
Max cycles frequency	Average coil consumpt	ion ≤20°C			10.	400
Max cycles frequency Cycles/h 1200 Mechanical operation cycles/h 1200 Operating times In AC In AC Closing NO min ms 110 Max ms 180 Opening NO min ms 60 min ms 60 max ms 180 Opening NO min ms 100 Use 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 class L Ambient conditions Temperature min °C -50 max °C 70 Storage temperature min °C -50 max °C 70 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
Mechanical operation	May avalog fraguency			nolaing	VV	18
Closing NO					cyclos/b	1200
Average time for Us control in AC Closing NO	-				Cycles/11	1200
in AC Closing NO	-	ntrol				
Closing NO	5					
Max			Closing NO			
Opening NO min ms 60 max ms 100				min	ms	110
In DC				max	ms	180
Closing NO			Opening NO	_		
In DC						
Closing NO		in DC		max	ms	100
Max		IN DC	Closing NO			
Max			Closing NO	min	ms	110
Opening NO						
Max			Opening NO			
V 600				min	ms	60
Rated operational voltage AC (UL) V 600				max	ms	100
Contactor						
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 °C -50 -50 max °C 70 70 To -60 max °C 80 80 Max altitude m 3000 Resistance & Protection Pollution degree 3		ge AC (UL)			V	600
AC current	General USE	Cantagtar				
Short-circuit protection fuse, 600V Standard fault Short circuit current kA 18 Fuse rating A 1200 Fuse class L		Contactor		AC current	۸	700
Standard fault	Short-circuit protection	fuse 600V		AC current		700
Short circuit current Fuse rating Fuse rating Fuse rating Fuse class Fu	Short should protoction					
Fuse rating Fuse class L		2.3		Short circuit current	kA	18
Ambient conditions				Fuse rating	Α	1200
Operating temperature				Fuse class		L
Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree 3						
min min max °C -50 max -50 max Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection 9 3	Temperature					
max °C 70 Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection 3		Operating temperature			° C	50
Storage temperature min or company or construction "Company or construction Max altitude m 3000 Resistance & Protection s Pollution degree 3						
min min max °C -60 regree Max altitude m 3000 Resistance & Protection 3 Pollution degree 3		Storage temperature		IIIdX	U	7.0
Max altitudemax°C80Mesistance & Protectionm3000Pollution degree3		Ciorago tomperature		min	°C	-60
Max altitude m 3000 Resistance & Protection Pollution degree 3						
Resistance & Protection Pollution degree 3	Max altitude					
	Resistance & Protectio	n				
Dimensions						3
	Dimensions					

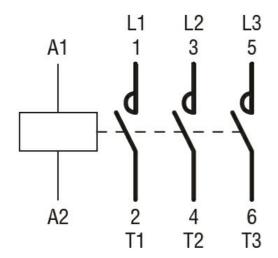
ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 520A, AC/DC COIL, 48VAC/DC



CONTACTOR TYPE	A	В	С
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



11B5000048

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 520A, AC/DC COIL, 48VAC/DC

ETIM 8.0

EC000066 -Power contactor, AC switching