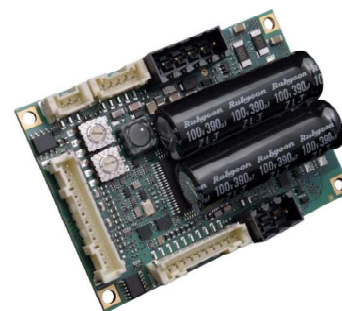


## Servo amplifier

## mcDSA-B50-Lp

Article number: 1514045

Certification:  \*1

Picture similar

## Technical data

Absolute maximum rating (destruction limits)	
Power supply voltage $U_p$ no polarity reversal protection	80 V
Continuous Electronic supply voltage $U_e$ no polarity reversal protection	33 V
Short term peak voltage < 1s $U_e$ no polarity reversal protection	37 V
Power	
Electronic supply voltage $U_e$	9..30 V
Electronic current consumption@ $U_e=24V^{*2}$	typ. 40 mA
Power supply voltage $U_p$	9..60 V
Max. output current	25 A
Continuous output current (certified UL)*3 @ $U_p=24V$ @ $U_p=60V$	7.5 A 7 A
PWM	
PWM frequency	25, 32*4, 50 kHz
Mechanical	
Size LxWxH	70 x 50 x 18 mm
Weight	50 g
Environment	
Protection class	IP00
Operating temperature	-40..70 °C
Rel. humidity (non-condensing)	5..90 %

CAN bus	
Protocol	DS301
Max. baudrate	1 Mbit/s
CAN specification	2.0B
Galvanically isolated	no
Sensor supply (Hall)	
Output voltage	5 V
Max. output current	0.2 A
Hall sensors	
Signals	H1,H2,H3
Max. frequency (per channel)	10 kHz
Input voltage	0..5 V
Signal type	open collector, single ended
Digital inputs	
Number - digital inputs	4 (Din0..3)
Low voltage	0..5 V
High voltage	8..30 V
Digital outputs	
Number	4 (Dout0..3)
Continuous output current	0.3 A
Load	resistive, inductive
Output voltage	Electronic supply voltage $U_e$
Signal type	positive switching
Analog inputs	
Number	2 (Ain0..1)
Signal type - Ain	0..10 V, 12 Bit, single ended

\*1 take into consideration the performance data

\*2 power amplifier switched off, 5V output (sensor supply) is free

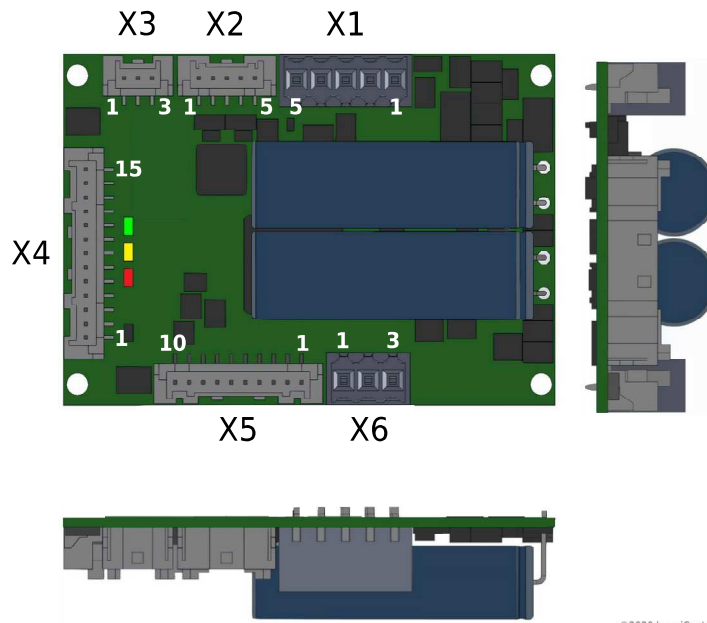
\*3 connector cable with max. possible cable cross-section, PWM frequency 32 kHz, ambient temperature 40 °C, I/O's and 5V output active

\*4 default value

Additional technical data are available in mcManual.



Scheme



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Terminal assignment

X1 Supply		
1	FE	Functional earth
2	+Up	Power supply voltage
3	GND	Ground for power supply voltage
4	+Ue24V	Electronic supply voltage
5	GND	Ground for electronic supply voltage
X2 Analog inputs		
1	Ain0	Analog input 0
2	res.	Reserved
3	Ain1	Analog input 1
4	res.	Reserved
5	res.	Reserved
X3 CAN bus		
1	CAN Hi	CAN High
2	CAN Lo	CAN Low
3	res.	Reserved
X4 Digital inputs/outputs		
1	res.	Reserved
2	Din0	Digital input 0
3	Din1	Digital input 1
4	Din2	Digital input 2
5	Din3	Digital input 3
6	res.	Reserved
7	res.	Reserved
8	res.	Reserved
9	res.	Reserved
10	Dout0	Digital output 0
11	Dout1	Digital output 1
12	Dout2	Digital output 2
13	Dout3	Digital output 3

X5 Hall and inc. encoder			
1	H1	Hall sensor 1	
2	H2	Hall sensor 2	
3	H3	Hall sensor 3	
4	res.	Reserved	
5	res.	Reserved	
6	res.	Reserved	
7	res.	Reserved	
8	res.	Reserved	
8	res.	Reserved	
9	+U5V	5V output voltage for sensor supply Sensors: encoder, hall	
10	GND	Ground for sensor supply Notice: don't connect with system GND	
X6 Motor			
1	Ma	Motor phase A	
2	Mb	Motor phase B	
3	Mc	Motor phase C	