

Servo amplifier

mcDSA-B60-Modul

Article number: 1504906



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@ $U_e=24V^{*1}$	typ. 20 mA
Power supply voltage U_p	9..60 V
Max. output current	15 A
Continuous output current @ $U_p=24V^{*2}$	5 A
Continuous output current @ $U_p=48V^{*2}$	4.3 A
PWM	
Output voltage	90% U_p
PWM frequency	12.5, 25 ^{*3} kHz
Mechanical	
Size LxWxH	53 x 41 x 10 mm
Weight	18 g
Environment	
Protection class	IP00
Ambient temperature (operation)	-40..70 °C
Ambient temperature (storage)	-40..85 °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
Analog inputs	
Number	2 (Ain0..1)
Signal type - Ain	0..10 V, 12 Bit, single ended

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

*2 connector cable with max. possible cable cross-section, PWM frequency 25 kHz, ambient temperature 40 °C (t >40 °C derating), RMS current: 5 A → 4.1 Aeff, 4.3 A → 3.5 Aeff

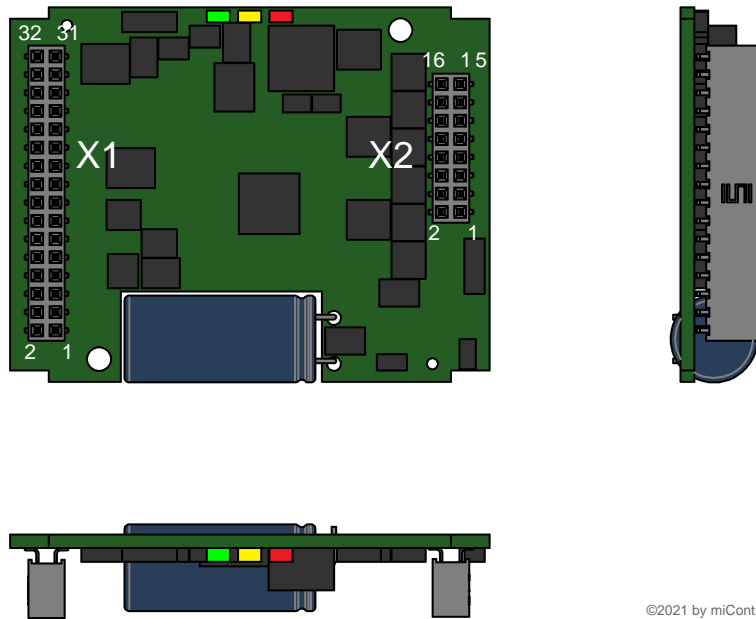
no guarantee, since value is determined empirical, please consider the application notes to determine the continuous current

*3 default value

Additional technical data are available in mcManual.



Scheme



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Terminal assignment

X1	Hall, I/O's and CAN	
1	res.	Reserved
2	res.	Reserved
3	+U5V	5V output voltage for sensor supply Sensors: hall
4	res.	Reserved
5	res.	Reserved
6	res.	Reserved
7	res.	Reserved
8	res.	Reserved
9	H3	Hall sensor 3
10	res.	Reserved
11	H2	Hall sensor 2
12	res.	Reserved
13	H1	Hall sensor 1
14	res.	Reserved
15	CAN Lo	CAN Low
16	res.	Reserved
17	CAN Hi	CAN High
18	res.	Reserved
19	res.	Reserved
20	res.	Reserved
21	Din2	Digital input 2
22	res.	Reserved
23	Din1	Digital input 1
24	res.	Reserved
25	Din0	Digital input 0
26	res.	Reserved
27	Ain0	Analog input 0
28	res.	Reserved
29	Ain1	Analog input 1
30	Din3	Digital input 3
31	GND	Ground for sensor supply Notice: don't connect with system GND
32	res.	Reserved

X2	Motor	
1	+Up	Power supply voltage
2	res.	Reserved
3	+Up	Power supply voltage
4	FE	Functional earth
5	GND	Ground for power and electronic supply voltage
6	GND	Ground for power and electronic supply voltage
7	Ma	Motor phase A
8	+Ue	Electronic supply voltage
9	Ma	Motor phase A
10	+Ue	Electronic supply voltage
11	Mb	Motor phase B
12	Mb	Motor phase B
13	Mc	Motor phase C
14	res.	Reserved
15	Mc	Motor phase C
16	res.	Reserved