

# Servo amplifier

## mcDSA-S60

Article number: 1511664



Picture similar

## Technical data

<b>Absolute maximum rating (destruction limits)</b>		<b>Auxiliary voltage</b>
Power supply voltage Up no polarity reversal protection	80 V	Output voltage 5 V
Continuous Electronic supply voltage Ue no polarity reversal protection	33 V	Max. output current 0.2 A
Short term peak voltage < 1s Ue no polarity reversal protection	37 V	<b>Digital inputs</b>
<b>Power</b>		Number - digital inputs 3 (Din0..2)
Electronic supply voltage Ue	9..30 V	Low voltage 0.5 V
Electronic current consumption@ Ue=24V* <sup>1</sup>	typ. 30 mA	High voltage 8..30 V
Power supply voltage Up	9..60 V	<b>Analog inputs</b>
Max. output current	10 A	Number 1 (Ain0)
Continuous output current @ Up=24V* <sup>2</sup>	3.5 A	Signal type 0..10 V, 12 Bit, single ended
Continuous output current @ Up=48V* <sup>3</sup>	3 A	
<b>PWM</b>		
Output voltage	85% Up	
PWM frequency	32 kHz	
<b>Mechanical</b>		
Size LxWxH	74 x 45 x 17 mm	
Weight	30 g	
<b>Environment</b>		
Protection class	IP20	
Ambient temperature (operation)	-25..70 °C	
Ambient temperature (storage)	-25..85 °C	
Rel. humidity (non-condensing)	5..90 %	
<b>CAN bus</b>		
Protocol	DS301	
Device profile	DS402	
Max. baudrate	1 Mbit/s	
CAN specification	2.0B	
Galvanically isolated	no	

\*<sup>1</sup> power amplifier switched off, 5V output (sensor supply) is free\*<sup>2</sup> connector cable with max. possible cable cross-section, PWM frequency 32 kHz, ambient temperature 40 °C (t >40 °C derating), RMS current: 3.5 A → 2.9 Aeff, 3 A → 2.4 Aeff

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

\*<sup>3</sup> connector cable with max. possible cable cross-section, PWM frequency 32 kHz, ambient temperature 40 °C (t >40 °C derating), RMS current: 3.3 A → 2.9 Aeff, 3 A → 2.4 Aeff

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

Additional technical data are available in mcManual.

## Scheme



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## Terminal assignment

X1 I/O's and CAN		
1	GND	Ground of the auxiliary voltage Notice: don't connect with system GND
2	+U5V	5V output voltage (auxiliary voltage)
3	res.	Reserved
4	res.	Reserved
5	res.	Reserved
6	res.	Reserved
7	res.	Reserved
8	CAN Lo	CAN Low
9	CAN Hi	CAN High
10	Din2	Digital input 2
11	Din1	Digital input 1
12	Din0	Digital input 0
13	Ain0	Analog input 0
14	GND	Ground for electronic supply voltage
15	+Ue	Electronic supply voltage
X2 Motor		
1	+Up	Power supply voltage
2	GND	Ground for power supply voltage
3	Ma	Motor phase A
4	Mb	Motor phase B
5	Mc	Motor phase C
6	Md	Motor phase D