



**PRÄZISION** IN BEWEGUNG

## Motor Controller E55



## 1. Technical Data Motor Controller E55

Name	Value
<b>Power</b>	
- Electronic supply voltage Ue	9..30 V
- Power supply voltage Up	9..60 V
- Max. output current	50 A
- Continuous output current* <sup>2</sup>	7 A
- Output voltage	100% Up
- PWM frequency	25, 32 <sup>*1</sup> , 50 kHz
- PWM mode	symmetrical / asymmetrical
- Min. load inductance	200 uH
<b>Motor types</b>	
- DC motors	yes
- BLDC motors	yes
- Linear motors	yes
- Stepper motors	no
<b>Mechanical</b>	
- Size LxWxH	78 x 74 x 28 mm
- Weight	100 g
- Assembly	Wall
- Connectors	Tension clamp connection, crimp technology
<b>Environment</b>	
- Protection class	IP20
- Operating temperature	0..40 °C
- Rel. humidity (non-condensing)	5..85 %
<b>Control elements</b>	
- Hex switches	yes
- Status LEDs	yes
<b>Controller cycle times</b>	
- Current controller (CURR)	125 us
- Velocity controller (SVEL)	250 us
- Velocity controller (VEL)	1000, 2000 <sup>*1</sup> us
- Position controller (POS)	1000, 2000 <sup>*1</sup> us
<b>Incremental encoder</b>	
- Type	incremental
- Signals	A,/A,B,/B,Inx

Name	Value
- Max. frequency (per channel)	500 kHz
- Input voltage (24V tolerant)	5 V
- Signal type	differential, open collector, single ended, 2,5kΩ input impedance
<b>Hall sensors</b>	
- Signals	H1,H2,H3
- Max. frequency (per channel)	10 kHz
- Input voltage	5 V
- Signal type	open collector, single ended, 5V pull up intern 920kΩ
<b>Digital inputs</b>	
- Number	8 (Din0..7)
- Low voltage @Ta = 25°C	-30..5 V
- High voltage @Ta = 25°C	7.5..30 V
<b>Digital outputs</b>	
- Number	4 (Dout0..3)
- Continuous output current	0.3 A
- Load	resistive, inductive
- Output voltage	Electronic supply voltage Ue
- Signal type	positive switching
<b>Analog inputs</b>	
- Number	2 (Ain0..1)
- Signal type	+/- 10 V, 12 Bit, differential, 20kΩ input impedance
- Number	1 (Ain2)
- Signal type	0 .. 5V, 12 Bit, single ended, 5V pull up intern 1,5kΩ
<b>CAN bus</b>	
- Protocol	DS301
- Device profile	DS402
- Max. baudrate	1 Mbit/s
- CAN specification	2.0B
- Galvanically isolated	no



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