

# EPOS4 Positioning Controllers Data



## EPOS4 Compact 50/15 EtherCAT

Ready-to-install compact solution, designed for use with brushed DC motors with encoders or brushless EC motors with Hall sensors and encoders up to 750/1500 Watt.

## EPOS4 50/5

Positioning controller in a robust housing, designed for use with brushed DC motors with encoders or brushless EC motors with Hall sensors and encoders up to 250/750 Watt.

## EPOS4 70/15

Positioning controller in a robust housing, designed for use with brushed DC motors with encoders or brushless EC motors with Hall sensors and encoders up to 1050/2100 Watt.

### Controller version

#### EtherCAT Slave

#### CANopen Slave with EtherCAT option

#### CANopen Slave with EtherCAT option

#### Electrical data

10 - 50 VDC

10 - 50 VDC

10 - 70 VDC

10 - 50 VDC

10 - 50 VDC

10 - 70 VDC

0.9 x V<sub>CC</sub>

0.9 x V<sub>CC</sub>

0.9 x V<sub>CC</sub>

30 A (<60 s)

15 A (<15 s)

30 A (<60 s)

15 A

5 A

15 A

50 kHz

50 kHz

50 kHz

25 kHz (40 μs)

25 kHz (40 μs)

25 kHz (40 μs)

2.5 kHz (400 μs)

2.5 kHz (400 μs)

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50 000 rpm (sinusoidal), 100 000 rpm (block)

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2.2 μH / 15 A

15 μH / 5 A

15 μH / 15 A

#### Inputs

H1, H2, H3

H1, H2, H3

H1, H2, H3

A, A\, B, B\, I, I\ (max. 6.25 MHz)

A, A\, B, B\, I, I\ (max. 6.25 MHz)

A, A\, B, B\, I, I\ (max. 6.25 MHz)

A, A\, B, B\, I, I\, Clock, Clock\, Data, Data\

A, A\, B, B\, I, I\, Clock, Clock\, Data, Data\

A, A\, B, B\, I, I\, Clock, Clock\, Data, Data\

4 (level switchable: logic/PLC)

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4, differential

4, differential

4, differential

2 (12-bit resolution, -10...+10 V)

2 (12-bit resolution, -10...+10 V)

2 (12-bit resolution, -10...+10 V)

configurable with DIP switch 1...5

configurable with DIP switch 1...5

configurable with DIP switch 1...5

#### Outputs

2

2

2

1, differential

1, differential

1, differential

2 (12-bit resolution, -4...+4 V, max. 1 mA)

2 (12-bit resolution, -4...+4 V, max. 1 mA)

2 (12-bit resolution, -4...+4 V, max. 1 mA)

+5 VDC, max. 70 mA

+5 VDC, max. 70 mA

+5 VDC, max. 70 mA

+5 VDC, max. 30 mA

+5 VDC, max. 30 mA

+5 VDC, max. 30 mA

+5 VDC, max. 150 mA

+5 VDC, max. 150 mA

+5 VDC, max. 150 mA

#### Interfaces

-

RxD; TxD (max. 115 200 bit/s)

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-

high; low (max. 1 Mbit/s)

high; low (max. 1 Mbit/s)

Data+; Data- (Full Speed)

Data+; Data- (Full Speed)

Data+; Data- (Full Speed)

100 Mbit/s (Full Duplex)

Optional 581245 EPOS4 EtherCAT Card available

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#### Indicator

Green LED, red LED

Green LED, red LED

Green LED, red LED

#### Environmental conditions

-30...+25°C

-30...+50°C

-30...+50°C

+25...+77°C; Derating: -0.288 A/°C

+50...+80°C; Derating: -0.167 A/°C

+50...+85°C; Derating: -0.429 A/°C

-40...+85°C

-40...+85°C

-40...+85°C

5...90%

5...90%

5...90%

#### Mechanical data

approx. 140 g

approx. 206 g

approx. 372 g

59.5 x 79.5 x 37.8 mm

105.0 x 83.0 x 38.7 mm

125.0 x 94.5 x 38.7 mm

M3 screws

Flange for M4-screws

Flange for M4-screws

#### Part numbers

**605299** EPOS4 Compact 50/15 EtherCAT

**546047** EPOS4 50/5

**594385** EPOS4 70/15

#### Accessories

**235811** DSR 70/30 Shunt regulator

**309687** DSR 50/5 Shunt regulator

**235811** DSR 70/30 Shunt regulator

Order accessories separately, see page 558

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