

Adapter for PDZ PAD






Adapter for converting the signal from a rotary encoder for the PDZ.

Features

- Converter (5 V to 24 V)
- Galvanic isolation between the encoder and the PDZ

Approvals

	PAD
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Technical Details	PAD
Electrical Data	
Power Consumption	Approx. 120 mA with 5 VDC
Versions	512, 1024, 2048, 4096 pulse/revolution
Output Contacts	2 semiconductor outputs
Output Current	10 mA
Residual Ripple DC	20 %
Rotary Encoder Features	2 channels, 2 signals per channel 180° out of phase: channels are 90° out of phase to each other
Connection for Rotary Encoder	15-pin D-Sub socket
Connection for Controller	15-pin connector
Continuous Duty	100 %
Mechanical Data	
Maximum Cross Section of External Conductors	1 x 2.5 mm ² or 2 x 1.5 mm ² Single-core or multi-core with crimp connectors
Dimensions (H x W x D)	87 x 45 x 121 mm
Weight	200 g

Description

- 45 mm P-93-housing, DIN-Rail mounting
- 2 semiconductor outputs
- Input for a rotary encoder
- Input layout: Sinumeric 800 or Sinumeric 840C
- Output for machine control
- Versions for pulse with different relationships between pulse/revolution.

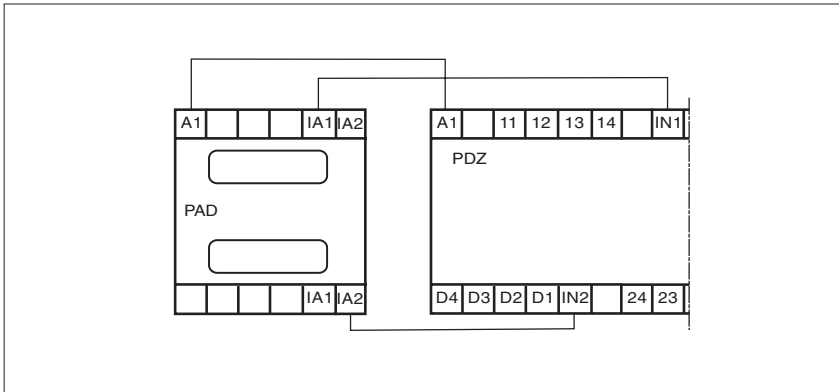
Function Description

The PAD fulfils the following tasks:

- Electrical separation between the encoder and the PDZ
- Configuration of the encoder frequency and the signal level to the PDZ
- Suppression of the pulse during standstill.
- Conditions on the rotary encoder:
 - Encoder signal: right angle with amplitude of 0.5 ... 5 V or sine/cosine signal with 0.5 ... 5 V peak-to-peak
 - Rotary encoder with high resistance outputs should a fault occur
 - 2 channels, 2 signals per channel, 180° out of phase to each other: channels are 90° out of phase with each other.

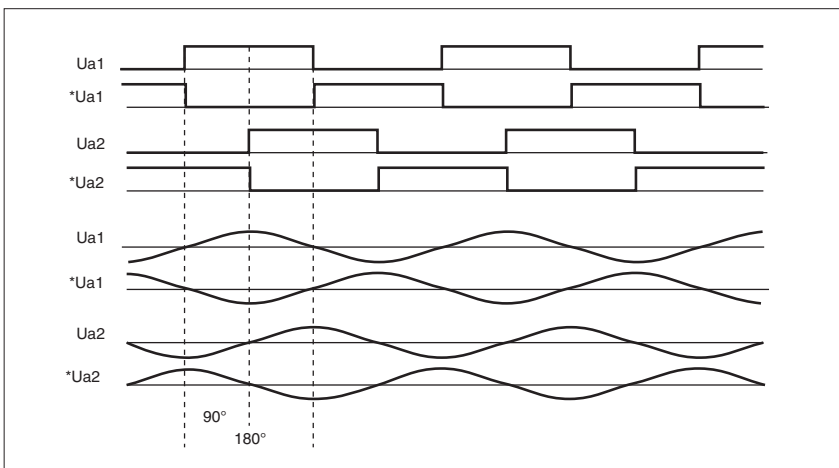
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Connection PAD - PDZ



Function Diagram

Encoder signals:
Right angle or sine/cosine



Adapter for PDZ PAD

General Technical Data

Unless stated otherwise in the technical details for the specific unit

Electrical Data

Frequency Range AC	50 ... 60 Hz
Residual Ripple DC	160 %
Contact Material	AgSnO ₂
Continuous Duty	100 %

Environmental Data

EMC	EN 50081-1, 01/92, EN 50082-2, 03/95
Vibration in accordance with EN 60068-2-6, 04/95	Frequency: 10 ... 55 Hz, Amplitude: 0.35 mm
Climatic Suitability	DIN IEC 60068-2-3, 12/86
Airgap Creepage	DIN VDE 0110 part 1, 04/97
Ambient Temperature	-10 ... +55 °C
Storage Temperature	-40 ... +85 °C

Mechanical Data

Torque Setting on Connection Terminals	0.6 Nm (screws)
Mounting Position	Any
Housing Material	Thermoplast Noryl SE 100
Protection	Mounting: IP 54 Housing: IP 40 Terminal Range: IP 20

The units were tested in accordance with the relevant standards current at the time of development.

Order References

Type			U _B	Order No.
PAD	BO 512	6 I	5 V DC	774 401
PAD	SI 800	1024 I	5 V DC	774 403
PAD	SI 800	2048 I	5 V DC	774 404
PAD	SI 800	4096 I	5 V DC	774 405
PAD	SI 800	512 I	5 V DC	774 402
PAD	SI 840	1024 I	5 V DC	774 407
PAD	SI 840	2048 I	5 V DC	774 408
PAD	SI 840	4096 I	5 V DC	774 409
PAD	SI 840	512 I	5 V DC	774 406
PAD	SI 800	32 I	5 V DC	774 410