

Datasheet

ADA-4040PC9

Kyma* KDU-110-SPS to MODBUS-RTU protocol converter



APPLICATION

Protocol converter **KDU-110-SPS to MODBUS-RTU ADA-4040PC9** is a device, which allow connecting Kyma* KDU-110 Shaft Power Meter (SPS) devices, equipped with RS485 interface to multipoint RS-485 bus, to which are connected devices communicate by MODBUS- RTU protocol. Simultaneously, the converter convert RS485 to RS485/422 standards, with setting of data format. Depending on configurations, can be set baud rate, data bits, parity, number of stop bits. The setting can be different for (KDU)RS485 i (RTU)RS485/RS422 ports.

The converter support the asynchronous transmission data with baud rate 230,4 kbps. through one or two pairs of twisted-pair cables of RS485/RS422 interface.

ADA-4040PC9 has screw terminal blocks for connection of RS485 interface KDU-110-SPS device, MODBUS RS485/422 bus and power supply. ADA-4040PC9 use Tx, Rx for communication with RS485 interface.

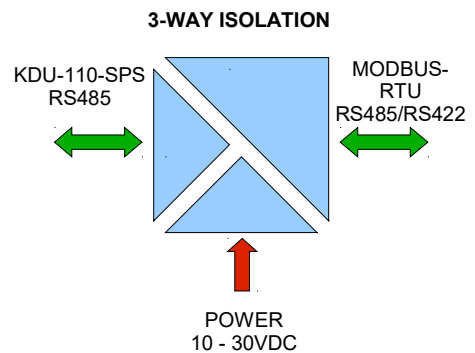
Overvoltage protection was made on base safety diodes and fuses on each RS485/RS422 lines.

TECHNICAL DATA

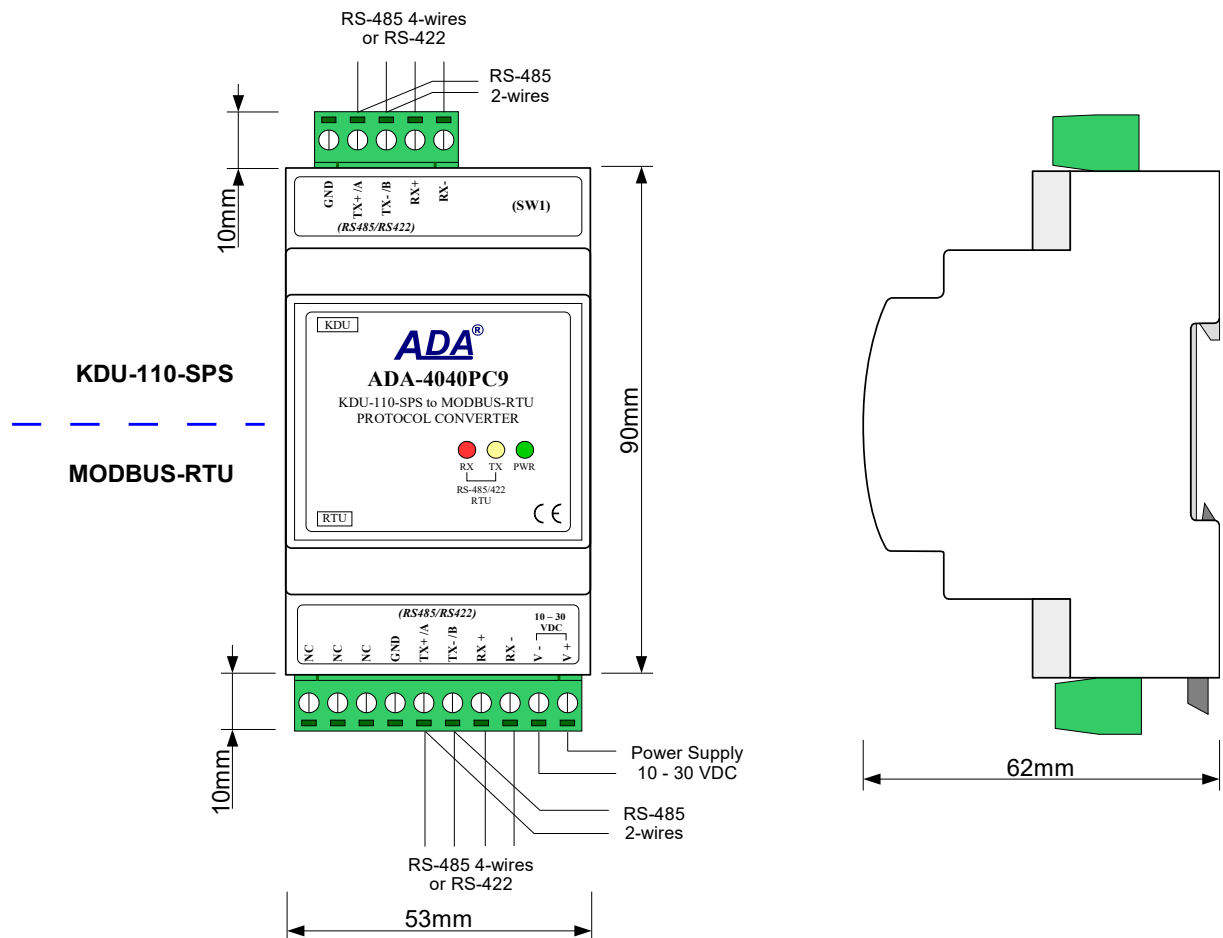
Transmission Parameters		
Protocol	Kyma* KDU-110	Modbus-RTU
Interface	RS-485/RS-422 (KDU)	RS-485/RS-422 (RTU)
Connector	Screw terminal, wire max. Ø 2,5mm ² .	
Max. Line length	1200m (depends on baud rate)	
Max. number of connected device	up to 32	
Transmission line	Twisted cable 1-pair or 2-pair, UTP Nx2x0,5 (24AWG), shield inside large interferences STP Nx2x0,5(24AWG).	

Standards	EIA-485, CCITT V.11
Transmission type	Asynchronous half duplex or full duplex
Optical Signalization	<ul style="list-style-type: none"> PWR – green LED power supply, RX - red LED data receiving from RS485/RS422 (RTU) interface TX - yellow LED data transmission through RS485/RS422 (RTU) interface
Electrical Parameters	
Power requirements	10 - 24 – 30 V DC
Power Cable	Recommended length of power cable – do 3m
Power	<2W
Protection from reverse power polarization	YES
Galvanic Isolation	1kVDC or 3kVDC between power circuit and signal lines RS485 and RS485/RS422
Optoisolation	~3kV - between signal line RS-485 (KDU) and RS485/RS-422 (RTU)
Electromagnetic compatibility	Resistance it disruptions according to PN-EN 61000-2 norm. Emission of disruptions according to PN-EN 61000-4 norm.
Safety requiring	According it the PN-EN 61010-1 norm.
Environment	Industrial
Environmental Parameters	
Operating temperature	-30 ÷ 60°C
Humidity	5 ÷ 95% - non-condensing
Storage temperature	-40 ÷ 70°C
Casing	
Dimensions (W x D x H)	53mm x 90mm x 62 mm
Material	Noryl UL. 94 V-O
Degree of casing protection	IP40
Degree of terminal protection	IP20
Weight	0,10 kg
According to standards	DIN EN50022, DIN EN43880
Location during work	Free
Mounting method	On the rail compliant with DIN35 / TS35 standard.

GALVANIC ISOLATION



DIMENSIONS AND CONNECTION



VERSIONS

ADA-4040PC9 -		
Version:		
Standard	1	
3-way galvanic isolation:		
Reserved	1	
1kV=	23	
3kV=	33	

Order example:
 Product Symbol: **ADA-4040PC9-1-23**
 1 – standard version,
 23 – 1kV=, 3-way galvanic isolation,

* - Names of companies and logotypes have been used only for informational purposes.