

# ENDA EDP2041 DIGITAL POTENTIOMETER

CE

- Order Code : EDP2041-**        -
- 1                            2

RS.....With RS-485 Modbus communication  
Empty.....Without RS-485 Modbus communication

| ENVIRONMENTAL CONDITIONS                                                                                                                                         |                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Ambient/storage temperature                                                                                                                                      | 0 ... +50°C/-25 ... +70°C (without icing)                                                 |
| Max. relative humidity                                                                                                                                           | 80% Relative humidity for temperatures up to 31 % °C, decreasing linearly to 50% at 40°C. |
| Rated pollution degree                                                                                                                                           | According to EN 60529<br>Front panel : IP65<br>Rear panel : IP20                          |
| Height                                                                                                                                                           | Max. 2000m                                                                                |
|  Do not use the device in locations subject to corrosive and flammable gases. |                                                                                           |

|                     |                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------|
| Supply              | 230V AC +10% -20%, 50/60Hz or 24V AC $\pm 10\%$ 50/60Hz or optional 9-30V DC / 7-24V AC $\pm 10\%$ SMPS |
| Power consumption   | Max. 7VA                                                                                                |
| Wiring              | 2.5mm <sup>2</sup> screw-terminal connections                                                           |
| Date retention      | EEPROM (Min. 10 years)                                                                                  |
| EMC                 | EN 61326-1: 2006 (Performance criterion B for the EMC standards)                                        |
| Safety requirements | EN 61010-1: 2010 (pollution degree 2, overvoltage category II, measurement category I)                  |

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Upwards input (UP)     | Contact input or max. 24VDC logic input (active low) |
| Downwards input (DOWN) | Contact input or max. 24VDC logic input (active low) |

|              |                                                                                                                                                                              |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0-10V output | Digitally adjusted maximum 10mA, max. 10V potentiometer output.<br>Accuracy :%0.1 Resolution : 1mV<br>Fluctuation : Maximum 30mV<br>Rise time from 0 to 10V is maximum 300ms |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|               |                                                                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0-20mA output | Digitally adjusted maximum 12V, max.20 mA potentiometer output.<br>Accuracy: %0.1 Resolution : 2μA<br>Fluctuation : Maximum 60μA<br>Rise time from 0 to 20mA is maximum 300ms |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                    |                                                            |
|--------------------|------------------------------------------------------------|
| Housing type       | Suitable for flush-panel mounting according to DIN 43 700. |
| Dimensions         | W77xH35xD71mm                                              |
| Weight             | Approx. 350g (after packing)                               |
| Enclosure material | Self extinguishing plastics                                |



up to date: 01022014, modification reserved and can be change any time previous notice !

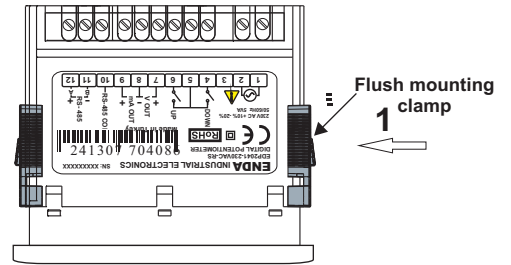
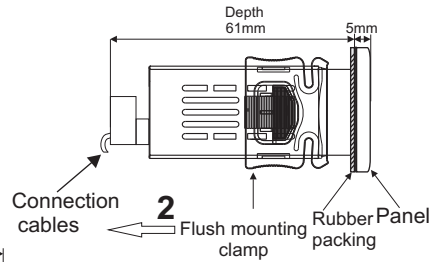
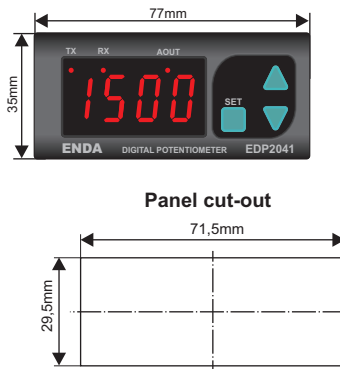
## TERİMLER



- 1) Adjusted potentiometer value is seen in run mode  
Parameter name, value or its unit in programming mode.
- 2) Increment key during run mode.  
Increment or parameter selection key during programming mode.
- 3) Decrement key during run mode.  
Decrement or parameter selection key during programming mode.
- 4) Used for selecting run or programming modes and for adjusting parameters.

|                            |                                            |
|----------------------------|--------------------------------------------|
| ( 1 ) Digital display      | 12,5 mm 4 digits 7 segment red LED display |
| ( 2 ), ( 3 ), ( 4 ) Keypad | Micro switch                               |

## DIMENSIONS



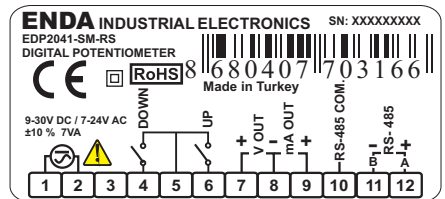
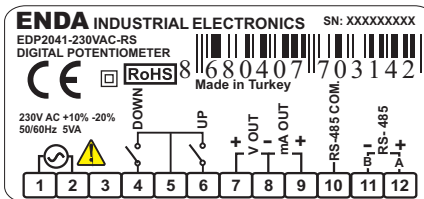
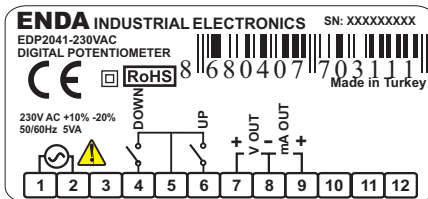
### Note :

- 1) Panel thickness should be maximum 7mm.
- 2) There must be at least 60mm free space behind the device, otherwise it would be difficult to remove it from the panel.

## CONNECTION DIAGRAM



ENDA EDP2041 is intended for installation in control panels. Make sure that the device is used only for intended purpose. The electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations. During an installation, all of the cables that are connected to the device must be free of electrical power. The device must be protected against inadmissible humidity, vibrations, severe soiling. Make sure that the operation temperature is not exceeded. The cables should not be close to the power cables or components.



### NOTE :

#### SUPPLY :



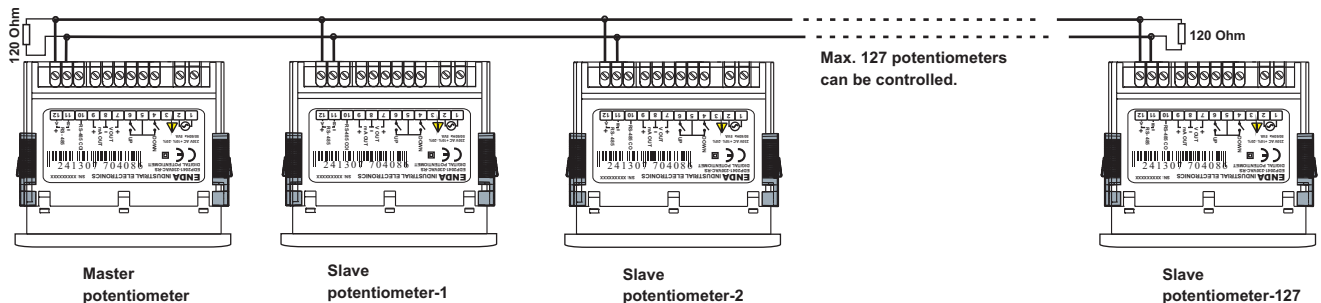
Equipment is protected throughout by DOUBLE INSULATION.

RoHS Compliant

Holding screw 0.4-0.5Nm

- Note : 1) Mains supply cords shall meet the requirements of IEC 60227 or IEC 60245.  
2) In accordance with the safety regulations, the power supply switch shall bring the identification of the relevant instrument and it should be easily accessible by the operator.

## CONNECTION DIAGRAM FOR SYNCHRONOUS RUNNING



### NOTE :

- *dAdr* parameter should be selected *CPot* in master potentiometer. In this case *dAdr* parameter of other potentiometers aren't used. But be sure that *CPot* isn't selected in slave potentiometers to prevent confusion. Settings of slave potentiometers change proportional to setting of master potentiometer. For example; When Max. output of master potentiometer is changed from 10V to 5V, max. output of slave potentiometers decrease half of previous value proportional to this. If previous output of slave potentiometer is 6V, it decreases 3V. *PonC* parameter of slave potentiometer should be selected *oFF* in order to understand master potentiometer when slave is energized.
- Computer should be used to change only a few potentiometers. In this case, there is not master potentiometer. Output of the required potentiometer is changed according to *dAdr* parameter.
- Baud rate of potentiometers must be same in both conditions. 120 Ohm termination resistor should be used at the ends and beginning of transmission line. See [www.enda.com.tr/EDP2041.htm](http://www.enda.com.tr/EDP2041.htm) for detailed information.

