

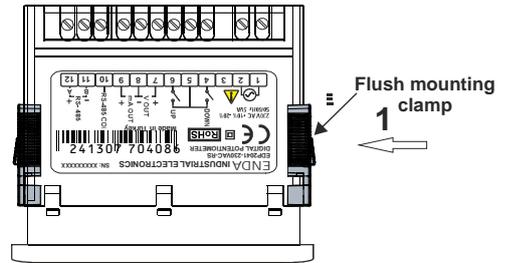
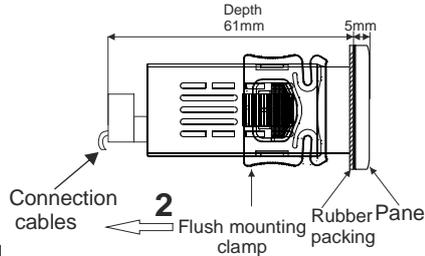
TERMS



- 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



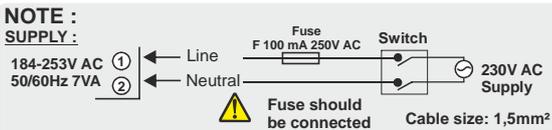
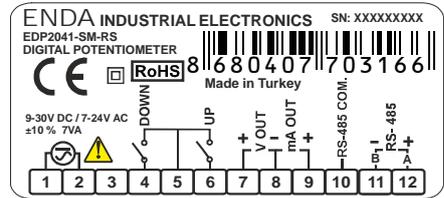
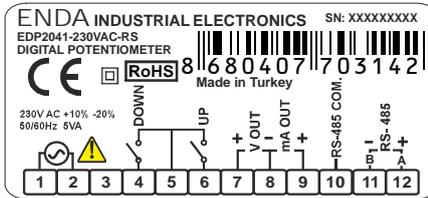
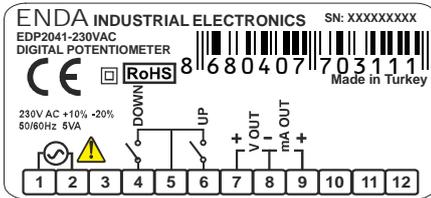
To remove the device from panel:
- While pushing the the flush-mounting clamp in direction 1, pull out it in direction 2.

- 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.

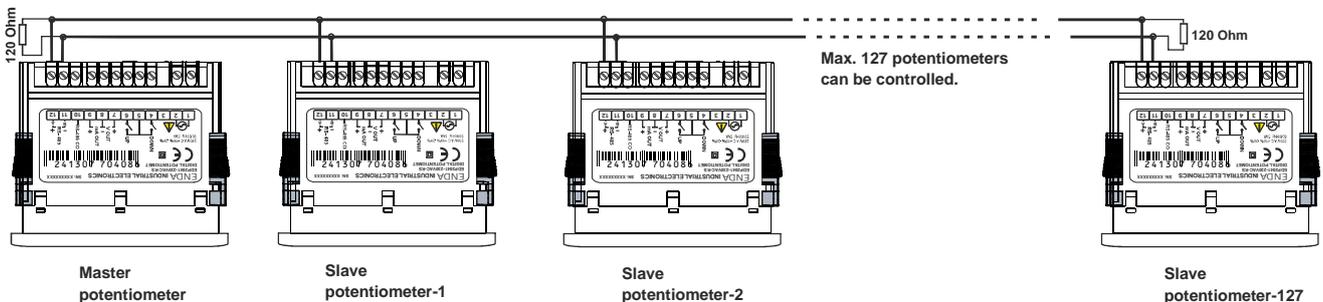


Equipment is protected throughout by DOUBLE INSULATION.



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.

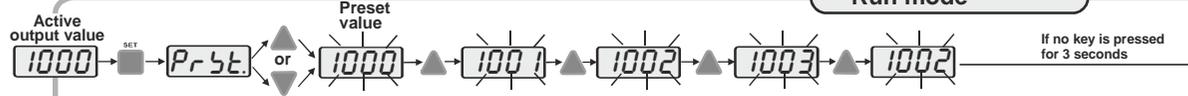
CONNECTION DIAGRAM FOR SYNCHRONOUS RUNNING



NOTE :

- *dRdr* parameter should be selected *CPoE* in master potentiometer. In this case *dRdr* parameter of other potentiometers aren't used. But be sure that *CPoE* 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 *dRdr* 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 for detailed information.

Run mode



If *oEtY* and *oDtY* parameters are adjusted to any value expect *d5Ab* parameter, output can be controlled with ▲ and ▼ buttons.

key is pressed whole in the run mode, preset setup mode is entered and PrSt. message is displayed. Message appears when the ▲ or ▼ button is pressed, the preset value starts to flash. ▲ ▼ By using keys ,preset value can be adjusted.Preset value can be adjusted by using external buttons as well.External buttons become disable in programming mode.If the device is also controlled by a potentiometer, adjustable preset value appears as above.

key is pressed while holding down to the programming mode is entered

Entering from programming mode to run mode:
If no key is pressed within 20 seconds during programming mode data is stored automatically and the run mode is entered.After pressing ▲ button and ▼ then passed to the program menu by pressing ▼ key is pressed in combination with SET ▲ keys and the information is recorded.

Programming mode



Default Parameters

- dPnt.** = Display decimal point parameter. Decimal point can be adjusted between 1. and 3. digits. See NOTE 1 for programming.
- L5cL.** = Lower value of the scale. Adjustable between -1999 and (H5cL.-10). Scale the lower value of the output, based on *oLYP* parameter selection, it is 0V,0mA or 4mA. See NOTE 1 for programming.
- H5cL.** = Upper value of the scale. Adjustable between (L5cL.+10) and 9999. Scale the upper value of the output based on, *oLYP* parameter selection; it is 10V or 20 mA. *H5cL.* and *L5cL.* difference can not be greater than 9999. See NOTE 1 for programming.
- LoLi.** = The lower limit of the preset value. Adjustable between *L5cL.* and (*H5cL.* -10). See NOTE 1 for programming.
- HiLi.** = The upper limit of the preset value. Adjustable between (*LoLi.* +10) and *H5cL.*. See NOTE 1 for programming.
- dAdr.** = Device address for ModBus. Adjustable between 1-247 or selectable *cPot.*. When *cPot.* is selected, the device will be master potentiometer and slave potentiometers can be adjusted dependent on it. See NOTE 1 for programming. ⚠ This parameter is active device with RS485 communication option.
- bAud.** = Baud rate for the RS485 connection. Adjustable; off, 2400, 4800, 9600, 19200 and 38400. ⚠ This parameter is active device with RS485 communication option.

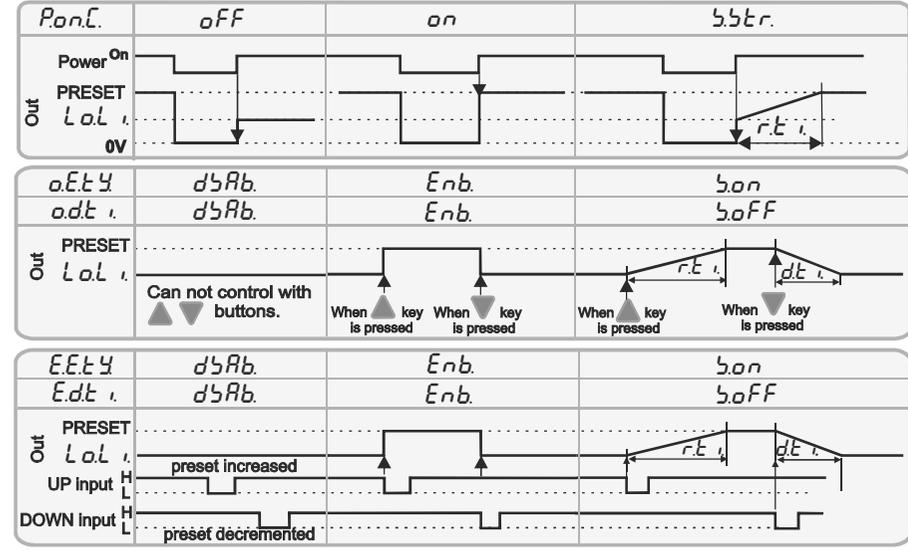
Default parameters

- PonC.** = Selection of the output parameter behavior. ⚠ *oFF* = When first energized, output is the voltage or current that lower limit value is indicated. Attention: If this parameter is selected, the set value that was adjusted before is seen when set button is pressed at first. In addition, if increasing or decreasing that value is wanted the set value is equalized to lower limit value and then adjustment can be done. *on* = When first energized, output is the voltage or current that the set value is indicated. *b5tr.* = When first energized, output is increased slowly from the voltage or current that lower limit value is indicated to the voltage or current that set value is indicated during *rEt.*. See NOTE 1 for programming.
- oEtY.** = Adjusted type of the output to preset value with ▲ button. *d5Ab* = Output can not be adjusted to preset value with ▲ button. *Enb.* = Output can be adjusted to preset value with ▲ button. *bOn* = Output is increased to voltage that set value is displayed with ▲ button during *rEt.*. See NOTE 1 for programming.
- oDtY.** = Adjusted type of the output to lower limit value with ▼ button. *d5Ab* = Output can not be adjusted to lower limit value with ▼ button. *Enb.* = Output can be adjusted to lower limit value with ▼ button. *bOFF* = Output is increased to voltage that lower limit value is displayed with ▼ button during *dEt.*. See NOTE 1 for programming.
- EeEtY.** = Returning method of the output to preset value with the external "Up" input. *oEtY* is set like the output parameter.
- EdEtY.** = Returning method of the output to preset value with the external "Down" input. *oDtY* is set like the output parameter.
- rEt.** = Increasing time for output. Adjustable between 1-250 seconds. Output is increased slowly to the lower limit value during adjusted time. See NOTE 1 for programming.
- dEt.** = Decreasing time for output value. Adjustable between 1-250 seconds. Output is decreased slowly to the lower limit value during adjusted time. See NOTE 1 for programming.
- P.rEt.** = Increasing and decreasing speed of preset value. It is adjusted *d5Ab.* ,1, 10, 100, 1000 values. *d5Ab* is selected, the preset value can not be changed. Selected according to the value increase or decrease the preset buttons for fast switching mode, the preset value speed is increased or decreased "one by one", 10 at each step, 100 at each step, 1000 at each step. See NOTE 1 for programming.
- oLYP.** = Output type selection parameter. 0-10 = 0-10V output usable. 4-20 = 4-20mA output usable. 0-20 = 0-20mA output usable. See NOTE 1 for programming.

Default parameters

- bCod.** = Access code for safety menu. This parameter should be 2041. Security code is 0; If ▼ key is pressed continuously for 5 seconds, *dEFP* message is displayed and return to the factory settings.
- Uc5c.** = *UcnF.* menu protection level parameter. *nonE* = No menu is seen. *P5E5* = Modification feasible. *P.no* = Only traceable.
- aC5c.** = *aCnF.* menu protection level parameter. *nonE* = No menu is seen. *P5E5* = Modification feasible. *P.no* = Only traceable. *P.no* = Menu visible.

OUTPUT DIAGRAM



NOTE 1 Parameter adjustment method

For adjusting a selected parameter first press and hold SET key. Then, by using ▲ ▼ keys, adjustment can be made.

If increment key ▲ is pressed and held 0.6 seconds, the value of the selected parameter changes rapidly. If waited enough, the value increases 100 at each step. After 1 second following the release of the key, initial condition is returned. The same procedure is valid for the decrement key ▼.