

Edge Position Control Systems



Kenar Kontrol Sistemleri

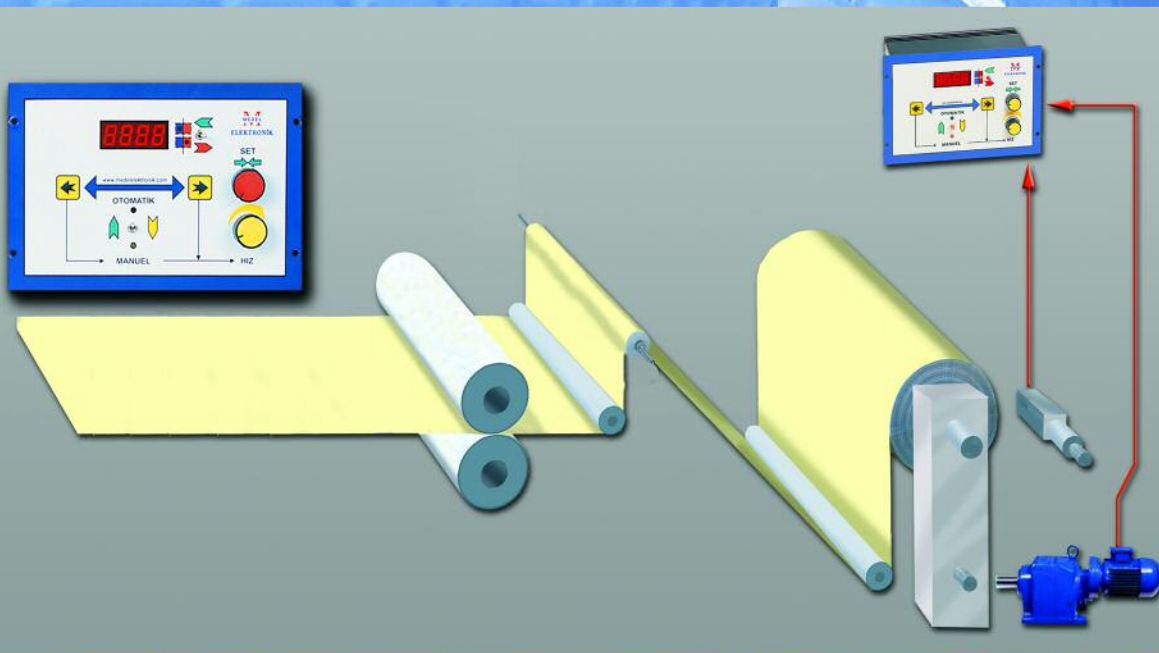
PRELIMINARY INFORMATION:

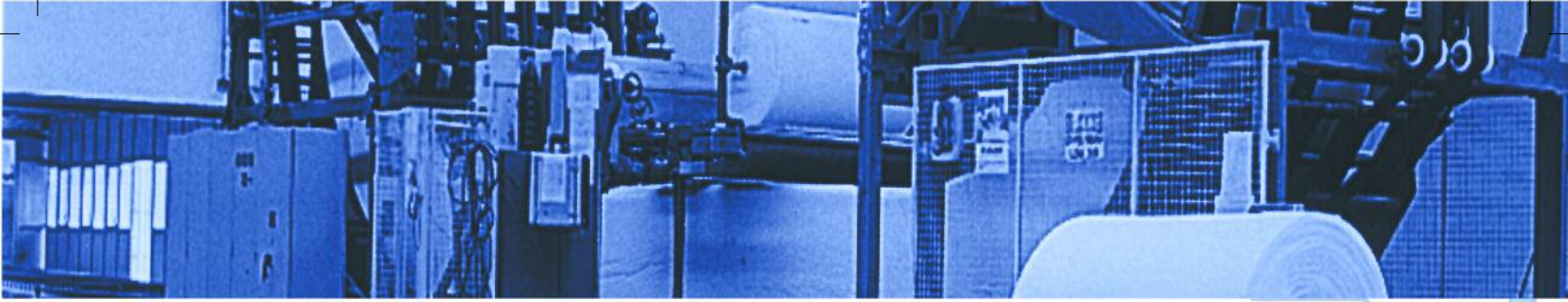
1. Install the edge following equipment in a place away from the machine vibration.
2. Ensure that the point on which the photocell is connected is not exposed much light by another source of light.
3. The system will operate more efficiently if the roll which is subject to the light of photocell is made of black rubber.
4. The photocell cable should be shielded and run to THE EDGE POSITION FOLLOWER through the shortest way.

INITIAL OPERATION

1. Check all connections for the last time before energising the system.
 2. After making sure that all connections have been performed correctly, switch the unit to the manual mode and energise it.
 3. For adjusting the motor direction correctly, first press on the manual left button and confirm the motion of the chassis to left direction. If it is in counter direction, reverse it, holding motor ends. Thereafter, check whether the edge limit switch is in correction position. (when you press the limit switch on the left while the chassis going to the left direction, the motor should stop). Repeat the same process for the manual right button.
- *- Make sure that the edge limit switches are open.

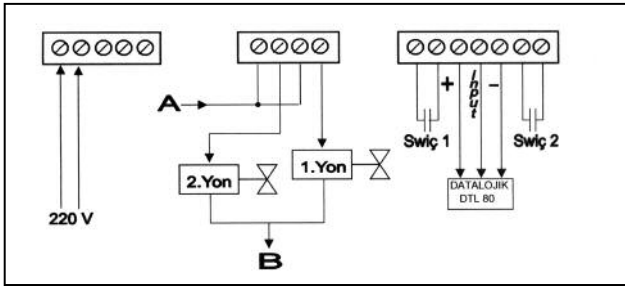
4. Before switching to automatic operation, adjust the photocell light. Expose the photocell light on the line where the edge that we want to follow joins the roll and draw it to zero, using zero potency. The closer it is to the zero value, the more stabilised the system is.
5. If you displace the photocell and want to follow the edge from other side of bobbin, you should change the position of the switch on the equipment (motor rotation direction).
6. When the equipment is switched to automatic mode, the motor will rotate to right and left, depending on the direction to which the material diverts. Via the sensitivity potency on the equipment, the reaction against the diversion of the material can be adjusted.



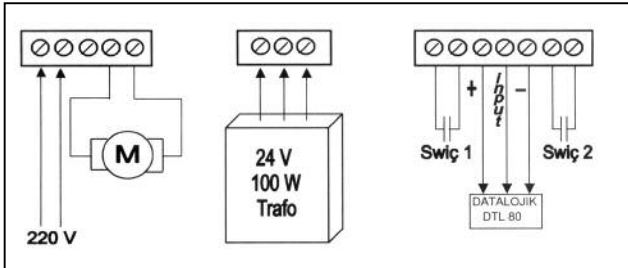


Medel Electronic Edge Position Control System can work in 3 different sections.

1. Edge Position Control System by 24V DC Motor
2. Edge Position Control System by Three-phase AC Motor
3. Edge Position Control System by Valve & Pneumatic Control



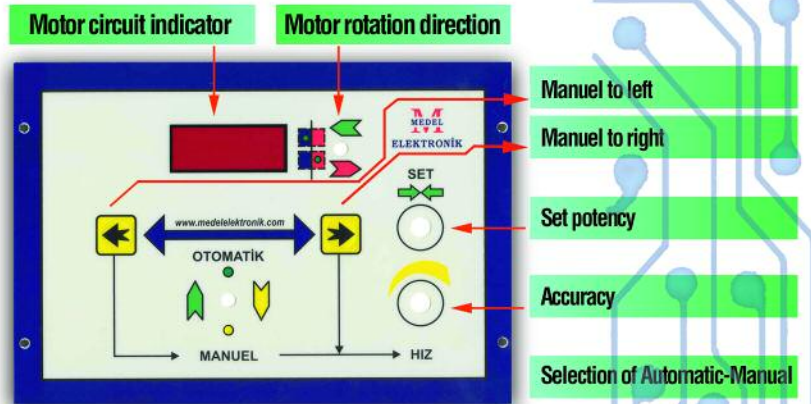
2) Three-phase AC Motor: The measurement method of the equipment is same. Control signal is read on socket as direction and reference data. Operator selects the motor and speed control equipment according to the requirement. After connection between motor and inverter, control outlets of the edge position controller are connected to the control inlets of the motor speed controller. The diagram shows the connection suitable for the motor speed controller with MEDEL brand.



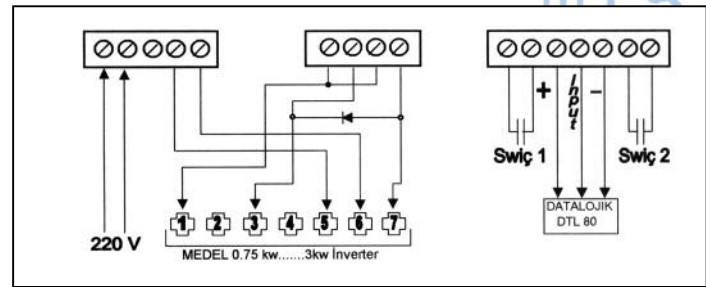
WORKING PRINCIPLE

Edge Position Controller of Medel Elektronik ensures the material to wind or unwind on a roll or spool on the same edge position smoothly and precisely. Due to its easy use, it does not cause any waste of time at the time of operation and ensures easy adaptation to the machine.

Colour photocell that can make sensitive measurement is used in the unit. Fine light emitted from the photocell crosses the edge line to be followed. By the set potentiometer, motor



1) By 24 Volt Motor: In addition to the unit, 2 x 24 volt AC is supplied by a transformer powered externally, depending on the motor size.



3) By valve & pneumatic control: 2 valves are energised, using the contact outlets of the edge position controller. Voltage on the A, B ends depends on the bobbin voltage of the valve used. Maximum 6 Ampere can be drawn from the equipment contacts.

cycle/min. indicator on the screen is lowered close to zero. After the system is switched to automatic mode, the equipment energises the motor and/or the valve in the counter direction of the direction where the material runs away in order to ensure the material to run on the same line. Gain setting is made by means of the speed potentiometer on the equipment. The light of the photocell is directed to the left or right of the edge line, using the direction switch.



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