Contatti REO Italia:
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REOTRON MDZ

Thyristor firing & control unit: Cabinet mounting version (IP 20)



Unique Selling Point

- Use as three-phase thyristor regulator or fully-controlled bridge
- Connection to positive or negative phase sequences (self-detecting)
- Current or voltage control
- Selection of the switched transformer group
- Operation as positioner or controller
- External setpoint
- Input for excess temperature switch
- Disturbance signalling
- Use as three-phase thyristor regulator with downstream transformer and passive bridge rectifier

Description

The firing & control units MDZ have been designed for the control of current converter installations, e.g. in electroplating plants. They contain one controller each for current and voltage control. In the voltage control mode, the output voltage is kept constant at a predefined setpoint value by the internal control circuit. Therefore, changes in the load or in the mains supply have no effect on the output voltage.

When operated in the current control mode, the output current is compared with the setpoint, and corrected accordingly. Hereby, the output voltage can increase to its maximum value. If the preset limits (Imax or Vmax) are exceeded, this is signalled by LEDs.

If both control modes are used together, the controller with the lower setpoint always has priority. For example, with voltage control and subordinated current control, this means that the voltage controller is in command as long as the permissible current value is not exceeded. As soon as the current limit is reached, the current controller takes over.If the unit is to be operated purely as a voltage or current controller, the respective other setpoint must be set to the 10 VDC reference value.

Intended for installation in a control cabinet, the unit is mounted in a compact aluminium housing. All electrical connections are made via plug-in screw terminals. The controls for adjusting the operating parameters are accessible on the front panel.

Technical Data

- Input voltage : 3 x 400 V +6 % - 10%
- Output voltage : 3x0...3xUe V
- Input voltage switchable : Eingangsspannung umschaltbar [V] V

Last modified: 11.04.2019. All data is provided to the best of our knowledge and awareness and is subject to error and amendment.

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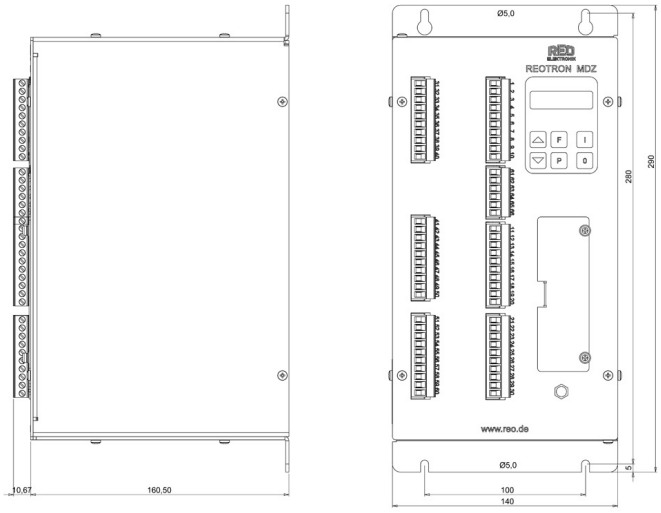
Technical data

Type	REOTRON MDZ
Mains supply:	3 x 400 V +6 % - 10%, 50/60 Hz
Firing pulse stages:	6
Firing pulse voltage & current:	ca. 12 V; 500 mA
Control range:	switchable for 120 °el. (DC) to 150 °el. (AC)
Switched transformer groups:	Dd0, Yy0, Dz0, Dy5, Yd5, Yz5, Dd6, Yy6, Dz6, Dy11, Yd11, Yz11 and primary positioner
External setpoint adjustment:	external with 0...+10 V, DC 0(4)...20 mA, potentiometer
Process value signal for voltage:	± 0 - 40 V (0 - 10 V, DC-Option)
Process value signal for current:	± 0 - 75 mV (0 - 10 V, DC-Option)
Up/down ramping integrator:	0,1 - 10 sec. adjustable
Voltage/current controller:	PI controller, adjustable P action
Enable/Inhibit signal:	24 V, DC or contact
Status relay:	1 changeover contact, 250 V, 1 A
Permissible ambient temp.:	0 - 45 °C
Protection rating:	IP 20

Dimension drawing



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