

VEW 6DT1013 RED

Thyristor regulator 2,2KW

The original Siemens thyristor regulators with reversal contactor are no longer available. Regarding pin dimensions and functions, our newly developed and redesigned devices are fully compatible with the original, and can be installed/replaced "plug-and-play" in the existing location.

The reversal contactor is replaced by a thyristor bridge.

With an output rating of 2,2 kW, the units are mounted in a 3HE 1/2-19-inch plug-in rack, are used for step operation of motor actuators by means of DC signals from a step driver module.

The open-frame construction is designed for natural convection cooling in a control cabinet with a 50% overload rating, and an ambient temperature of max. 60°C.

The unit works as an electronic 3-phase reversal switch operated by positioning pulses and with an automatic DC brake.

The rotation direction of the connected AC actuator motor is determined by thyristor-controlled phase switching between L1 and L3.

Hereby, the respective rotation (RL-LL) and actuation of the DC brake are indicated by signalling LEDs in the front panel.

The DC brake is actuated for an adjustable duration after every positioning pulse.

The logical input conditions for RL-LL control are mutually locked.

A signal change at only one of the logic inputs during operation does not cause a change in the actuators rotation direction.

Interference pulses are suppressed.

A superordinate blocking input is provided in the rotation direction logic.

If a blocking input is set during operation, the actuator will be operated, but without the DC brake.

Moreover, the blocking input will interrupt any braking sequence.

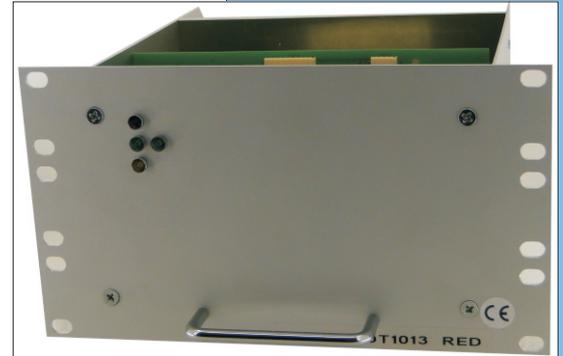
As soon as the automatic DC brake is triggered after every positioning pulse, the preset braking sequence will start when the preset turn-off time for the thyristors has expired. Hereby, a thyristor chain is operated as a rectifier using phase-angle control, so that the motor winding generated a static magnetic field, which brakes the rotor.

If the input condition for the rotation direction changes directly, the electronic brake is not triggered between the positioning pulses.

Furthermore, the control unit monitors phases L1, L2 and L3, the system voltage which is generated from two phases and fuse F1. In case of a fault, an output signal is set. If one of the thyristors are bad, an output is set and a automatic fuse interrupts the circuit.

The required signal voltage must be supplied externally.

A thermal motor protection circuit with a thermistor is provided.



6DT1013 2,2kW 1/2-19"

Technical data:

Supply voltage	: 400 VAC; 3-phase; alternativ 230V AC 3-phases
Output rating	: 2,2kW for 3-phase induction motors or standard 4-pole motors
Input, logic signal	: 24 V level; RL-LL; blocking signal, 50 ms pulse, max. 20 pulses/s
Brake	: Dynamic DC brake, pre-adjusted 70ms, adjustable
Construction	: 3HE 1/2 19-inch unit, open frame. 2 units combinable as a full 19-inch module
Connectors	: For logic control, Sub-D-25pole, male For power output, 16-pole Harting HS12

Redesign



DIE ENTWICKLER

VEW Vereinigte Elektronikwerkstätten GmbH
Edisonstraße 19 * POb: 330543 * 28357 Bremen
Fon: (+49) 0421/271530 Fax: (+49) 0421/273608
E-Mail: VEW-GmbH-Bremen@t-online.de