VEW 6DT1026/27 RED 3/6kW Thyristor regulator

Redesign

The original Siemens thyristor regulators 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 modular units with 3,0 kW output rating are mounted in a19-inch 3HE rack.
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 units work as a 3-phase reversal switch with an optional automatic DC brake for topping and change of rotation direction.
The rotation direction of the connected AC actuator motor is determined by thyristor-controlled phase switching.
Hereby, the respective rotation (RL-LL) and actuation of the DC brake are actuation are indicated by signalling LEDs in the front panel. The automatic DC brake can be triggered between every change of rotation direction and for stopping, with an adjustable duration of 17 ms up to max. 530 ms. The brake is present for a duration of 53ms (default).

6DT1026/27 RED 3/6kW
1/1 19" 3HE rack

The logical input conditions at E8 and E9 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 actuator's rotation direction. Interference pulses are suppressed.
A superordinate blocking input at E7 is provided in the rotation direction logic.
If blocking input E7 is set during operation, the actuator will be stopped (release).
If the automatic DC brake has been configured in the hardware, it will be triggered after every positioning pulse, and 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 for the adjusted time (default 53ms) using phase-angle control, so that the motor winding generates a static magnetic field, which brakes the rotor.
Depending on how the module has been configured by means of jumpers, the turn-off time for the thyristors is 13.5 ms or 27 ms.

Backside
Connector x1, x2

When the actuator's rotation direction is to be changed, the thyristor turn-off times preceding and following the preset braking time are added to give a total time, after which the actuator is reversed.
For example: 13.5 ms + 85 ms + 13.5 ms = 112 ms.
Furthermore, the control unit monitors phases L2 and L3, the system voltage, and the actuator temperature.
Each of the three monitors can trigger a corresponding alarm signal, which can be processed by an external superordinate system.

Samples are available ex stock.

Technical data:	6DT1026 RED	6DT1027 RED
Supply voltage	: 400V AC; 3-phase	400V AC; 3-phase
Output rating	: 3kW	6kW
Inputs, logic signal	: +24V-level; RL; LL; Release (stop)	
Brake	: Configurable with/without, adjustable 17...530ms, default 53ms	

VEW®
DIE ENTWICKLER

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