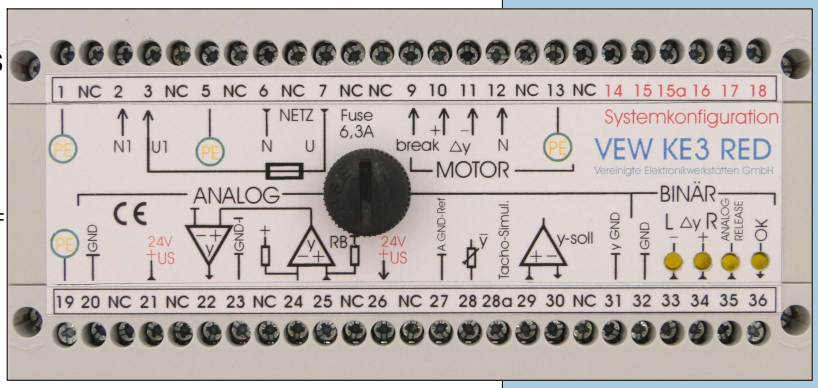
Compact power electronics for S&F control mechanism drives VEW KE3 RED

Redesign

The original KE3 power electronics from Hartmann & Braun can be replaced with a completely dimensional, functional and terminal compatible plug-and-play redesign.
The VEW KE3 RED in the control panel housing for rail mounting acts as position regulator with P- characteristic by having the position of the control mechanesm drive tracked proportionally downstream to the upstream controller.
The input circuit of the controller compares the configured intended value with the actual value position of the actuating element.
The difference between YSOLL minus YIST = D Y controls the operating angle for the operation of the position motor so that the motor torque is in the range of the process requirements.



In the event of a position deviation 0.7% (1.4%), the motor will then deliver the nominal torque.
In the event of a position deviation < 0.7%, the torque is controlled proportional to the position deviation.
During the positioning of the drive, the electronics controls the torque so that a balance is set between the motor torque and load torque. The drive is electrically kept in the position or returned to it.
The control logs can be dampened by activating a tachometer generator, which provides a speed-proportional signal.
The dampening can be set with the potentiometer y.
Motors without tachometer generator (M0053L ... (E) M063B) use the differentiated signal from the position indicator.
As the effectiveness of the differentiation remains limited is used only for the regulating times > 20s.
The motors with tachometer generators (M163LT ... M1203T) allow for shorter regulating times of < 5s thanks to the settable dampening.
The VEW KE3 RED replaces all KE3 original devices as the redesign can be configured for all motor versions with jumpers.
The operating capacitor needed for the servo motors is directly installed in the drive or in a separate capacitor connection box.

Technical data:

Input voltage	: 230V AC 50Hz +10-15%, 5VA; +24V 0,1A (16...+33V)
Analog input	: Pos. desired value 0/4...20mA; Pos. actual value 0/4...20mA
Binär input	: Bin1 = nom. +24V (+12...36V), Bin 0 = 0V (-2...+5V)
Binär output	: ,,Ready for operation" 1 = +24V
Analog output	: ,,Pos. check-back-signal" 0/4...20mA
Power output	: 230V AC max. 400VA, min. 25VA
Housing	: Plastic IP20, control cabinet mounting profile, B150 T120 H72mm

DIE ENTWICKLER

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