Redesign for Contronic E Plate coupler PMK01/02

The redesign of the bulk memory - coupler module PMK01 is used to couple the mass memory stations with PMM30 to the central stations of the process control system Contronic E.

The coupling uses a 25 pole and 50 pole shielded flat cable between two coupling modules, with one set in the central station and the other in the bulk memory station.

The coupled stations exchange data via the 2 x 16 kbyte dual port RAM of the coupling module. Thanks to the dual-port RAM technology with the corresponding controls and interrupt management, asynchronous simultaneous access to the data is possible.

The addresses at the station bus are recorded in the address receiver of the coupling module and temporarily stored to decouple the processing of signal traffic on the data bus.

Remote access to the RAM memory of the counter station is done using a bidirectional, parallel address and data bus. The internal and external RAM memory forms a joint address space for the station so that continuous 32 KB memory is available.

The RAM memory can be controlled by bytes or words.

The distribution of the memory area uses the address decoder, which generates a enabling signal for its own RAM area if this is contacted by the coupled station. The access approval is controlled by the input and output control signals; by using a flip flop on the second coupler blocks the enabling so that simultaneous access to the data from there is prevented. The configurable address decoder sets the address of the memory station for the central command station and the reverse.

The decoder for the direction approval shall control the send and receiving directions for addresses and data depending on the enabling signal as well as the write-read pulses on the RAM and the interrupt processing. The latter is controlled using a flip-flop on the coupled station.

The PMK redesign is completely pin and function compatible with the original modules and can be operated cross compatibly with this.

Technical data:Memory: 32 KB-Ram, each 16KB/PMKAccess: asynchronTransmission rate: 800K words/s, 16 Bit/w ~ 12,8 MBdInterconnec. cable: 50 pol. resp. 25 pol. flat ribbon cable, shieldedSupply: +5V, 1A DCSize: DIN41612 19" insert, FPL 8TE, 220 mmConnector: Front: 50 pol/25 pol SubD Stift, Basis DIN 41612C64

Redesign





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