

Stepping Motor Output Stage Type EHV 01.001



Board in European dimensions for controlling 2-phase stepping motors

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This board in European dimensions is suitable for controlling 2-phase stepping motors in whole or half-step operation (200 or 400 steps/revolution). The bipolar chopper output stage is protected against short circuits phase-0 and phase-phase. An interruption of the load circuit during operation (motor running) does not harm the output stage. Motors of various impedance and current rating can be connected. The current can be infinitely adjusted via a potentiometer up to 6 A. An automatic current reduction at standstill reduces the phase current to 55% or 80% of its value (holding current). The electronic monitor of the cooling element temperature protects the output stage from continuous overload. The monitor switches off at 70°C cooling element temperature, and on again automatically at 60°C.

The control of the output transistors is performed by the stepping logic, which is plugged onto this board as a pick-a-back print. It not only governs the timed control of the two motor phases, but also – in the case of 400-step operation – produces a suitable current distribution over the individual steps. This and other measures have resulted in the dreaded resonance effect of the stepping motors becoming hardly noticeable.

Technical data:

Inputs:

 $\begin{array}{l} Cycle \ (6,8 \ k\Omega \ on \ high \ level) \\ Direction \ of \ rotation \ (6,8 \ k\Omega \ on \ high \ level) \\ Reset \ (circuited \ as \ power-on-reset; \\ low \ level \ means \ switch-off \ of \ power \\ section). \end{array}$

Logic section:

Operating voltage	+12V stab.
max. current consumption	100mA
Input resistance	6,8kΩ
max. frequency	20kHz
Impulse breadth min.	25µs
Logic level high	>8V
Logic level low	<4V



Connections:

The board is available with 31 pole or 32 pole connector terminal.



Connector: DIN 41617

Power section:

Operating voltage 35–60 V Phase current adjustable 0,5–6A Holding current 55% or 80% of running current Ambient temperature 40°C (forced cooling necessary)



Connector: DIN 41612 a+c

Dimensions:

European dimensions 100×160×65mm Weight 0,8 kg

All information, specifications and data in this leaflet are subject to change without notice.



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