Electronic Timer in AUMA MATIC

AUMA Actuators, Inc. USA

Scope

This instruction shows the calibration of the pulse timer in AUMA MATIC controls.

Task: Extension of operating time for either a part of or the entire travel.

Application: The timer arrangement can be used instead of expensive two-speed motors and their controls (double reversing contactors).

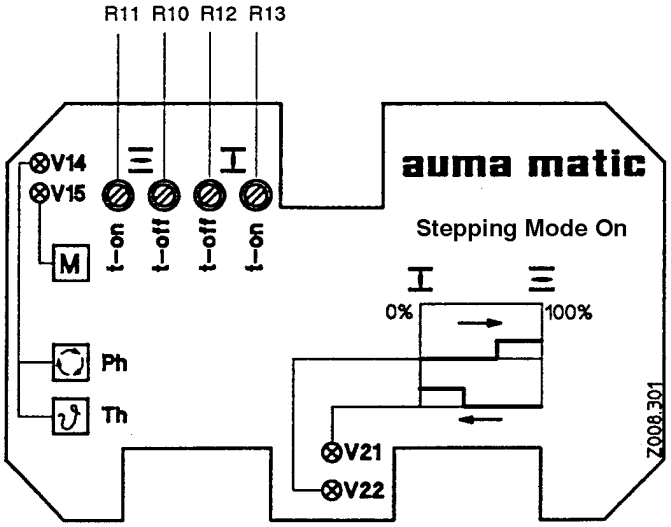
Example: In order to avoid water hammer effects in long pipelines, the operation can be in steps for any section of the valve travel.

Advantage: During commissioning on site, the electronic timer can be adjusted to suit the particular process.

Control Options:

1. The beginning and the end of the stepping mode is determined by setting of the intermediate switches on the four train gear limit switching.
2. The beginning and the end of the stepping mode can be controlled by an external contact.[1)]

Setting: The timer board is fixed in place of the interface board within the AUMA MATIC housing. The setting elements (four [4] adjustable potentiometers) are accessible after removing the top cover. The "ON" and "OFF" time can be set independently and separately for both the opening and closing directions, each within the range 1-30 seconds.



LEDS:

V14 Fault: Incorrect phase sequence, phase failure or thermoswitch tripped
V15 Fault: Torque switch tripped in mid-travel
V21 Stepping mode "ON" in close direction
V22 Stepping mode "ON" in open direction

Settings:

(Clockwise rotation increases counter-clockwise rotation decreases time
R10 Direction OPEN, pause time
R11 Direction OPEN, running time
R12 Direction CLOSE, pause time
R13 Direction CLOSE, running time

[1)] For external control, potential free (dry) contacts must be used.