# CONTROL AMPLIFIER FOR EHD3



This control amplifier is constructed compactly by adopting a switching power supply and can operate with a wide range of power supplies (AC85 to 250 V (50/60 Hz) and DC110 to 250 V).

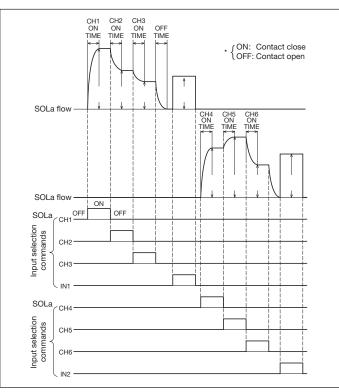
### Features

- 1. The amplifier incorporates three pressure setting units and can handle multi-stage pressure control on up to three channels.
- 2. The time settings for switchover among the channels can be made independently.
- 3. When there are multiple flow settings using one control valve, multiple-stage setting and shock relief are possible without installing external setting units.
- The cord connecting the valve coil connection terminal to the valve coil should have a current capacity of 1 A or larger, and the voltage drop in the connection cord should be limited to within 2 V.
- If the SOL connection terminal is disconnected with the power on, a surge voltage is generated and it may degrade the solenoid insulation.
- Simultaneous selection of more than one channel may cause trouble. An input selection command should be used for each channel, independently.
- For the external voltage input (IN1, IN2), use a shielded cable. The shielded cable should be connected as specified: IN1 to terminal No. 10 and IN2 to terminal No. 14. (Terminal Nos. 10 and 14 are connected in the amplifier).

### Specifications

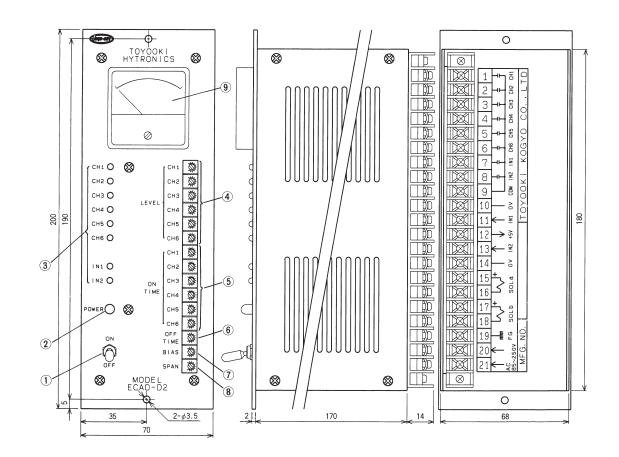
| Model                   | ECAD-D2   |  |  |  |  |
|-------------------------|---|--|--|--|--|
| er supply voltage       | AC85 to 250 V, 50 to 60 Hz, DC110 to 250  |  |  |  |  |
| nal input voltage       | 0 to +5 V   |  |  |  |  |
| Voltage input           | 1 input × 2 (SOLa, SOLb)  |  |  |  |  |
| Contact input           | 3 contacts × 2  |  |  |  |  |
|                         | (input selection command),  |  |  |  |  |
|                         | DC12 V, 2.4 mA  |  |  |  |  |
| gain                    | 300 mA / 5 V  |  |  |  |  |
| impedance               | 10 ΚΩ   |  |  |  |  |
| d output current        | 300 mA  |  |  |  |  |
| etting adjustment range | 0.07 to 7 s (CR time constant curve)  |  |  |  |  |
| /coil resistance        | 34Ω/ at 20 °C   |  |  |  |  |
| ;                       | 1.8kg   |  |  |  |  |
| ing temperature range   | 0 to 50 °C  |  |  |  |  |
| ower consumption        | 16 VA   |  |  |  |  |
|                         | er supply voltage<br>nal input voltage<br>Voltage input<br>Contact input<br>gain<br>impedance<br>d output current<br>tting adjustment range<br>/coil resistance |  |  |  |  |

### Time chart



## Outside dimensions

## ECAD-D2



### Terminal functions

# Power switch POWER pilot lamp Input selection indicating lamps Flow setting knobs (LEVEL) Rise time setting knobs (ON TIME) Fall time setting knobs (OFF TIME) Minimum pressure setting knob (BIAS) Maximum pressure setting knob (SPAN) Ammeter

| Terminal No. | Descriptions                |     | Terminal No. | Descriptions                                   |      |
|--------------|-----------------------------|-----|--------------|--|------|
| 1            | Input selection command CH1 |     | 12           | Input signal                                   | +5V  |
| 2            | Ť                           | CH2 | 13           | Ť  | IN2  |
| 3            | Ť                           | CH3 | 14           | Ť  | OV   |
| 4            | Ť                           | CH4 | 15           | Output to valve<br>SOLa                        |      |
| 5            | Ť                           | CH5 | 16           |  |      |
| 6            | t                           | CH6 | 17           | Spare  |      |
| 7            | Ť                           | IN1 | 18           | Spare  | SOLb |
| 8            | Ť                           | IN2 | 19           | Frame ground                                   |      |
| 9            | Ť                           | COM | 20           | Power input<br>AC85 to 250 V<br>DC110 to 250 V |      |
| 10           | Input signal                | OV  | 21           |  |      |
| 11           | †                           | IN1 |              |  |      |

### Mounting hole dimensions

