Open Loop Control Driver (for AC Power Supply)

Features

- Achieves optimum control of open loop control type solenoid operated proportional control valves.
- The constant current characteristics suppress the power supply voltage fluctuation, and the output current fluctuation due to temperature rise of the solenoid, to almost zero.
- The output current waveforms (dither frequency, amplitude) are set to optimize the hysteresis and resolution of solenoid operated proportional control valves.
- The PWM (pulse width modulation) control of electrical current minimizes heat generation from the driver.
- The response time adjustment function that smoothly changes output current in response to stepped changes in command inputs enables shockless change of hydraulic output. The response time can be adjusted independently for the rising and falling edges.

Nomenclature

<table>
<thead>
<tr>
<th>KC-6</th>
<th>10</th>
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</table>

1 Model No.
KC-6: Open loop control driver (for DC power supply)

2 Design No. (The design No. is subject to change)

Specifications

- Power supply voltage: AC 100, 200, 220 V (Common for 50 and 60 Hz)
- Permissible voltage fluctuation: −10 to +10%
- Applied load: Proportional solenoid (DC 24 V)
- Command input: DC 0 to 5 V or 1 kΩ potentiometer
- Output current: 0 to 850 mA (mean value indication)
- Power consumption: 32 VA maximum
- Input impedance: 50 ± 5 kΩ
- Trimmer adjustment: MIN 0 to 400 mA minimum (at 0 V input), MAX 850 to 300 mA minimum (at 5 V input)
- Dither selection: Five kinds (by replacing internal socket pins)
- Response time adjustment range: TMU 0.05 to 3.0 seconds (at maximum output), TMD 0.05 to 3.0 seconds (at maximum output)
- Operating ambient temperature: 0 to 55°C
- Operating ambient humidity: 25 to 90%RH
- Mass: 1.8 kg

Dither selection guide

<table>
<thead>
<tr>
<th>Valve model code</th>
<th>Pin code</th>
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<th>Pin code</th>
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</thead>
<tbody>
<tr>
<td>JR-P-G02</td>
<td></td>
<td>MEV12</td>
<td>S4</td>
</tr>
<tr>
<td>JRPL-G02</td>
<td></td>
<td>MEV16</td>
<td></td>
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<tr>
<td>C2RP-G02</td>
<td>S5</td>
<td>MEV20</td>
<td>S3</td>
</tr>
<tr>
<td>C2RLP-G03</td>
<td></td>
<td>MEV25</td>
<td>S2</td>
</tr>
<tr>
<td>C2GLP-G03</td>
<td></td>
<td>MEV32</td>
<td>S1</td>
</tr>
</tbody>
</table>

Note: Set to S4 at shipment
Before using the product, please check the guide pages at the front of this catalog.

http://www.daikinpmc.com/en/

For latest information, PDF catalogs and operation manuals

**External dimension diagram**

![External dimension diagram](image)

Note: A crimp-style connector (ELP-12V) and an ELP-12V connector with 500-mm lead wires attached (UL1007, AWG22 equivalent to 0.3 mm²) are supplied with the product. (The colors of the lead wires follow the color code order, except for the power supply wires.)

**Circuit configuration diagram**

**Wiring diagram**

* Space required to remove the connector

* When inputting command voltage from an external device, connect the positive (+) terminal to pin No. 2 and the negative (−) terminal to pin No. 3. When connecting a potentiometer for command input, follow the sample wiring below:

  ![Diagram](image)

  * CW Potentiometer (1 KΩ)

  * Use when adjusting the electrical current response time from an external device. Be sure to short the terminals when they are not used. If they are not shorted, no current will be output.

* Connect an ammeter only if necessary.
  There is no polarity with proportional solenoids.
  * AC 100 V is selected at shipment.
  When using an AC 200/220 V power supply, change the connection at the power supply tap inside.

* Example of selection among two or more solenoids

  - Selecting solenoids using relay contacts CRa and CRb
  - Insert a surge absorber or varistor (varistor voltage 100 V) in parallel to the relay contacts.