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



1 Model No.

KC-6: Open loop control driver (for DC power supply)

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

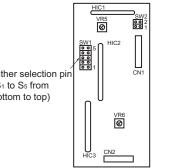
Specifications

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 k Ω 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

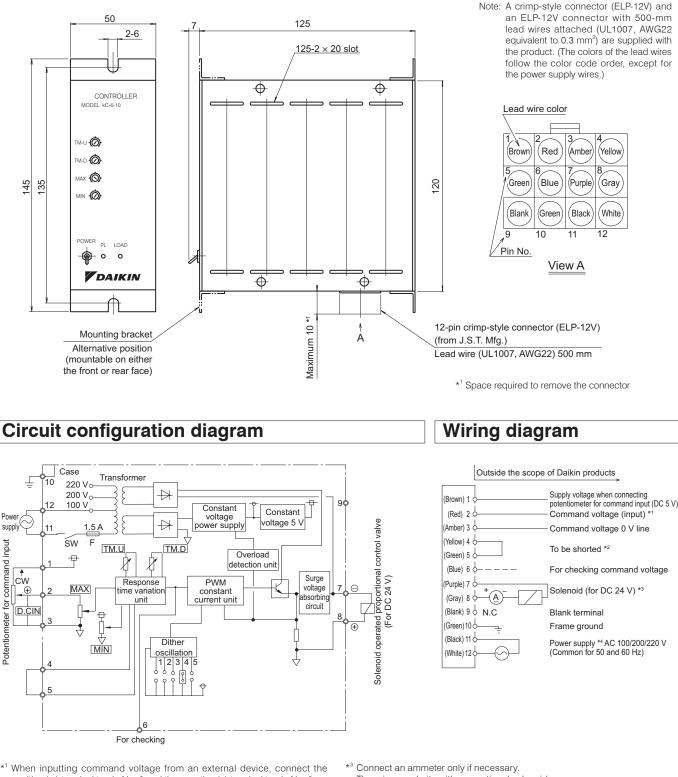
Valve model code	Pin code	Valve model code	Pin code]
JRP-G02	S5	MEV12	S4	Ditt (S1 bot
JRPL-G02		MEV16		
C2RP-G**		MEV20	S3	
C2RLP-G03		MEV25	S2	
C2GLP-G03		MEV32	S1	

Note: Set to S4 at shipment



Part layout diagram for KC-6-10, viewing the panel from the rear.

External dimension diagram



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



*2 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.

- There is no polarity with proportional solenoids.
- *4 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.