

Industrial Valve Test Box Kit EHA-TEQ-470-A-10



General Description:

The test box kit is designed to test proportional valves and their electronics. The equipment is useful for hydraulic valves with integrated electronics, i.e. KB-valves and AxisPro valves. The test box kit has an internal supply for 24V, which can supply one valve. The mains lead connects the test box with the outlet. The range from the main supply is 100V to 240V. A cable with 7 pin Amphenol connector connects the test box with the electronics of the valve.

The kit also includes a USB to CAN adaptor (PCAN-USB) and a CANBus M12 to SubD9 cable. With a downloadable software ProFX the valve can be diagnosed and setup via a CAN bus network



Features:

- Power supply with wide range input (100V to 240V AC)
- Provision for +/-10V voltage command on the positive and negative valve command input
- Provision for +/-20mA current command
- Potentiometric knobs to set the command values
- Switch to drive the Enable signal
- Breakout bus bar to measure all voltages and currents on the 7 pin Amphenol connector

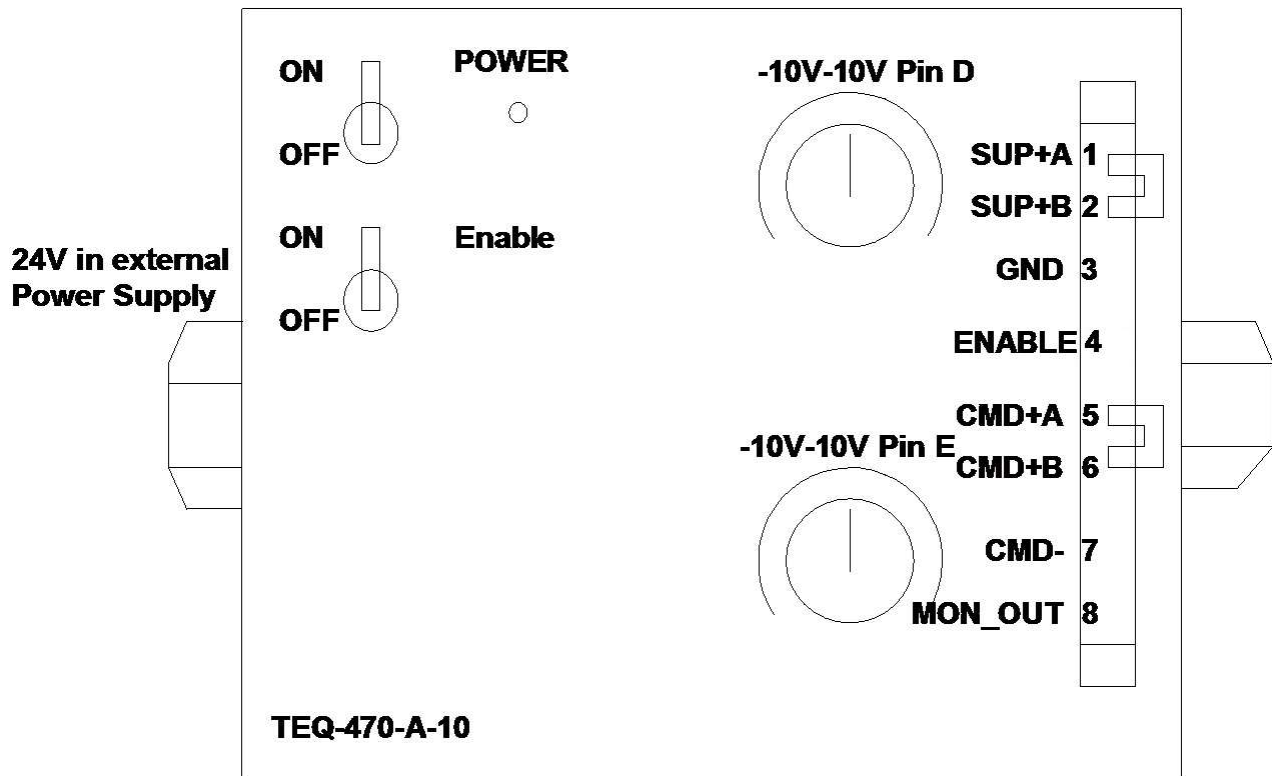


Contents:

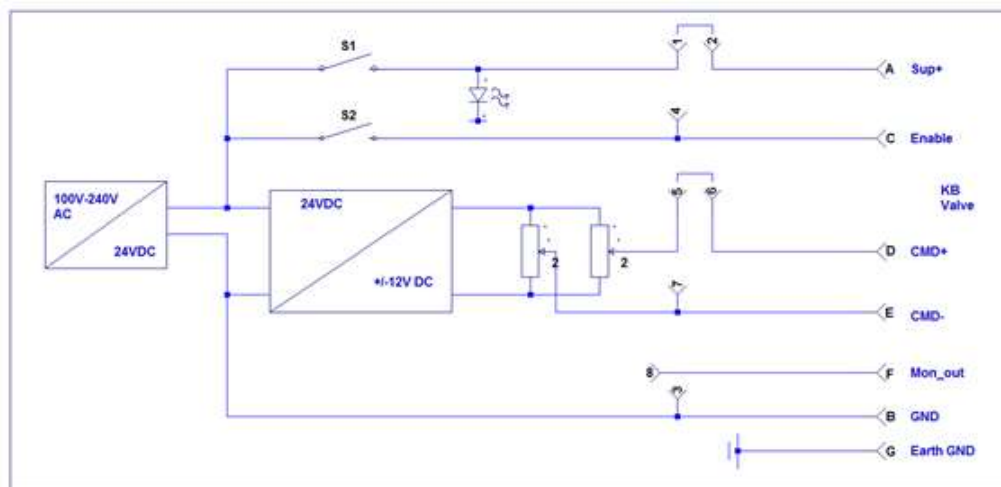
- Test box with command circuit, breakout terminals and switches
- Wide voltage power supply
- USB CANbus adapter for PC's, PCAN USB
- CAN bus cable M12-5pin to the Sub-D 9 (from the valve to the PC)
- Robust and watertight carrying case 27x24x17 (W x D x H)



Front Panel:



Block Diagram:



Electrical Specifications:

Power Input Voltage		100V to 240V AC 50/60 Hz
Valve supply		24V/ 2.5A
Short Circuit Protection		Yes
Command Signal	Voltage Command	+/-12V 25mA
	Current Command	-20mA to 0mA or 0mA to +20mA
Valve connector		
Header	7 pin Amphenol connector	
1	A	24V supply
2 (jumper connection)	A	
3	B	Ground
4	C	Enable on=>24V
5	D	CMD+
6 (jumper connection)	D	
7	E	CMD-
8	F	Monitor O/P

Mechanical Specifications:

Housing:	Dust proof, Color: black
Dimension:	23.6cm x 15.5cm x 18.3cm (9.3" x 6.1" x 7.2")
Operating Temperature range :	0 to 40°C

The diagram illustrates the power supply and control circuit for the KB Valve. It features a 100V-240V AC input connected to a 24VDC power supply. The power supply is connected to the KB Valve through a switch S1 and a diode. The control circuit is connected to the KB Valve through a switch S2 and a diode. The KB Valve is connected to the power supply and the control circuit. The output of the KB Valve is connected to the Monitor_Output_Voltage. The circuit also includes a supply_current and a command_current source.

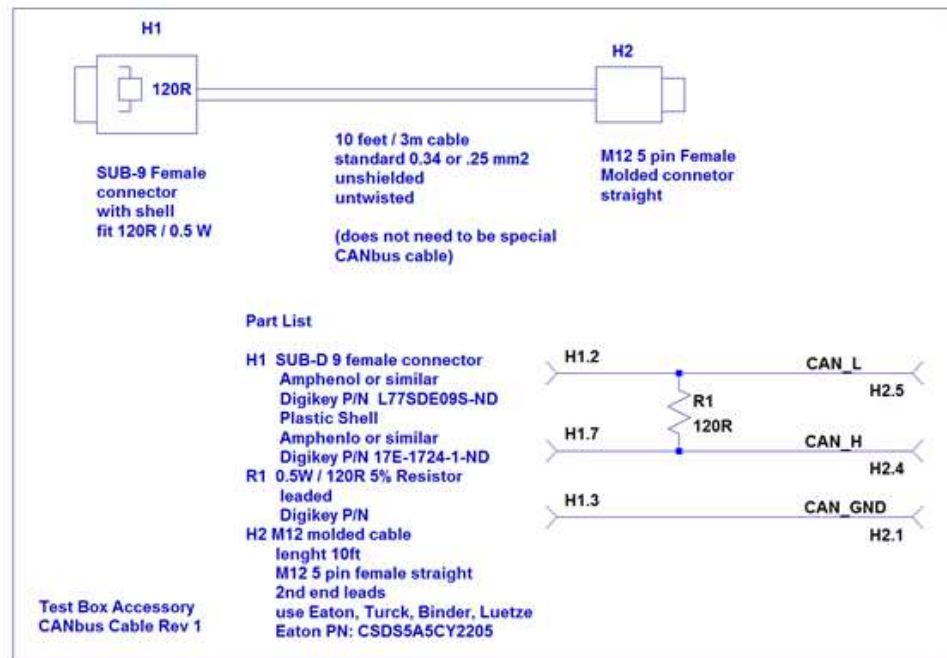
- Plug in the power supply, plug in the valve
- Turn S1 on to power up the valve
The LED should turn on
The valve LED should turn on
- Set potentiometer 2 to 0V, measure between 3 (GND) and 7 (CMD-)
- Vary potentiometer 1 to +/-10V, measure between 3 (GND) and 6(CMD+ out)
- Check if the valve is operating by measuring the monitor output between 3 (GND) and 8 (Monitor out)

- Same basic operation as voltage command. Set the valve in to M2 mode via ProFX.
- Now CMD+ is a 4mA to 20mA input with a 100Ohm internal resistance. CMD- is connected to ground.
- Set potentiometer 2 to 0V, measure between 3 (GND) and 7 (CMD-) to limit the current into that pin
- Vary potentiometer 1 to +/- 20mA, to measure the exact current, remove the jumper between 5 and 6 and insert a DVM in current mode.

CAN Functionality:



USB to CAN Adapter
P/N: GC-CAN-USB
PCAN-USB



CANBus M12 to SubD9 cable

Download the ProFX software from our Power Source website, it will automatically install all the necessary drivers.

Available Models:

Modelcode: EHA-TEQ-470-A-10

Partnumber: 107EC99003A

Description: Industrial CANbus Valve Test Box Kit

Modelcode: EHA-TEQ-471-A-10

Partnumber: 107EC99004A

Description: Industrial Valve Test Box Kit

Available Accessories:

None