

Electrical Quick Start Guide

Important! Read this first!

Always consider environmental and mechanical conditions of the installation, such as ambient temperatures, chemicals, moisture and exposure to mechanical impacts, shock and vibration. For mechanical protection of the wiring as well as to comply with EMC (Electro Magnetic Compatibility) standards it is recommended to place the wiring in screened conduit or to use screened cables.

Step 1: Location Considerations

Consider the voltage drop of the power supply wires. Locate the power supply sufficiently close to the actuator to ensure a genuine 24 Vdc is available at the actuator terminals when the actuator is operating. See section 3.2.2 of the actuator manual (IOM) for wire gauge vs. max cable length table.

Step 2: Installation

- ISOLATE the power before installation.
- The power supply **MUST** be regulated to 24Vdc (3.5 amps for G12 / 5 amps for G13).
- Remove the terminal enclosure cover of the actuator. Wire the power to the supply as shown in Figure 1. Use one of the cable entry points located either side of the actuator.
- Use a cable gland to ensure a water tight seal around the power cable or conduit.
- BOTH** ends of the screen **MUST** be grounded. When placing the wiring in metal conduit, which is grounded, shielded cable is not required, but the conduit **MUST** be grounded at both ends.
- Ensure the conduit or screened wiring will **NOT** lead water into the actuator via the cable entry points.
- All actuators are shipped factory set to the customer's requirements specified at time of purchase.
- The Actuator comes with a RS232 to USB adapter serial port cable for modifying control options. Plug it into (PORT 3) of the Actuator and use the Emech Configuration. The EmechConfig can be found on the Armstrong Website.
armstronginternational.com/emech.

Step 3: Operation

- Press and hold the power switch for 2 seconds to turn the unit ON or OFF.
- When in local mode the actuator is operated from the keypad, located under the lid of the actuator. The keypad uses "dual press" functionality meaning either SET or MODE is held ON and then modified by pressing UP (+) or DOWN (-). Refer keypad legend (Fig 4) located on the underside of the keypad lid. E.g. to increase the temperature control set point HOLD SET and press UP (+).
- The normal display on the keypad is the present process value (e.g. temperature). Pressing SET will display the control set point.
- Refer to the manual for remote operation with current loop or selector switch.



Figure 3: Actuator Keypad & Display

UNIT INDICATOR			
LED	Temperature	Position	
1		ON	
2			ON
UNITS	°C	°F	%

Figure 4: Actuator keypad operation & LED indicator legend
(Located under the lid of the actuator)

	+ up	Increase Control Set Point
	- down	Decrease Control Set Point
set	Pressing 'set' displays Set Point. Normal display is 'present value'.	
	set	Remote or Local Mode Toggle
	+ up	Temperature Units: °C or °F
mode	- down	Position or Temperature Toggle
HOLD	PRESS	KEY OPERATION

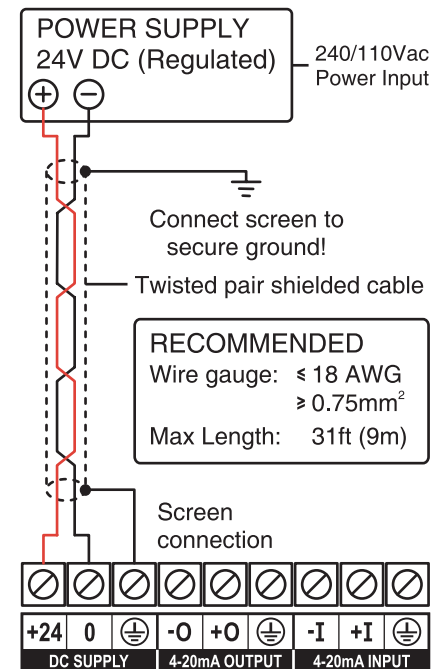


Figure 1: Electrical connection terminal
(Located under the terminal cover)

