



# MCS-SE-IB X - (EXV Interface Board) Description & Specifications

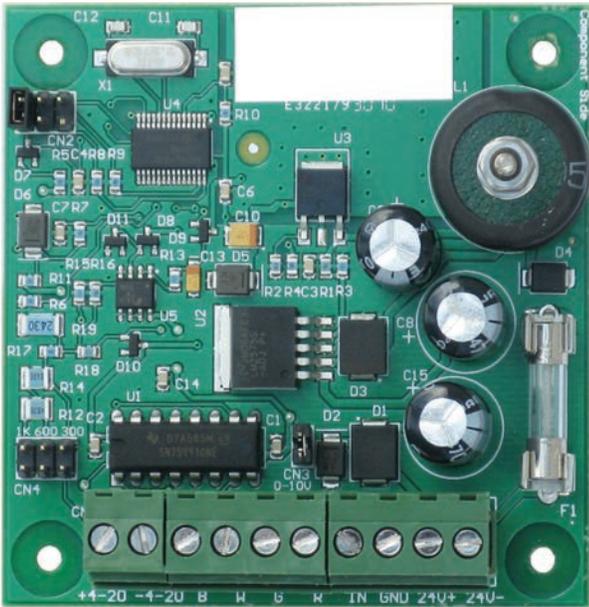
## Specifications

Dimensions ..... 3.0"w, 3.0"h, 1.5"d  
 Operating Temperature ..... -40°F to +176°F (-40°C to +80°C)  
 Storage Temperature ..... -40°F to +176°F (-40°C to +80°C)  
 Input Power ..... 24VAC, 15VA, Secondary  
 Output not grounded.



### Part #

**MCS-SE-IB1** ..... Interface for MCS-SEI-20  
**MCS-SE-IB2**.....Interface for Ser-G, J, K  
**MCS-SE-IB3** ..... Interface for MCS-SEI-30  
**MCS-SE-IB6** ..... Interface for MCS-SEI-50



## Description

The IB Series is available in four basic models, MCS-SE-IB1, MCS-SE-IB2, MCS-SE-IB3 and MCS-SE-IB6, and each can accept 4-20 milliamp or 0-10 volt DC analog input signals. All are designed to allow externally supplied control signals to control the MCS-SEI/SER/SEH electric expansion valves.

The IB1 is programmed to control any MCS Electronic Expansion valves having 1596 steps of resolution, the IB3 is used with valves having 3193 steps and the IB6 is used on valves with 6386 steps.

When properly configured and installed the IB Series requires no maintenance. They incorporate a number of operational features to assure trouble free service. On power-up the board will initialize by giving the valve a large number of steps to assure that the valve is fully shut. The routine will require approximately 8 seconds for the IB1, 16 seconds for the IB3 and 32 seconds for the IB6. The valve will not respond to input signals during this time.

If the valve is required to shut during operation, the pump down terminals should be used. When given a pump down signal, the board will shut the valve immediately and overdrive by 250 steps to reset valve position. On removal of the pump down signal the valve will resume position as dictated by the external control signal.

If power is lost to the IB or wire to the valve severed, the valve will remain in its last position. Solenoid valves may be desired before the step motor valve on critical applications.

## Board Mounting

The IB Series is based on a 3.0" x 3.0" circuit card with 0.125" mounting holes, 0.25" from each corner. If desired, these mounting holes may be used with customer supplied non-metallic standoffs. The IB Series does, however, come supplied with a length of snap-in plastic track. The track should be mounted in the desired location and one side of the IB engaged in the upper groove in the track.

The IB is then pushed down so that the opposite side of the board snaps into the uppermost groove in the opposite side of the track. The board may be mounted in the orientation most convenient for wiring. Location should be dry, protected and close to the 24 volt power supply and external controller.



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