



MARINE PROPULSION CONTROL

PNEUMATIC LOGIC AND CONTROL PANEL

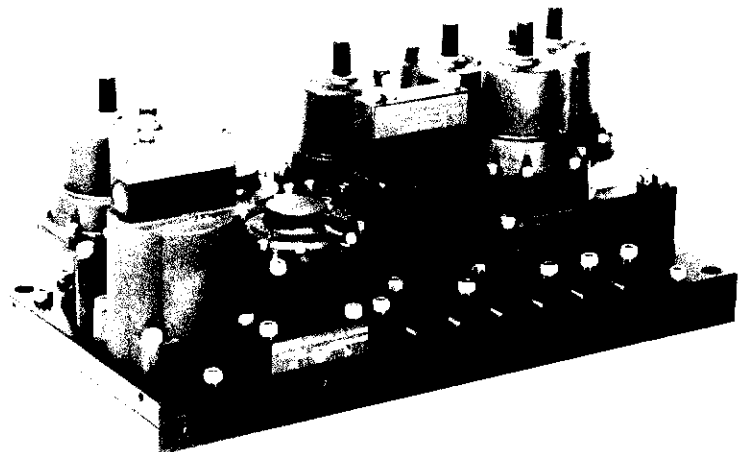
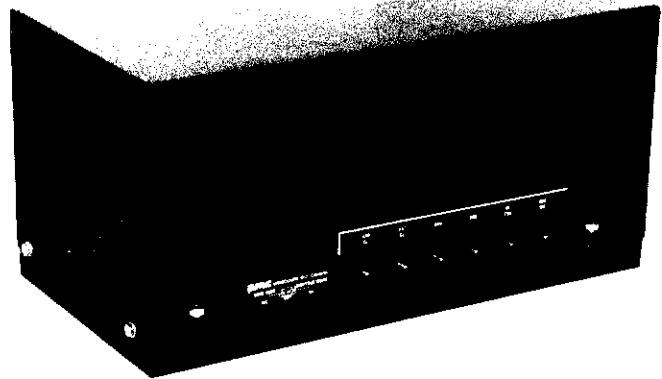
TYPE MPC-3H

APPLICATION

Propulsion control for vessels with fixed pitch propellers, reverse gears and hydraulic clutches

FEATURES

- .Compact Size
- .Easy Installation
- .High Flow
- .Manifold Mounted Components
- .Power Boost
- .Controlled Engine Acceleration
- .Clutch Pressure Interlock
- .Proportional Timed Reversing Interlock

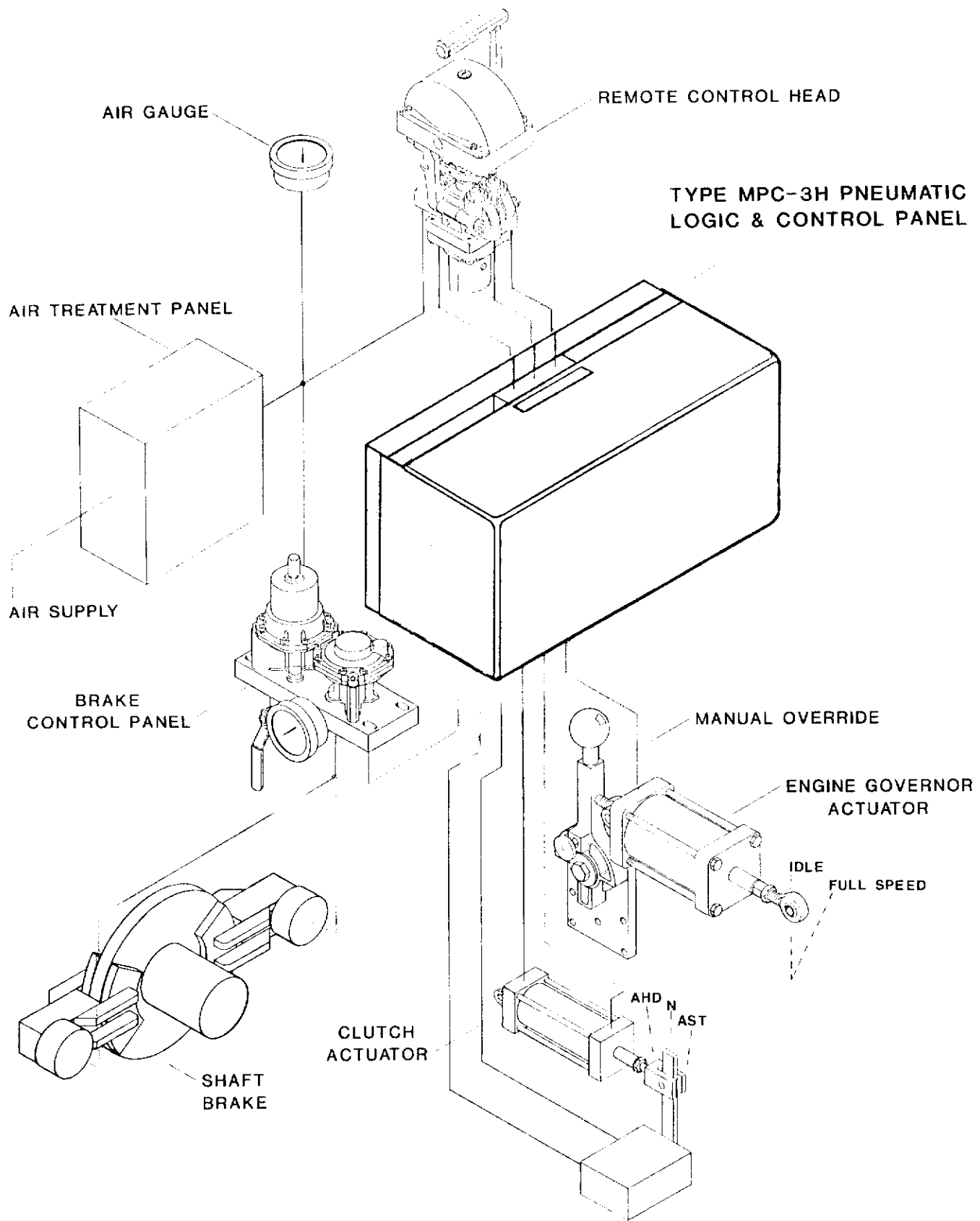


PRIME MOVER CONTROLS INC.

VANCOUVER, B.C., CANADA

**DESIGN, MANUFACTURE AND SERVICE OF MARINE AND
INDUSTRIAL CONTROL COMPONENTS AND SYSTEMS**

Electronic - Pneumatic - Hydraulic



TYPICAL PROPULSION CONTROL SYSTEM

GENERAL DESCRIPTION

The MPC-3H pneumatic panel is a compact modular unit, designed to provide propulsion control for vessels with fixed pitch propellers, reverse gears and hydraulic clutches. The MPC panel contains all necessary logic, interlocks and timing to ensure that the engine and reverse gear operate properly, smoothly and safely. A pneumatic signal for operating a shaft brake is also provided.

A laminated manifold with air channels eliminates the need for piping between the individual valves. Installation is fast and simple. All valves are base mounted and can be removed for servicing without breaking any pipe connections.

FEATURES

Power Boost

Increases engine RPM setting during clutch engagement to prevent engine stalling or reversal.

Controlled Engine Acceleration

Limits rate of engine RPM increase for efficient acceleration.

Clutch Pressure Interlock

Assures clutch lock-up before the engine RPM can be increased from any remote control station, preventing excessive wear of clutches. If at any time the clutch pressure drops below a pre-set level the engine RPM is automatically reduced.

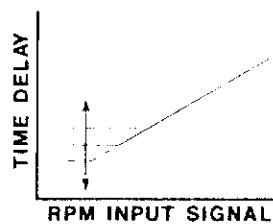
Proportional Timed Reversing Interlock

Provides a reversing time delay proportional to the magnitude and duration of the engine RPM setting. This allows the engine and propeller speeds to reach acceptable levels before reversal without sacrificing speed of operation when maneuvering at low speeds. The shaft brake is activated during this time, if used.

ADJUSTMENTS

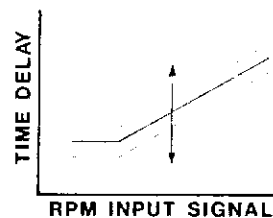
All of the above features are adjustable and are individually set and tested at the factory before shipping. They are also available in factory pre-set tamper proof configurations.

The reversing interlock has four different adjustments as follows.



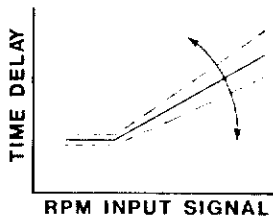
Min Delay Adjustment

Adjusts the minimum time delay for low speed maneuvering.



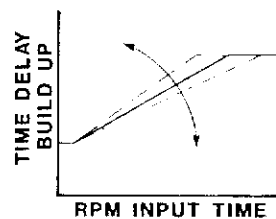
Base Adjustment*

Adjusts timing over the entire range of RPM input signal.



Ratio Adjustment*

Adjusts the ratio of the RPM input signal to the time delay.

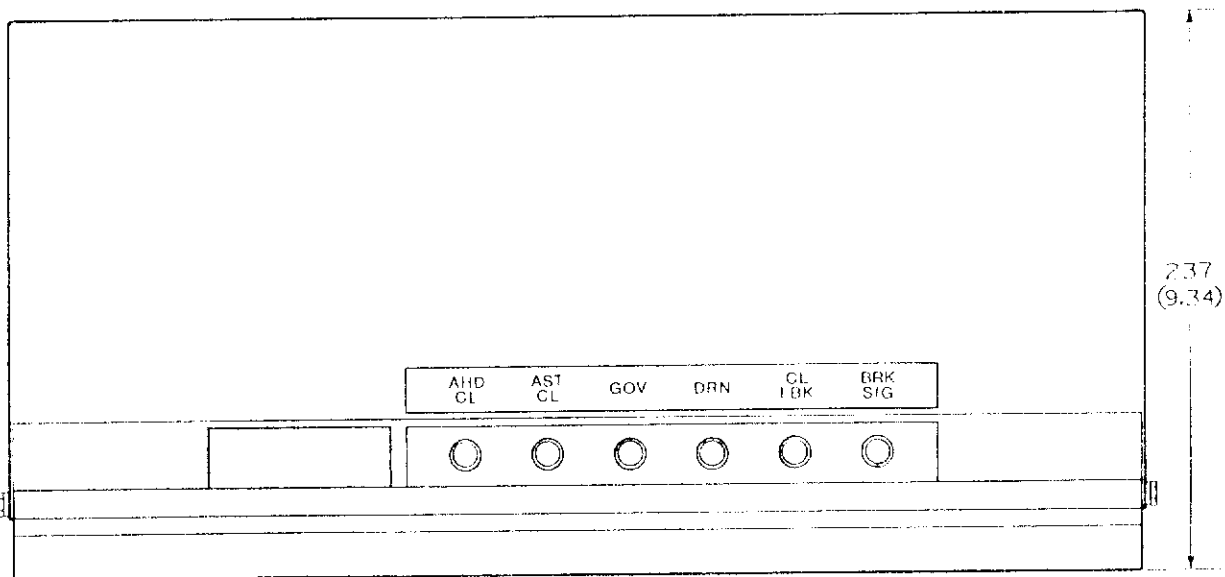
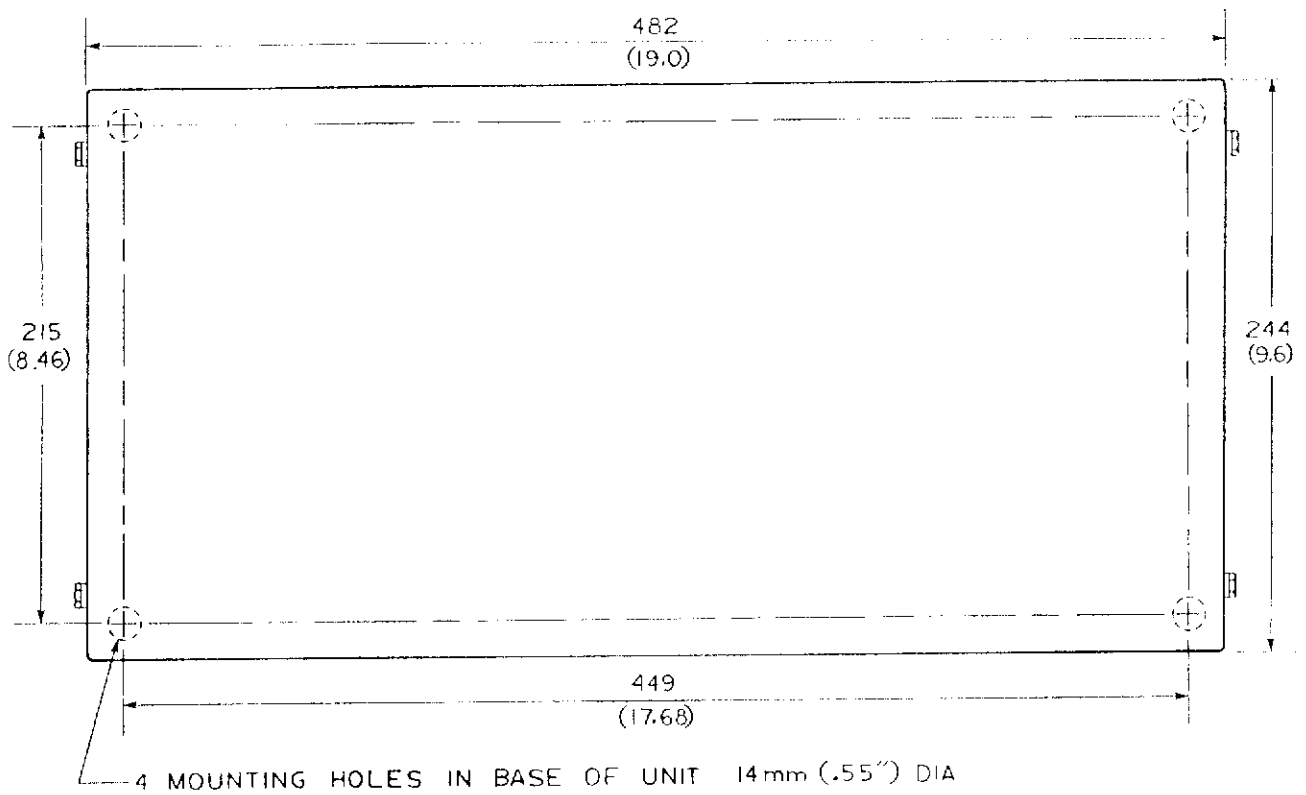


Time Delay Build Up Adjustment

Adjusts the rate of build up of the time delay above the minimum delay.

*

Both of these can be adjusted independently for ahead and astern.



DIMENSIONS ARE IN ^{mm} (INCHES)

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