



AUTOMATION

## Adjustable, automatic, high quality pneumatic clutch control.

P&S Automation have designed and delivered a pneumatic clutch control system primarily as a direct replacement for the Lohmann + Stolterfoht Rexroth clutch control system, however it can be adapted to suit similar pneumatic clutch arrangements.

The replacement system addresses key issues with the original equipment. The timing and sequencing elements are now performed with electronic relays and timers as opposed to the unreliable pneumatic timer valve and associated pilot valves. The requirement for the external control valve has been removed, and all components of the system are mounted inside the cabinet itself. The build of the panel is much simpler due to the removal of all the small bore control pipe work which is a common point of failure in the original equipment.

The system uses top quality components, with the pneumatics provided by Aventics (formally Rexroth) and electronics provided by Omron and ABB. All components used are type approved for marine applications.

CLUTCH CONTROLS



*Exterior View of Clutch Control*



*Interior View of Clutch Control*

- Remote control of 'clutch-in' and 'clutch-out' via electronic signals
- Adjustable clutch-in restrictor to vary clutch engagement timing
- Electronic adjustable timer for changeover to working air pressure
- Adjustment for working air pressure
- Emergency operation switch inside the panel to bypass all controls
- Internal air supply filter with auto-drain facility
- 2 interlock inputs to prevent clutch operation for turning gear, shutdowns etc.
- Automatic disengagement at low air supply pressure to protect the clutch
- Dual power supply inputs, 24V DC or 110-220VAC with monitoring for both
- Alarm outputs for failed power supplies, low air pressure, and indication of clutch engagement

## SPECIFICATIONS

### ELECTRICAL

Power Supply	24V DC, 110-220V AC. Other voltages can be accommodated with a change of power supply
Control Signal	Standard 24V, any voltage from 3V to 110V DC and 6V to 240V AC available on request
Interlock Input Signal	Standard 24V, any voltage from 3V to 110V DC and 6V to 240V AC available on request
Alarm Output Signal	Volt Free Contact
Clutch Engaged Indication	Volt Free Contact

### MECHANICAL

Size (WxHxD)	600x760x210
Protection	IP66
Temperature Rating	-20°C - 65°C

### PROCESS

Supply Connections	10mm Compression on bottom of panel
Output Connections	10mm Compression on bottom of panel
Control Air Pressure	7 Bar nominal input
Output Pressure	Adjustable from 0 to input air pressure
Auto-Drain Facility	Yes, 6mm connection on bottom of panel
Auto Disengage Function	Fully Adjustable up to working air pressure
Low Air Pressure Alarm	Fully Adjustable up to working air pressure
Interlock / Trip Inputs	2

### APPROVALS

Plan Approval	GL
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#### P & S AUTOMATION LIMITED

22C&D West Station Industrial Estate  
Spital Road, Maldon, Essex, CM9 6TS

T: +44 (0) 1245 322 777

F: +44 (0) 1245 322 776

E: enquiries@PandSautomation.com

W: www.PandSautomation.com



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