

DESCRIPTION

BUS System

The Mecair **MASTER** and **SLAVE SYSTEM** has been designed to command the sequence of diaphragm valves used in Pulse Jet Dust Collector Filters. The new "**BUS**" system consists of a "**MASTER CONTROLLER**" (**MSC**) and one or more "**SLAVE**" cards (Min. 1 - Max 20 Slave). The connection between each **SLAVE** card is very simple and requires a standard three wire gland cable (and not a special shielded cable). The standard cable is then connected to a standard three-pin DIN socket (without ground), which is then plugged directly into each slave card enclosure. The greater the number of diaphragm valves and the more convenient and cost effective becomes the system.

By using our system we are able to:

- Obtain a system which is pre-wired in zones
- Time saving in wiring
- Eliminating large quantity of wires being dragged from one end of the filter to the other
- Auto testing of system to ensure correct functioning of diaphragm valves
- No more laborious installation of wiring - Cost saving.

Master and **Slave Controller** is the intelligent part of system. It allows us to read the (Δp) and control the sequence of the diaphragm valves in the dust collector filter. The **Master Controller** is mounted in an enclosure (IP65).

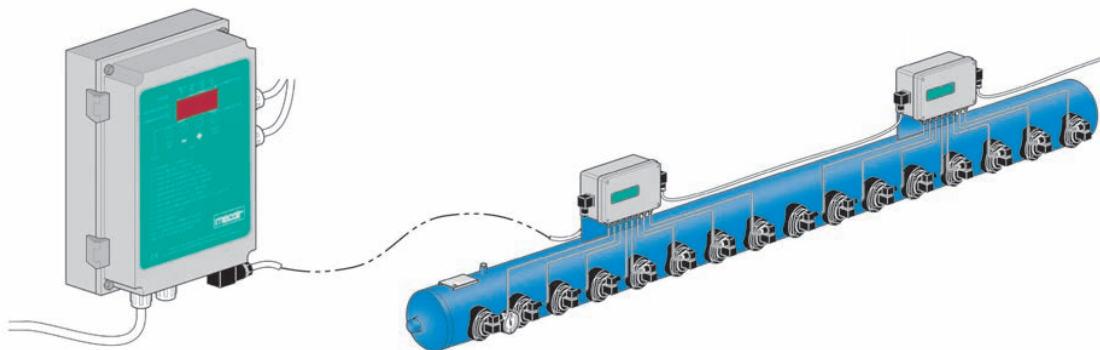
The electronic controller uses microprocessor technology and all technical characteristics have been approved by an authorised laboratory. Clear menu and instructions allow ease of operation. The **Master Controller** allows the correct functioning of the entire system. Identifies eventual anomalies relative to the diaphragm valves and indicates this on the liquid crystal display. Localises and identifies problems with wiring or short circuit relative to the diaphragm valve. Ability to remotely visualize the (Δp) in the dust collector filter and as an option, ability to monitor the pressure in the header tank remotely.

The Slave, like the **Master Controller**, also utilizes microprocessor technology.

The Slave is mounted in an enclosure (IP 65).

The Slave allows ease of wiring in zones with up to a maximum of 10 valves per Slave.

The Slave has a push button mounted on the circuit board to automatically check the correct functioning of each diaphragm valve connected.



MAIN FEATURES

BUS System

- The MSC (Master and Slave) System controls the diaphragm valves mounted on dust collector filters, pulse-jet, whether they are bag filters or cartridge filters
- Main controller - Master with display and menu, for easy selection and setting of parameters
- Slave cards are modules of 10 outlets and up to a maximum of 20 slaves for a maximum of 200 valves
- Slave units available with PR1/4" remote pilots mounted within enclosure for pneumatic connections or stand alone slave for standard electrical connections
- 2 ΔP Set Points
- Automatic regulation of cleaning based on level of ΔP in the filter
- Easy selection - Manual or Automatic Mode
- Automatic search of diaphragm valves connected
- Shut Down Cleaning Function
- Low Pressure Alarm
- Remote Control
- Alarms
- Hour Counter
- Remote ΔP setting (Optional)

TECHNICAL CHARACTERISTICS	
Enclosure	Metal Enclosure - Powder Coated - Light Grey
Protection rating	Master - IP65 Slave - IP65
Dimensions	Master - 250x175x90 mm. Slave - 320x140x65 mm.
Weight	Master - 1,95 Kg. Slave - 1,10 Kg. Slave PR 1/4" - 3,4 Kg. (10 pilots)
Connections	Screw in Terminals – Max. 2,5 mm ² section
Temperature	Storage: -20°C / +80°C Working Temp: -10°C / +50°C, with duty cycle (intermittent) 30%
Power Inlet	Master inlet voltage: 115/230 V (±10%) - 50/60 Hz Slave Outlet: 24 V DC max 20W
Absorbed power	Total Absorbed Power: 35 VA - 230V - with 6 slaves Total Absorbed Power: 50 VA - 230V - with 10 slaves Total Absorbed Power: 70 VA - 230V - with 20 slaves Master - 2,5 VA Slave 1,5 VA
Relay	2 A - 250 V AC
Main fuse	500 mA - delayed for 115 V 260 mA - delayed for 230 V
Pulse time	0,01 ÷ 3,00 sec.
Pause time	1 ÷ 999 sec.
Pause time in automatic	1 ÷ 999 sec.
Range ΔP positive	0,01 ÷ 9,99 kPa
Range ΔP negative	-0,01 ÷ -0,50 kPa
Shut Down Cleaning-Cycles	0 ÷ 99 cycles
Shut down cleaning	Activated via external contact (normally open) free of power
Remote control	Activated via external contact (normally open) free of power
ΔP precoating	Activated via external contact (normally open) free of power
Hour counter	0 ÷ 999,999 hours