

CDS-100 CONTROLLER

Duty/Standby Controller for
digital chemical dosing pumps



Reliable Dosing System:

The WES CDS100 Duty Standby Controller provides as cost effective method of controlling the switchover between dosing systems either manually or automatically initiated as a result of a fault conditions from contact inputs from the process.

The user friendly device gives clear indication as to the status of the dosing system with LED lamps indicating the Active unit and whether the selected Duty unit has failed and any Fault condition.

In normal operation, the duty dosing unit is selected by the user and will operate until manual or automatic changeover is implemented. Automatic changeover will be initiated either by a Common Fault input that comes from a source that is common to both dosing units; or by a Unit Fault input from the operating stream. Certain selectable fatal faults, such as the chemical running empty, will stop both Units and raise a system failure alarm.

Main Features:

- **Duty Standby changeover for complete dosing system in response to either equipment or process failure conditions.**
- **Automatic changeover initiated by specific or common stream faults.**
- **System shutdown inputs to stop dosing and raise an alarm condition.**
- **A selection of system control options available:**
 - Local hand start/stop
 - Remote start/stop
 - Local or remote duty pump selection.
 - Duty cycle selection
- **Can accommodate different dose rate control options:**
 - Manual dose rate setting.
 - Remote analogue control from 4-20mA signal.
 - Remote pulse or contact dose control.
- **Configurable start-up fault inhibit timer on selected inputs.**
- **Configurable start-up and shutdown delay timer.**
- **Clear LED visual indication of:**
 - Active Dosing Pump
 - Failure of duty pump
 - System failure
- **Volt-free alarm contacts to indicate duty pump failure and system fault.**

Choice of Control Options:

The WES CDS100 controller is designed to operate in a number of different configurations depending on the complexity of the dosing system in which it is installed. It is intended to operate in conjunction with modern digital type dosing units that incorporate control processors within the dosing units:

The dosing system can be started and stopped manually at the CDS100 controller or it can be started and stopped remotely either from a central control system, or a switch contact from the process or even a telemetry contact.

The dose rate can be set manually at the dosing units or it can be controlled remotely by a 4-20mA from a remote device, such as a flow meter, analyser or PLC control system. The CDS100 will direct the 4-20mA signal to the active dosing unit.

The CDS100 can also control the dose rate by a pulse signal from a remote device such as a water meter or PLC control system. The dosing units need to be configured to receive the pulse signals and the CDS100 will direct the pulse to the active dosing unit.



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Technical Specifications	CDS-100
Dimensions (mm—W x D x H)	325 x 140 x 240
Enclosure protection	IP65
Weight kg	2.75
Power supply	100 to 240 V 50/60 Hz single phase 60 VA max load
Digital inputs	Equipment fault: 2 (one for each stream) Process stream fault: 2 (one for each stream) Common faults: 2 Shutdown signals : 2 Run signal: Local or remote Duty pump select: Local or remote System reset. Pulse control input
Analogue inputs	2 x 4-20mA control input signals
Digital outputs	Dosing unit control: 2 (one for each dosing unit) Alarm relay contacts: 2 (Duty pump failed & system fault)
Analogue outputs	2 x 4-20mA proportional control (one to each dosing unit)

