



USF WALLACE
& TIERNAN

DCU

DOSING
CHANGEOVER

SYSTEM

SB.40.196.GE

USF Wallace & Tiernan continue to be the leader in the disinfection of potable, waste, industrial process and leisure water applications. With over 80 years of experience, the design and manufacture of chemical feed and disinfection products, using the collective expertise of the USF Wallace & Tiernan centres around the world, continues to produce safe and reliable methods of controlling the addition of chemicals to water sources.

The Wallace & Tiernan DCU Dosing Changeover Unit provides a cost effective method of controlling switchover between dosing systems either manually or automatically initiated as a result of alarm conditions from fault contact inputs from the process.

The user friendly device gives clear indication as to the status of each component within the dosing system with LED displays indicating whether Duty, Operating or Failed.

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 by a Common Fault input that can be from any source that is common to both dosing units, or by a Unit Fault input from the operating machine.

An optional Trip amplifier can be installed within the unit to stop both dosing devices should flow fall below a preset value.

The Wallace & Tiernan DCU Dosing Changeover Unit is designed to operate in a number of different configurations depending on the complexity of the dosing system in which it is installed.

The DCU will accept basic input/ output control from dosing system components to operate two dosing units, or by the addition of a flow signal, will provide flow controlled operation.

In more sophisticated chlorination

systems, the DCU can be combined with MFA analysers, PCU Process Control Units or SCU Signal Conditioning Units to provide for duty / standby operation of dosing units together with variable speed and stroke control of those dosing units.

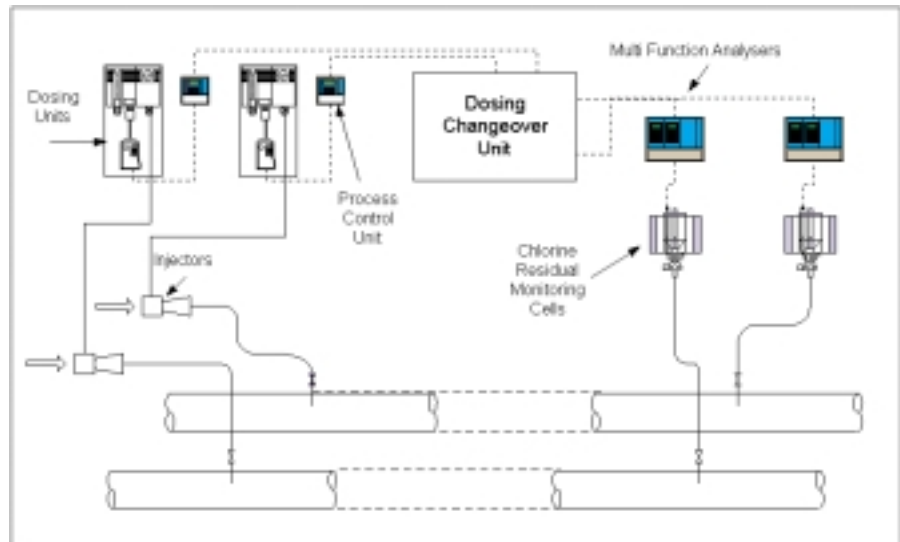
By substituting the dosing units for automatic V10k Gas Chlorinators, the DCU can be used to switch between duty / standby gas dosing units and will adjust each unit's plug positioner.

MAIN FEATURES

- Duty / standby changeover for complete dosing systems ensuring continuous dosing even in the event of a machine / controller failure
- Automatic changeover initiated by a Common Fault input or one or two Unit Fault inputs
- Two independent timers to inhibit Common Fault contact and Unit Fault contacts on machine start up
- Switching circuits provided for all Wallace & Tiernan Controllers, Pumps and Chlorinators plus additional circuits for custom installations

- Visual indication of Duty / Operating / Failed for each dosing system
- Shutdown input may be used to stop both dosing systems in case of an emergency
- Volt-free Alarm contacts indicate when a system has failed
- Manual duty selection
- Optional Trip Amplifier can shut down both Duty and Standby machines in the event of loss of flow

TYPICAL INSTALLATION



Dimensions (mm):	359 (W) x 100 (D) x 237 (H)
Weight:	2.8kg
Mains Supply:	230V \pm 10% or 115V \pm 10% (Switch selectable) 47 -63Hz, Single phase 20VA + External Load Max Load 700VA (230V), 350VA (115V)
Changeover Relays:	Switching circuits provided for: 1. Dosing Unit Control (4 contacts per dosing unit) 2. Inhibit contacts 3. Increase / decrease signals 4. 2 x analogue channels 5. Position feedback
Alarm Relays:	Dosing Unit 1 Double pole changeover Dosing Unit 2 Double pole changeover
Relay Contacts:	Maximum Voltage 250 VAC Maximum Current 2A Maximum Power 500W
Digital Inputs:	1. Common Fault 2. Unit 1 Fault 3. Unit 2 Fault 4. Shutdown All inputs isolated, for use with external potential free contacts only
IP Rating:	IP65
Operating Temperature:	0°C to +50°C
Storage Temperature:	-20°C to +50°C
EMC Compliance:	Complies with Generic Standards EN50081-1 and EN50082-2
Electrical Safety:	EN61010-1 Safety Class II / Installation Category II
Optional Trip Amplifier:	Input 0 -20mA, 47 Ohms Trip Point Adjustable to any point in the range 0 -20 mA

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MEETING QUALITY STANDARDS

In the continued development and improvement of our products certain specifications may be altered without prior notice.



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