



**USF** WALLACE  
& TIERNAN

CCU

CHEMICAL

CHANGEOVER

UNIT

SB.40.198.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. Designed to meet the global needs for the automatic changeover between two chemical supplies, the Wallace & Tiernan CCU (Chemical Changeover Unit) is no exception.*

EFFICIENT CHEMICAL CONTROL

Automatic changeover of chemical supplies, from a duty to a standby supply, is a necessity in many installations which are not under constant supervision and is strongly recommended for all applications where temporary interruption of chemical supply might lead to unwanted complications.

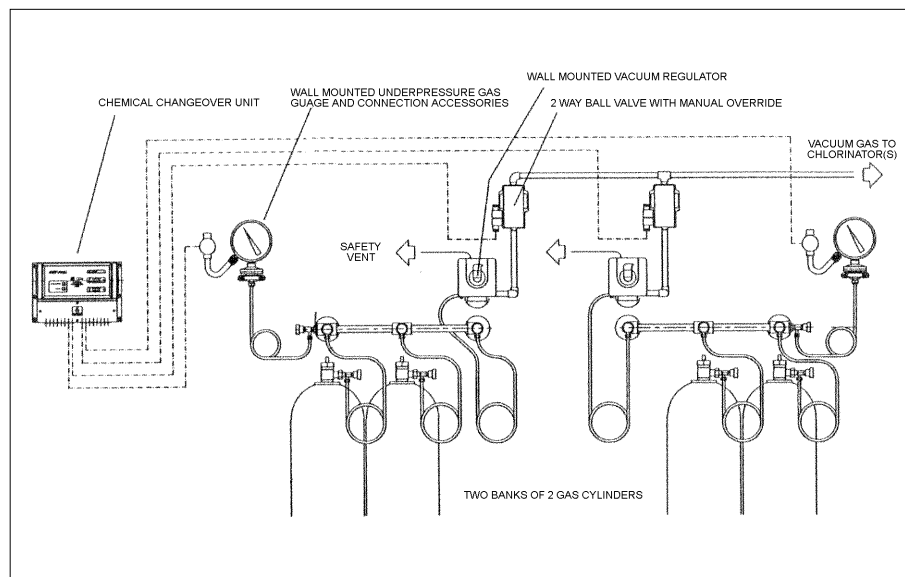
The CCU will provide this automatic changeover to ensure continuous chemical supply. The supply of chemical is controlled by a 3-port motorised valve, or by a pair of 2-port motorised valves. A

pressure switch, or gauge is used to initiate changeover when the pressure falls to a preset level.

By utilising different valve arrangements, the CCU provides automatic changeover for a variety of chemicals in both pressure and vacuum systems.

The CCU will provide changeover in low or high pressure installations and will handle both gas and liquid valve arrangements as illustrated in the following typical layouts.

TYPICAL LOW PRESSURE INSTALLATION

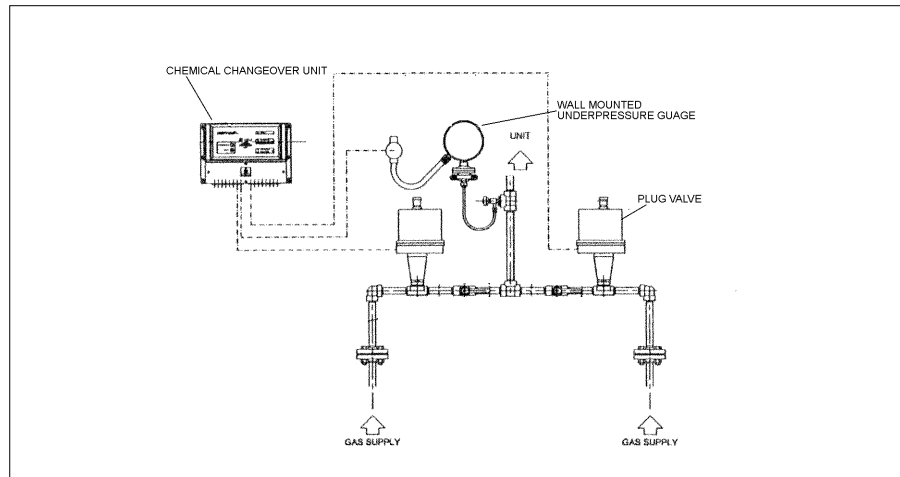


## MAIN FEATURES

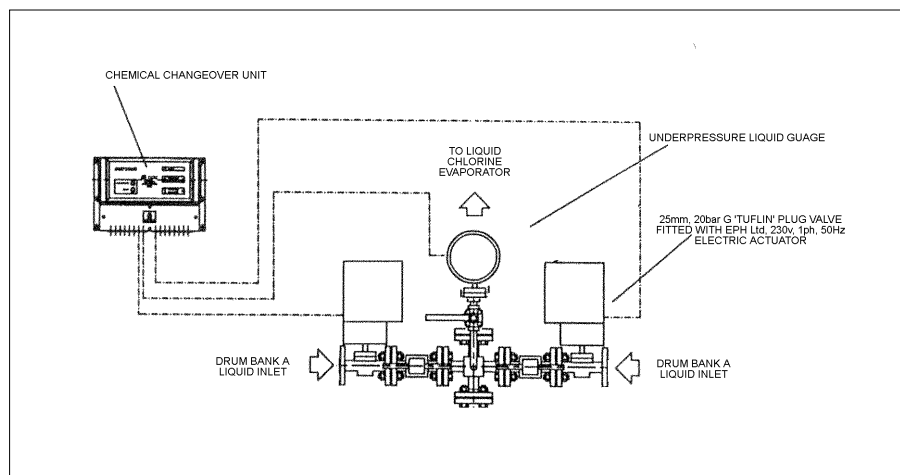
- Duty / standby valve changeover ensuring continuous chemical supply
- Pressure or vacuum operation
- Suitable for use with a wide variety of chemicals
- Controls single 3-port valve or two 2-port valves
- LED's provide visual indication of Valve Open / Exhausted for each supply
- Full monitoring of valve positions - an alarm is generated if a valve fails to open or close
- Changeover initiated by 1 or 2 pressure / switches - switch contacts may be normally open or normally closed

- Shutdown input may be used to disconnect both supplies in an emergency (only available when 1 pressure / vacuum switch is used)
- Volt-free Running contacts indicate which supply is being used
- Volt-free Alarm contacts indicate when a chemical supply is exhausted
- Manual changeover facility
- Inhibit timer prevents pressure switch, or gauge, from initiating change before a supply is fully on line
- Reset option returns CCU to known state following power up

## TYPICAL HIGH CAPACITY GAS INSTALLATION



## TYPICAL HIGH CAPACITY LIQUID CHANGEOVER



TECHNICAL SPECIFICATIONS

<b>Dimensions (mm):</b>	359 (W) x 100 (D) x 237 (H)
<b>Weight:</b>	2.4kg
<b>Mains Supply:</b>	230v +/- 10% or 115v +/- 10% (Switch selectable) 47 -63Hz, Single phase 20VA + External Load Maximum Load 700VA (230v), 350VA (115v)
<b>Relay Connections:</b>	Valve 1            Single pole changeover Valve 2            Single pole changeover Running 1         Single pole changeover Running 2         Single pole changeover Exhausted 1      Double pole changeover Exhausted 2      Double pole changeover
<b>Relay Contacts:</b>	Maximum Voltage 250 VAC Maximum Current 2A Maximum Power 500W
<b>Digital Inputs:</b>	1. Valve 1 open 2. Valve 1 closed 3. Valve 2 open 4. Valve 2 closed 5. Pressure / Vacuum switch 1 6. Shutdown or Pressure / Vacuum switch 2 All inputs isolated, for use with external potential free valve contacts only
<b>IP Rating:</b>	IP65
<b>Operating Temperature:</b>	0°C to +50°C
<b>Storage Temperature:</b>	-20°C to +50°C
<b>EMC Compliance:</b>	Complies with Generic Standards EN50081-1 and EN50082-2
<b>Electrical Safety:</b>	EN61010-1 Safety Class II / Installation Category II

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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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