

Wallace & Tiernan[®] Chemical Changeover Unit (CCU)

Introduction

Siemens Water Technologies have over 90 years of experience in the design and manufacture of chemical feed and disinfection products of potable, waste, industrial process and leisure water applications.

Siemens Water Technologies continue 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 Chemical Changeover Unit (CCU) 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 layouts.

Key Benefits

- Duty/standby valve changeover ensures continuous chemical supply
- Pressure or vacuum operation
- Suitable for use with a wide variety of chemicals



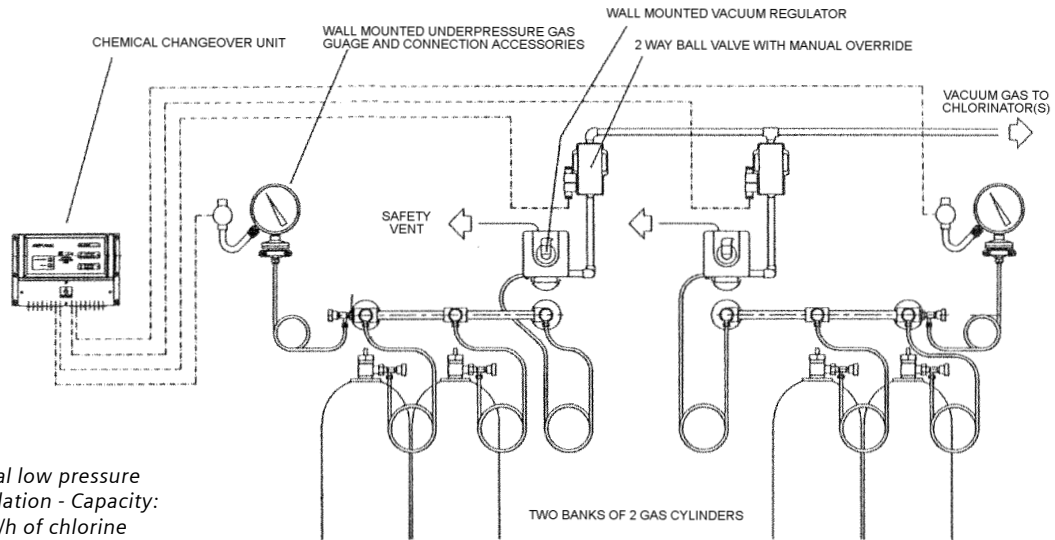
Product Sheet

Main Features

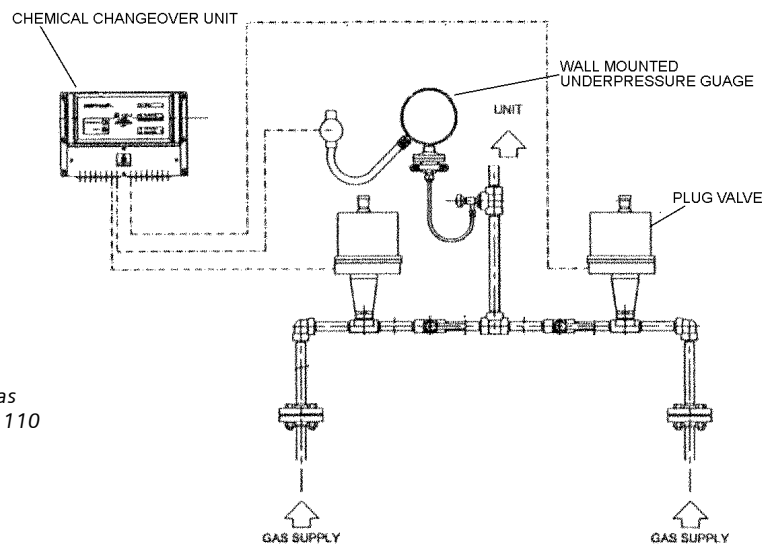
- Duty / standby valve changeover ensuring continuous chemical supply
- Pressure or vacuum operation
- Suitable for use with a wide variety of chemicals
- Controls single 3-port valve or 2 port valves
- LED's provide visual indication of Valve Open / Exhausted for each supply
- Full monitoring of valve 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.

Technical Data

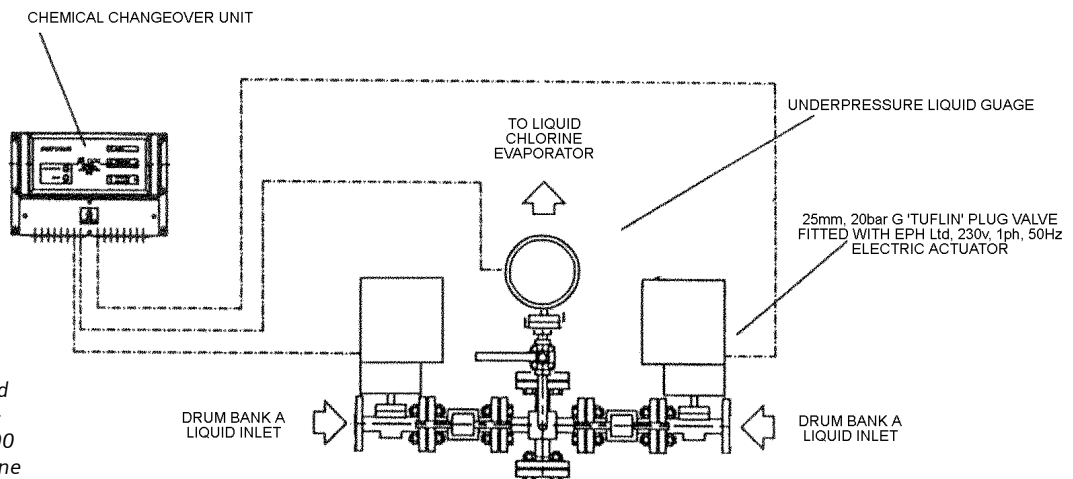
Weight:	2.4kg
Mains Supply:	230v +/- 10% or 115v +/- 10% (Switch selectable) 47 -63Hz, Single phase 20VA + External Load Maximum Load 700VA (230v), 350VA (115v)
Relay Connections:	Valve 1 Single pole changeover Valve 2 Single pole changeover Running 1 Single pole changeover Running 2 Single pole changeover Exhausted 1 Double pole changeover Exhausted 2 Double pole changeover
Relay Contacts:	Maximum Voltage 250 V AC Maximum Current 2A Maximum Power 500W
Digital Inputs:	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
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
Dimensions:	359 (14 1/8") (W) x 100 (3 15/16") (D) x 237 (9 5/16") (H)



Typical low pressure installation - Capacity: 10 kg/h of chlorine



Typical high capacity gas installation - Capacity: 110 kg/h of chlorine



Typical high capacity liquid changeover - Capacity: 1000 kg/h of chlorine

Siemens
Water Technologies

Germany:
+49 8221 9040
wtger.water@siemens.com

United Kingdom:
+44 1732 771777
wtuk.water@siemens.com

USA:
+1 856 507 9000
wtus.water@siemens.com

© 2008 Siemens Water Technologies Corp.
Literature No.: WT.040.198.000.IE.PS.1108
Subject to change without prior notice.

Wallace & Tiernan is a trademark of Siemens, its subsidiaries or affiliates.

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.