

# System Components for Compact Panels

Manifolds/Changeover Regulators

DCATLABO12166XEN2

## Annunciator System

The annunciator system is used in combination with a cylinder station in order to avoid a complete discharge of the cylinder which would cause an interruption of the process. The annunciator system consists of a signal box, the pressure switches or contact gauges and the electrical wiring. For Explosion Proof environments a Switch Amplifier Box (Ex-Modul) must be added. The annunciation consists of an integrated horn, lights or an additional external indicator.

### Application

- Easy continuous monitoring of gas storage

### Features and Benefits

- One annunciator system monitors up to 10 contact pressure gauges
- Acoustical and optical signals
- Error messages can be forwarded to external systems using potential-free relay contacts



Annunciator signal box

### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

#### Power Supply

**Connection:** Terminal clamp X4, cage clamps

**Voltage:** 230 V AC, 50 Hz

**Power Consumption:** < 3 VA

#### Outlets

**Connection:** Terminal clamp X3, cage clamps

**Type:** Change-over relay contact, potential-free

**Load:** 8A/230 V AC ohmic load

**Function:** Collective error report

**Connection:** Terminal clamp X2, cage clamps

**Type:** Change-over relay contact, potential-free

**Load:** 8A/230 V AC ohmic load

**Function:** Non-confirmed error report

#### Inputs

**Connection:** Terminal clamp X1, 2-tier cage clamps

**Number:**

02: 2 inputs

06: 6 inputs

10: 10 inputs

**Type:** internal direct current supply to the inputs, potential free

**Voltage between terminals:** approximately 6 VC / 10 mA

#### Dimensions

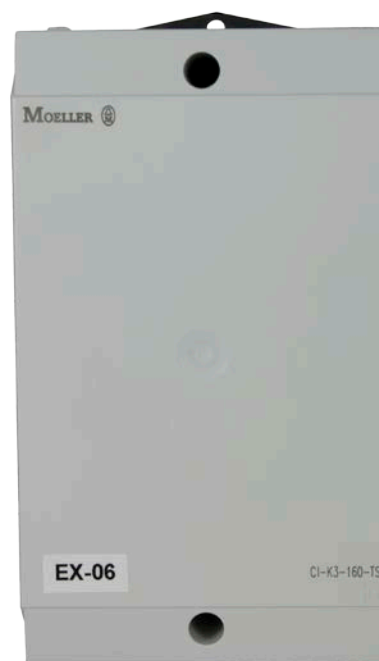
**Casing:** 7.9" x 4.7" x 3" / 200 mm x 120 mm x 75 mm (WxHxD)

**Protection:** IP65

**Material:** ABS

**Joints:** 4 x M16

**Ambient temperature:** 32°F to 131°F / 0°C to 55°C



Switch Amplifier Box

## Emergency Switch-Off System

(Solenoid Valve, Control Box and Emergency Switch)

The emergency switch-off system acts in case of emergency or other hazardous events as an electrical operated quick shut-off for main pipe systems, floor pipe systems or room pipe systems. All gas supplies will be stopped at the feeding points already. In combination with a control box and a gas warning system the emergency switch-off system is an important part of the central gas supply system.

### Applications

- Solenoid valves control the gas stream after the compact panels
- The Solenoid Valve Control Box is needed to control solenoid valves in case an emergency shut-down is necessary
- Safety device according TRG 280

### Features and Benefits

- Easy to install
- Reliable design
- Long-life system



Solenoid Valve

SOLENOID VALVE TYPE 214	SOLENOID VALVE TYPE 220
<b>Nominal Width / Connection</b> DN 4 / G 1/4" internal	<b>Nominal Width / Connection</b> DN 10 / G 3/8" internal
<b>Operating Pressure</b> 0-260 psig / 0-18 bar	<b>Operating Pressure*</b> 2.9-145 psig / 0.2-10 bar
<b>Function</b> 2/2-way powerless closed	<b>Function</b> 2/2-way powerless closed
<b>Voltage</b> 230 V AC, 50 Hz	<b>Voltage</b> 230 V AC, 50 Hz
<b>Type of Protection</b> IP65 / Ex EEx em II T4	<b>Type of Protection</b> IP65 / Ex EEx em II T4
<b>Body Material</b> Brass / Stainless Steel	<b>Body Material</b> Brass / Stainless Steel
<b>Seats</b> <b>For Ex-Version:</b> FPM <b>For all IP65-Types:</b> EPDM	<b>Seats</b> <b>For Ex-Version:</b> FPM <b>For all IP65-Types:</b> EPDM

\*Do not use for line pressures below 3 psig / 200 mbar.

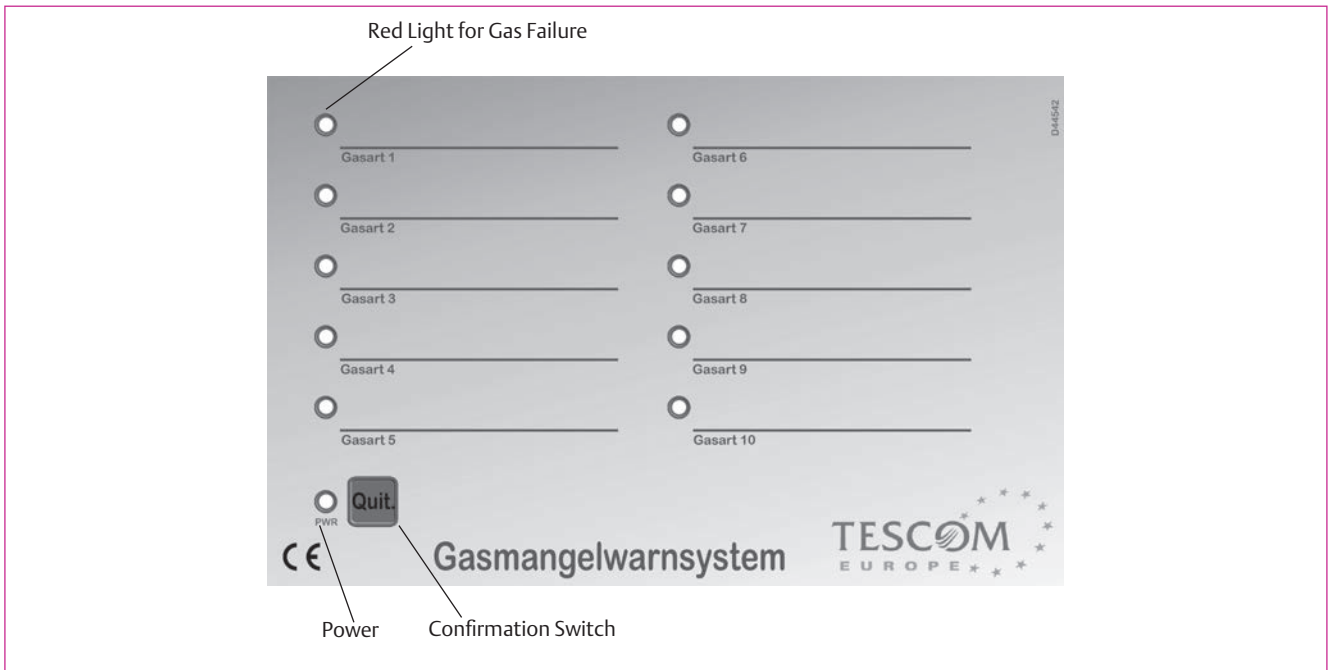


Solenoid Valve Control Box

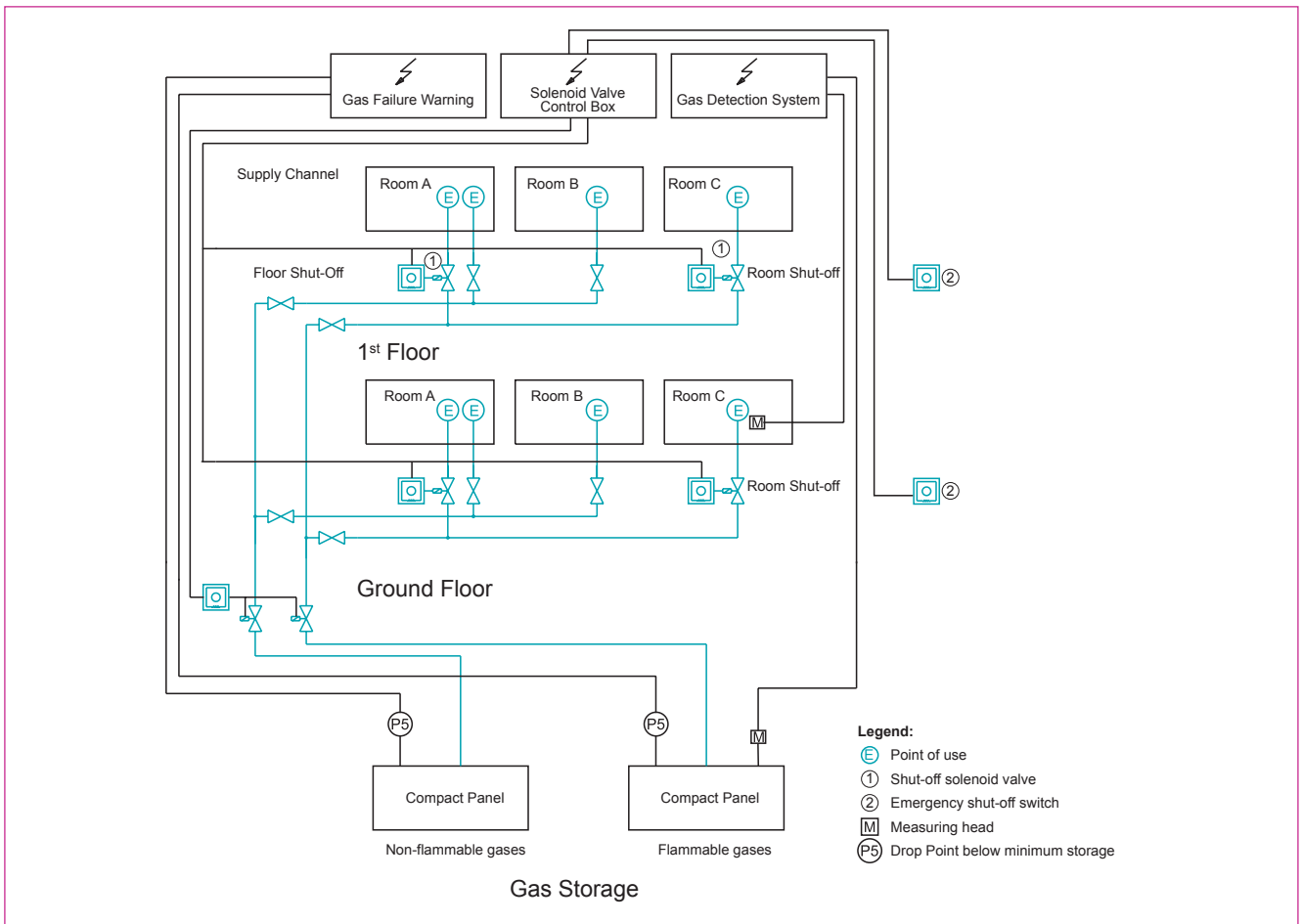
### SOLENOID VALVE CONTROL BOX SPECIFICATIONS

<b>Voltage</b> 230 V AC, 50 Hz
<b>Input Power</b> < 3 VA
<b>Dimensions for Box Width x Height x Depth</b> 200 x 120 x 75 mm
<b>Material</b> ABS
<b>Protection</b> IP65
<b>Ambient Temperature</b> 32°F to 131°F / 0°C to 55 °C

### Annunciator Signal Box - Interface Panel



### Annunciator System Drawing



## Annunciator System Part Number Selector

D44542 - 02 BLANK

BASIC SERIES	NUMBER OF SHOWN SIGNALS	USAGE
D44542	02 – Dual 06 – Sixfold 10 – Tenfold	[Blank] – not for Ex-proof area (Standard) EX – for Ex-proof area

If you like to upgrade your existing annunciator signal box with an switch amplifier box for Ex-proof area later, please contact TESCOM.

## Emergency Switch-Off System Number Selector

Repair Kits, Accessories & Modifications may be available for all products. Please contact TESCOM for more information.


### Solenoid Valve

BASIC SERIES	NOMINAL WIDTH	BODY MATERIAL	PROTECTION	OPTIONS
D45093	04 – DN 3.5 Valve Type 214 10 – DN 10 Valve Type 220	1 – Brass 6 – Stainless Steel	[BLANK] – IP65 (this is standard) EX – Ex EEx em T4	A –24 V DC [BLANK] –230 V AC (this is standard)
Certificate EN 10204-2.2 available - Please, add "Z" at the end when ordering!				

### Solenoid Valve Control Box

BASIC SERIES	NUMBER OF CONTROLLED SOLENOID VALVES
D44700	05 – 5 Valves 10 – 10 Valves

### Emergency Switch

PART NUMBER	DESCRIPTION	DRAWING
V09556	Emergency-Switch <b>Key-operated: After emergency switch-off, the key must be turned to activate the system again.</b>	

### Contact Pressure Gauges

Material: Stainless Steel  
Type of protection: IP54 or EX II 1 G EExia IIC T6  
Connection: G 1/4" male  
Diameter: 2.48" / 63 mm

PRESSURE RANGE*	ORDERING NUMBER: SOLENOID CONTACT	MINIMUM SWITCH POINT	ORDERING NUMBER: INDUCTIVE CONTACT**
4569 psi / 315 bar 5802 psi / 400 bar 580 psi / 40.0 bar 580 psi / 40.0 bar Acetylene	D44500-00G3156 D44500-00G4006 D44500-00G0406 ----	218 psi / 15.0 bar 290 psi / 20.0 bar 44 psi / 3.0 bar 12 psi / 1.5 bar	D44272-00G3156 D44272-00G4006 D44272-00G0406 D44272-22G0406
* Please, contact us for additional pressure ranges and connection types (e.g. NPT or VCR®). **For use with EX-proof version!			



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.