PRODUCT DATA SHEET

Control Systems   Transmitters   Sensors   Accessories

TOCSIN 625
Fast, Effective Gas Detection System Controller

TOC-625 is a multi-channel detector controller in an easily installed and implemented small format package. *The Controller features our industry first: **1 Click Automatic Alarm Setup function**.* The system will automatically set all alarm levels up for the connected sensors to EH40 and DSEAR Regulations with 1 click of a button. The system can be used with any of the Tocsin Addressable range detectors or I/O modules providing maximum flexibility. The controller can be wall mounted or panel mounted and has a pump and duct mount options. The controller has two SPCO relays as standard with three 4-20mA outputs.

Connect

Click

Run

MADE IN BRITAIN

1-Click Setup

Features

- 1 *Click Automatic Alarm Setup Function*

- *1-8 Devices on one cable*

- Wall or Panel Mounting

- Relay Outputs as Standard

- 4-20mA Outputs as Standard

- Control up to 8 Devices as Gas Detectors or I/O Modules

- LCD Display With Multi Colour

- Backlight, Flashes Red on Alarm,

- Flashes Yellow on Fault etc

- Battery Backup Option

Standard Specifications

Power	110/230V AC 50/60Hz 25W Standard 24V DC Option
Construction	ABS
Display	2 Lines x 8 Digit LCD Display Multi-Colour Backlight (Red-Alarm, Yellow-Fault, Blue-Normal)
Outputs	2 off SPCO Relays 4A Non-Inductive User Configurable 3 off 4-20mA Linear Outputs User Configurable
Other I/O	Sounder 80dB @ 100mm (Mutable)
Inputs	8 off Addressable Series Detectors or I/O Modules
Temperature	-5 to 55 Deg C
Humidity	0-95% RH Non-Condensing
Sealing	IP54
Mounting	Wall Mount, Panel Mount Kit Option, Duct Mount Kit Option
Weight	840g

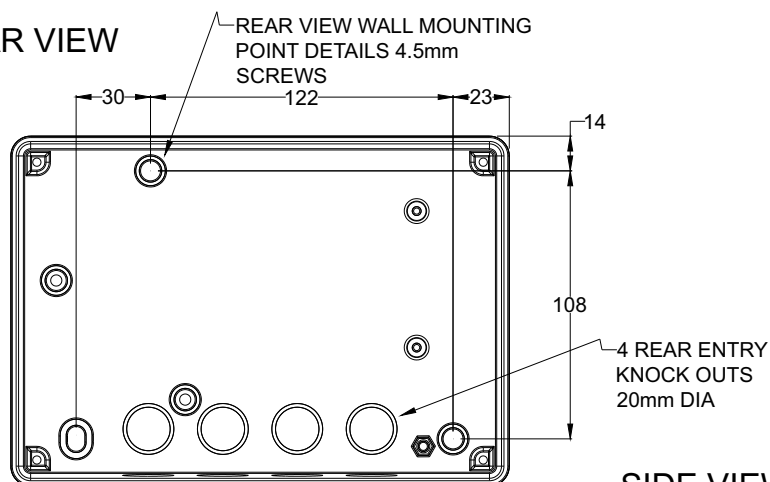**bsi.** ISO 9001 Quality Management   ISO 14001 Environmental Management

FS646773   EMS696504

Control Systems   Transmitters   Sensors   Accessories

EC Declaration of Conformity

Issuers name and address:

Oliver IGD Limited of
Triton House,
Crosby Street,
Stockport, SK2 6SH
England

CE

Declares that the product listed as:

TOC-625

Single or Multi-Channel Detector Control Panel

Are in conformity with the provisions of the following European Directive(s) when installed, operated, serviced and maintained in accordance with the installation and operating instructions contained in the product documentation.

2004/108/EC   **EMC Directive**
2014/34/EU   **Low Voltage Equipment Directive** *(note not applicable to 24V DC Powered Versions)*

And that the standards and/or technical specifications referenced below have been applied or considered.

EN *60079-29-1:2016*   *Explosive Atmospheres. Gas Detectors. Performance Requirements of Detectors for Flammable Gases. **conforms to***

EN 50271:2018   Electrical apparatus for the detection and measurement of combustible gases, toxic gases or Oxygen: requirements and tests for apparatus using software and or digital technologies. *Excluding requirements for SIL*

EN 61000-6-2: 2005   EMC Generic standards. Immunity for industrial environments
EN 61000-6-4: 2007   EMC Generic standards. Emission standard for industrial environments
EN 61000-3-2/A2:2009   EMC Limits. Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3: 2008   EMC Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase
Technical File Reference   T625-TF9

Oliver IGD Limited Operate an Independently assessed ATEX/IECEX QAN.

Quality Assurance Certificate Number
16PQAN0014
Quality Assurance Notification Number:
2585

ExVeritas

Units 16-18 Abenbury Way,
Wrexham Industrial Estate,
Wrexham, LL13 9UZ
United Kingdom

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Oliver IGD Limited operate an independently assessed ISO9001:2015 Quality Management and ISO14001:2015 Environmental Management System
Certificate Numbers
FS0646773 & EMS696504

BSI Assurance UK LTD,
London, W4 4AL
United Kingdom

EMC Tested by:

TUV - SUD
Octagon House
Concorde Way
PO 15 5RL Fareham

TÜV SUD EMC
tuv-sud.com/ps-cert

Certificate Number
E8N 15 02 91327 001

TUV Certificates and reports can be checked on-line at
https://www.tuev-sued.de/industry_and_consumer_products/certificates
Select Oliver IGD when prompted on the website to view certificates

Issued by: Oliver IGD Limited, Stockport, SK2 6SH , United Kingdom

Signature:

Name: Andrew J Collier M.I.O.D

Position: Managing Director

Declaration of Conformity in accordance with EN ISO/IEC 17050-1:2010

Date: 06/06/2019   Declaration Ref: TOC-625-DEC-3

IGD

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Document Ref: ROS625 V7.1

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PRODUCT DATA SHEET

REAR VIEW

REAR VIEW WALL MOUNTING POINT DETAILS 4.5mm SCREWS

30   122   23
14
108

4 REAR ENTRY KNOCK OUTS 20mm DIA

FRONT VIEW

PANEL MOUNT VERSION (CLAMP)

PANEL CUT OUT

TOCSIN 625
ADVANCED GAS DETECTION

1: CO
90 PPM

ALARM
FAULT
Function
POWER

IGD   CE
MADE IN UK
www.internationalgasdetectors.com

201

SIDE VIEW

84
79
18
141 136
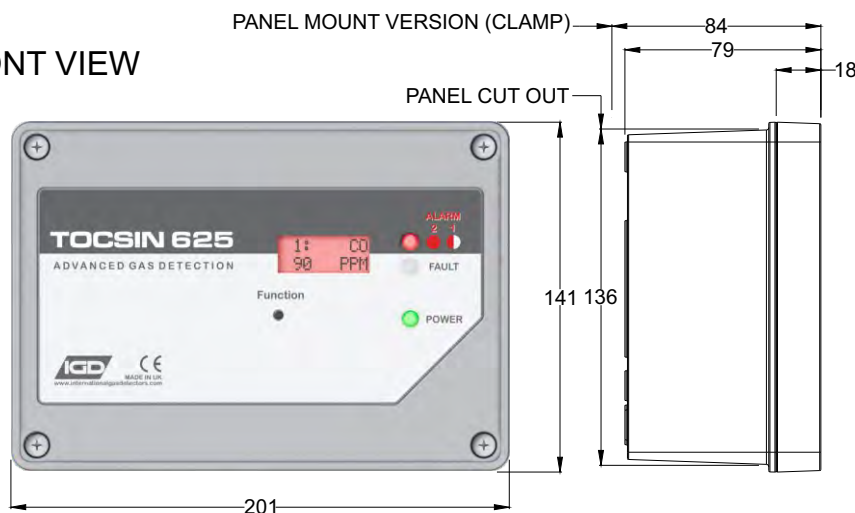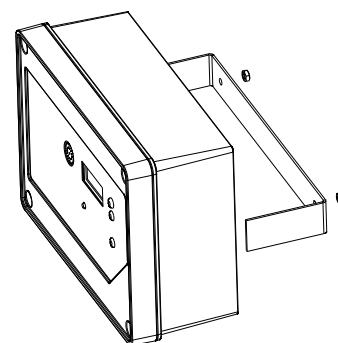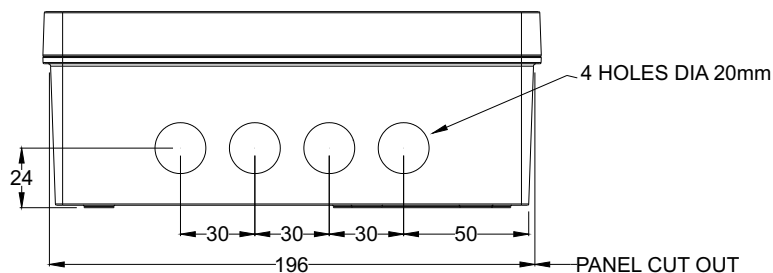
Optional Panel Mounting Kit
PN 5686401
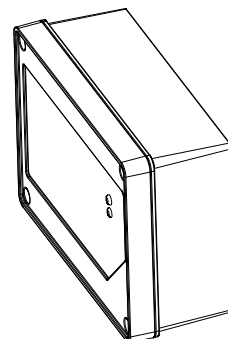
Optional Battery Backup Kit
PN 5686601

Note this module uses the same style enclosure as the TOC-625 and houses batteries and charge control. It is usually mounted below the TOC-625 and is supplied with all required connectors.

BOTTOM VIEW

4 HOLES DIA 20mm

24

30   30   30   50
196
PANEL CUT OUT

PRODUCT DATA SHEET

1 Click Automatic Alarm Setup Function - Easy to Install With No Gas Detection Knowledge Needed.

Flammable Gas Detection
Toxic Gas Detection
Oxygen Depletion

Innovative Gas Detection Since 1917

Combine Controllers With Detectors and I/O Nodes as Required, with our industry first 1 Click Automatic Alarm Setup Function. Once you have connected all your sensors. Press the setup wizard and the controller will find all conected devices and set the alarm levels up, in accordance to EH 40 and DESEAR regulations. Once it has finished bump test the connected sensors. 1-8 Sensors.
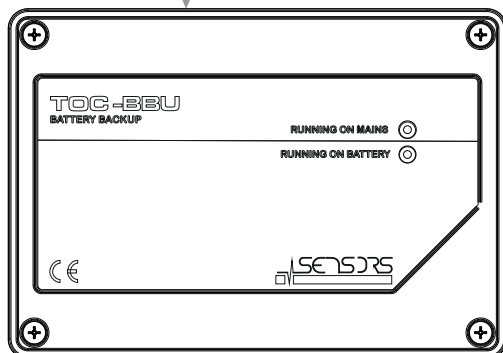
Use with TOC-30 Series Detectors and I/O modules. ABS housed detectors sealed up to IP65 rating.

This detector series is standard 2 gang mount for surface, flush mounting or mounting to dado rail.

Interface to TOC-30 Series annunciators for additional I/O functions. The smart alternative to beacons, sounders and slam switches.

TOC-625 Controller 110/230V AC	5685401
TOC-625 Controller 24V DC	5686501
TOC-625 Controller Panel Mount Kit	5686401
TOC-625 Battery Backup Module	5686601

Document Ref: ROS625 V7.1

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PRODUCT DATA SHEET

Auto Setup Table

Gas / Outputs	Range	Type	Alarm 1 / Relay 1	Alarm 2 / Relay 2
Flammables	0-100% LEL	Rising - Latching	10% LEL	20% LEL
Carbon Monoxide	0-100ppm	Rising - Latching	20ppm	55ppm
Carbon Dioxide	0-5000ppm	Rising - Latching	3500ppm	4500ppm
Carbon Dioxide	0-5%	Rising - Latching	0.5%	1.5%
Chlorine	0-5ppm	Rising - Latching	0.2ppm	0.5ppm
Oxygen	0-25%	Falling - Latching	19.5%	18.5%
Hydrogen Sulphide	0-50ppm	Rising - Latching	5ppm	10ppm

Relay 1 and Relay 2 on the TOC-625 Controller are set to be normally energised, de-energising on alarm or power failure.

The TOC-625 Controller can FIND up to 8 devices. These can be any mix of gas detectors and output nodes

The TOC-625 Controller can FIND up to 2 relay output nodes. Relay nodes supplied with TOC-625 Controller need to be addressed as follows and will operate according to the following table.

Relays Active on First Alarm	Output Node 1		Output Node 2	
	Relay 1	Relay 2 Mutable	Relay 1	Relay 2 Mutable
Node Relay Address	4201	4202	4203	4204

Note that mutable relays re-energise on second alarm.

Connect

Click

Run

1-Click Setup

One Cable

Automatic Setup

Up to 6 Detectors

Up to 2 Relay Modules
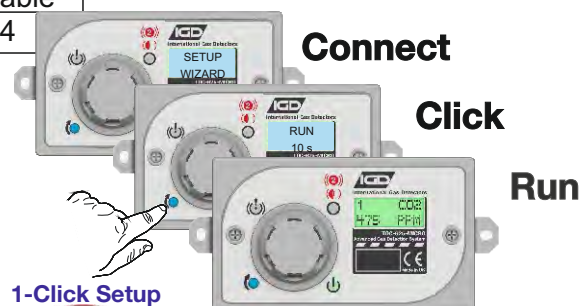
PRODUCT DATA SHEET

Analogue Output Interfaces

+24V DC
- 24V DC
mA Sig 1
mA Sig 2
mA Sig 3

Note as standard mA outputs are set. These can be re-configured as 0-10V signals

Front View Cover Open

Mains Power Connector
110/230V AC 50/60Hz

L	nc	N	nc	E

RL 2   RL 1
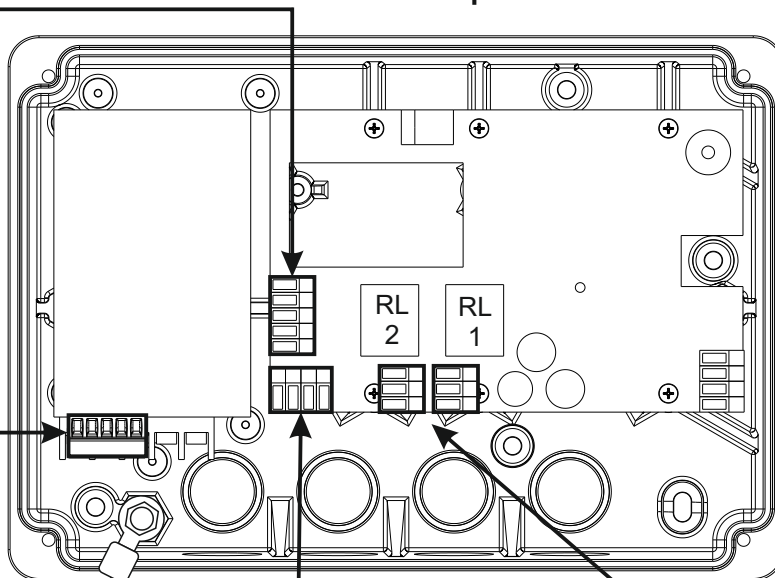
Connect to detectors and nodes using 4 core 1.5mmSQ CY style cable or FP200 style cable as appropriate. Cable screens should be terminated as indicated

Detector I/O Interface

0V DC	A	B	24V DC

Normally Closed	Connections
Common	common to each of
Normally Open	the two relay outputs

Connect up to 8 addressable devices. These can be Gas Detectors or by using the available I/O Nodes any 4-20mA Device such as pressure or temperature transmitters, read these back to the control panel as any other detector and set alarms as required.
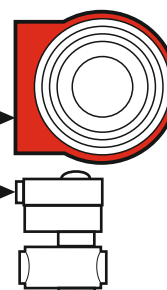
SCRN	0V DC	A	B	24V DC

Detector

SCRN	0V DC	A	B	24V DC

Gas detectors count as one device, there can be any mix of gas detector types on the highway. For example Flammable Gas Detectors, Carbon Monoxide, Oxygen etc.

SCRN	0V DC	A	B	24V DC

24V DC		Relay 1
Input 1		Relay 1
Input 2	I/O Node	Relay 2
0V DC		Relay 2

SCRN	0V DC	A	B	24V DC

Each I/O Node counts as one device and can be used to interface to analogue devices and provide additional relay outputs where they are needed to control items such as beacon-sounders, solenoids or interfaces to fire panels. Depending on loading external power may be required.

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