

# iCO<sup>®</sup> Pump Unit V2 Technical Datasheet







#### Part No: PU001-00 Dimensions: 342mm (W)x 342mm (D) x 495mm Clearance requirement: 100mm of clear space required around on each side for ventilation Voltage rating: 240V Current rating: 13A Power Supply Connection: Dedicated 16A fused supply from the NON RCD side of the board. Fire rated cable required 1/2" BSP Inlet connection: Outlet connection: 3/8" BSP 60° Cone Water requirement: 12 lpm @ 1 bar Minimum Pump run sound pressure level: 79db @ 1 m Pump run Flow switch: 0.5lpm Weight: 24kg Serviceability Access: Removable front cover with security screws Internal Components: Corrosion resistant brass and stainless steel Floor or wall mount Mounting: Standing Pressure: Mains water pressure 1-10bar Adjustable 10-100bar Running Pressure: Set at 0.5 bar Mains low pressure monitoring: Pressure relief set at 20bar Mains water over pressure protection: Pump run time: 10min or 30min (adjustable with pump and actuated ball valve shut off) Operation: Wet type or pre-action linked to smoke detection Self-test: Monthly self-test Thermal fuse set at 100°C Heat protection: 2x NO / NC volt free 30vDC 1 A Fire relay: 2x NO / NC volt free 30vDC 1 A Fault relay: Priority demand valve output: 12v 1A Power out: 12v 1A Power monitoring: Battery backed up audible alarm for fault monitoring Battery monitoring: Check every 8mins if battery is detached System indication: Internal LCD display Control valve: Integral isolation valve, drain valve & pressure gauge Strainer: Internal 500 micron filter IP Rating: IP53 Manual controls: Internal and optional external manual start and stop button

iCO





# **KEY BENEFITS**



EASY INSTALLATION



USES JUST 12L/MIN AT 1 BAR OF PRESSURE



NO STORED WATER NEEDED



80% LESS WATER

THAN STANDARD

SPRINKLERS



FULLY COMPLIANT

## **KEY FEATURES**

#### **Excellent Quality Assured**

 $\mathsf{iCO}^{\circledast}$  is independently tested in line with automatic water fire suppression systems standards.

#### Neat, Compact Design

All iCO $^{\rm \otimes}$  system components are integrated and housed within the iCO pump unit: no untidy valves or hoses.

#### **Automated Self-Test**

The  $iCO^{\scriptscriptstyle (0)}$  pump unit automatically tests itself once a month to ensure the unit is functioning correctly.

#### **Removable Cover**

The  $iCO^{\ensuremath{\scriptscriptstyle \odot}}$  pump unit has a removable cover allowing easy access for servicing and maintenance.

#### **Outstanding Durability**

The iCO pump unit is comprised of steel: protecting it from fire and mechanical damage.

#### Wall or Floor Mounted

The iCO  $^{\scriptscriptstyle \oplus}$  pump will fit in most kitchen cupboards or can be wall mounted if preferred.

#### Adjustable Run Time

The iCO  $^{\rm \tiny \odot}$  pump can be adjusted to suit a 30min (Residential) or 10min (Domestic) application, depending on the need.

#### **Adjustable Run Pressure**

The iCO  $^{\rm \tiny (8)}$  pump can be adjusted from 10 - 100bar to suit the particular building or application.

#### **Actuated Ball Valve**

 $\rm iCO^{\otimes}$  has an integrated actuated ball valve to shut off the water and power supply following elapse of the selected run time.

### External Power Out

12V power out for powering 3rd party equipment such as GSM alarm diallers for remote monitoring or external relays.

#### **Battery Backup**

Battery backup to provide audible alarm in the event of power loss or system failure.

#### **LCD** Display

An internal LCD display is provided on the control & monitoring board to indicate the status of the system.

#### **Thermal Fuse**

A thermal fuse has been provided on the control & monitoring board to cut power if the temperature exceeds 100°C.

#### Manual Start/Stop Button

The iCO  $^{\rm \tiny \$}$  pump unit has a connection point for an (optional) manual start/stop button.

#### **Double Knock Activation**

The iCO® nozzles are activated by a double knock trigger (heat/ smoke): significantly reducing the risk of false activation.

#### Additional Relay Connections

 $\rm iCO^{\$}$  provides 2 fault & 2 alarm relays as standard for connection to 3rd party equipment such as fire alarms and AOV's.

#### **Drip Tray with Float Switch**

The  $iCO^{\oplus}$  float switch will close the actuated ball valve in the event of a leak: shutting off the water supply to avoid damage.

#### **Real Time Monitoring and Alerts**

 $\rm iCO^{\otimes}$  System GSM Monitoring provides real time alerts to your smart phone in case of emergency or fault.

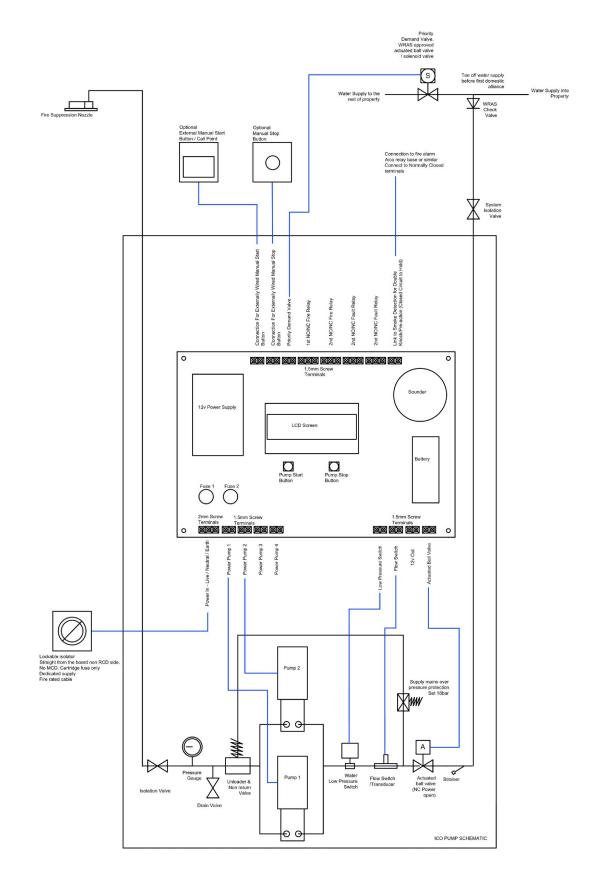


# Technical Data - iCO<sup>®</sup> Pump Unit V2 (Monitored, Non-WiFi)



# **TECHNICAL PUMP SCHEMATIC (DOMESTIC)**

Private homes, heritage or listed buildings and new-build properties.



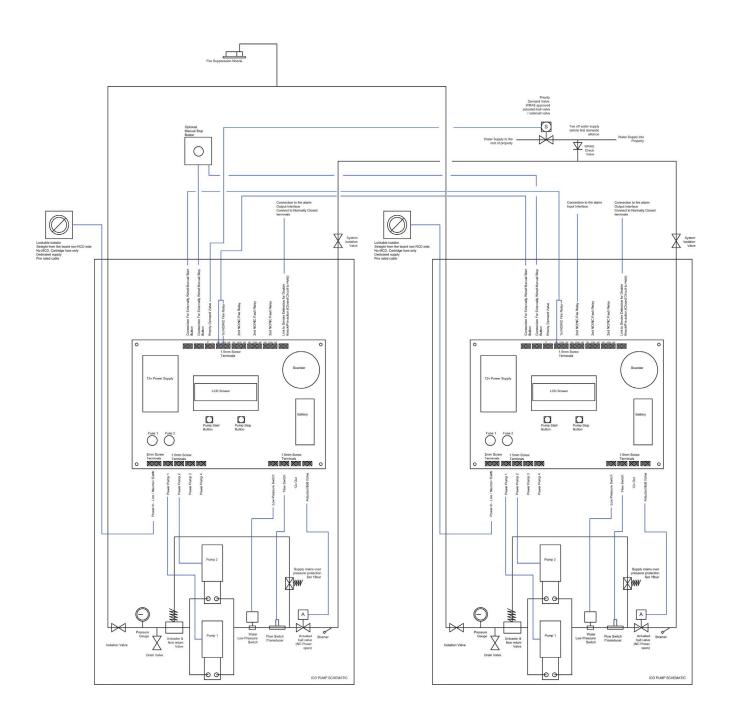


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# TECHNICAL PUMP SCHEMATIC (RESIDENTIAL)

Apartment blocks, care homes, student accommodation, hotels and other HMOs (houses in multiple occupancy).

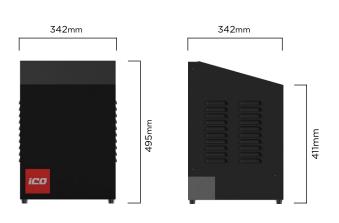




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# **DIMENSIONS (MM)**



### INSTALLATION

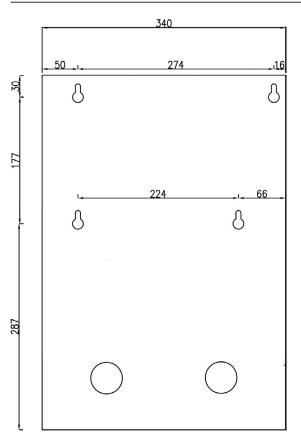
Our cost efficient and easy to install solution is designed specifically for the residential and domestic markets, offering design flexibility whilst providing faster and more reliable fire suppression.

As a leading manufacturer of fire suppression systems, iCO $^{\circ}$  sell through a network of accredited distributors in the UK and overseas.

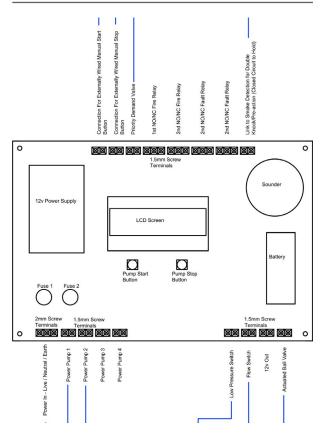
iCO® systems must be designed, installed and commissioned by an accredited installer. On-going systems should be also maintained annually by an accredited installer.

To find a local installer, visit ico-products.com/find-installer/

## WALL MOUNT DETAILS



## **CONTROL & MONITORING BOARD**



### CONTINUED PROFESSIONAL DEVELOPMENT

iCO<sup>®</sup> provide CPD (continued professional development) presentations and online webinars for architects, fire safety officers, building control officers and other industry professionals.

For more information or to book onto a course, contact your local installer.

## **TESTING & CERTIFICATION**

iCO<sup>®</sup> is ISO9001 accredited for the design, manufacture and supply of water mist fire suppression systems.

iCO® has been independently tested by Exova Warrington Fire, a UKAS accredited laboratory. The iCO® system meets the performance requirements of BS:8458 Residential Water Mist Standards and BS:9252 Sprinkler Standards, as validated by the BSI Verification Certificate.

All test reports are available on request.



### ACCREDITATION







