



iCO® Pump Unit V2  
Technical Datasheet



iCO Products is a trading name of HiPro Industries Ltd.  
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Industry leaders in domestic and residential fire suppression systems



## Technical Data - iCO® Pump Unit V2 (Monitored, Non-WiFi)

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
Inlet connection:	1/2" BSP
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
Mounting:	Floor or wall mount
Standing Pressure:	Mains water pressure 1-10bar
Running Pressure:	Adjustable 10-100bar
Mains low pressure monitoring:	Set at 0.5 bar
Mains water over pressure protection:	Pressure relief set at 20bar
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
Heat protection:	Thermal fuse set at 100°C
Fire relay:	2x NO / NC volt free 30vDC 1 A
Fault relay:	2x NO / NC volt free 30vDC 1 A
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

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Typical domestic category installation.



Typical residential category installation.

NOTE: All images in this document are for illustration purposes only.

## 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

iCO® is independently tested in line with automatic water fire suppression systems standards.

### Neat, Compact Design

All iCO® system components are integrated and housed within the iCO pump unit: no untidy valves or hoses.

### Automated Self-Test

The iCO® pump unit automatically tests itself once a month to ensure the unit is functioning correctly.

### Removable Cover

The iCO® 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® pump will fit in most kitchen cupboards or can be wall mounted if preferred.

### Adjustable Run Time

The iCO® pump can be adjusted to suit a 30min (Residential) or 10min (Domestic) application, depending on the need.

### Adjustable Run Pressure

The iCO® pump can be adjusted from 10 - 100bar to suit the particular building or application.

### Actuated Ball Valve

iCO® 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® 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

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® float switch will close the actuated ball valve in the event of a leak: shutting off the water supply to avoid damage.

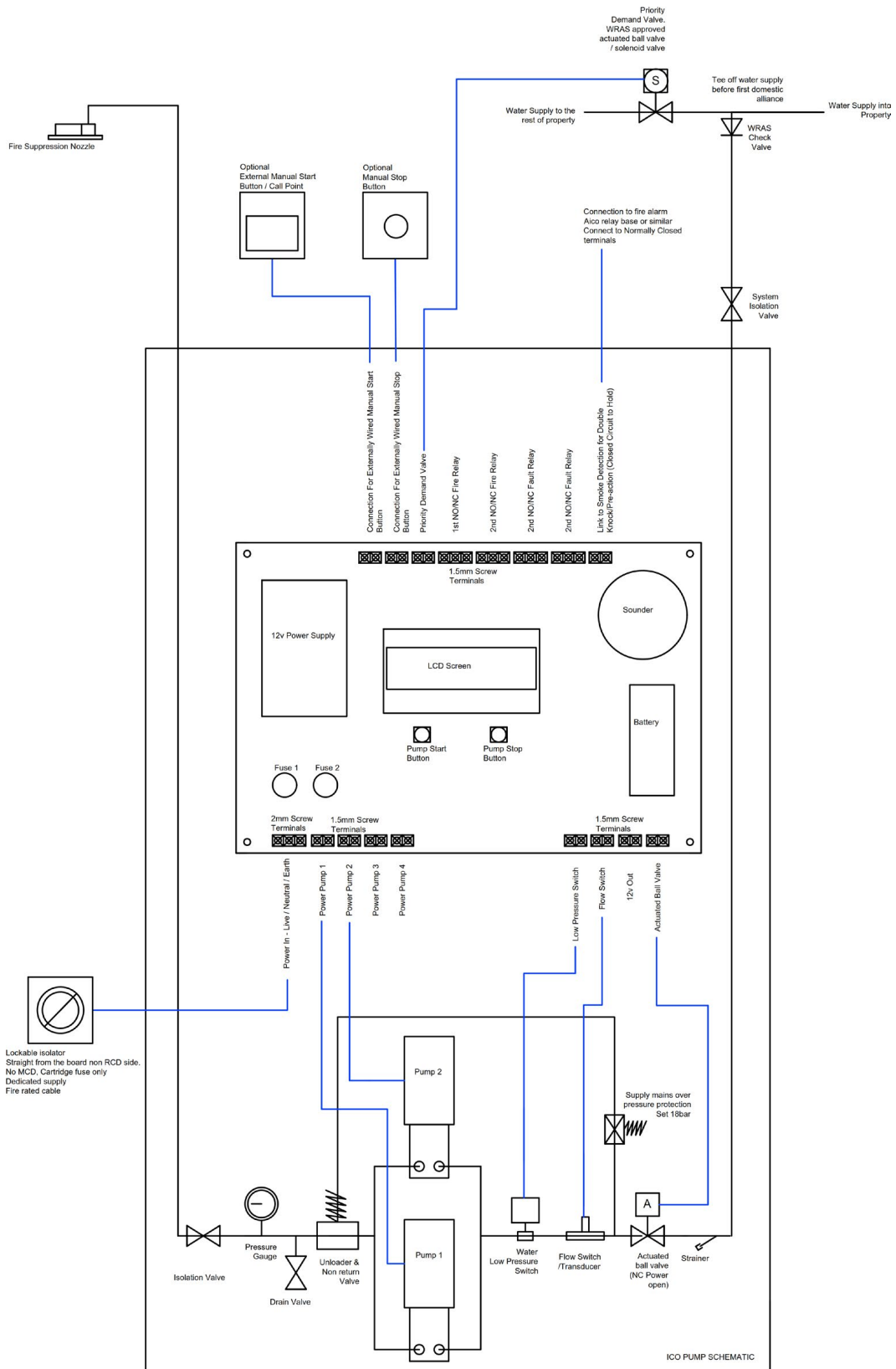
### Real Time Monitoring and Alerts

iCO® System GSM Monitoring provides real time alerts to your smart phone in case of emergency or fault.

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## TECHNICAL PUMP SCHEMATIC (DOMESTIC)

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

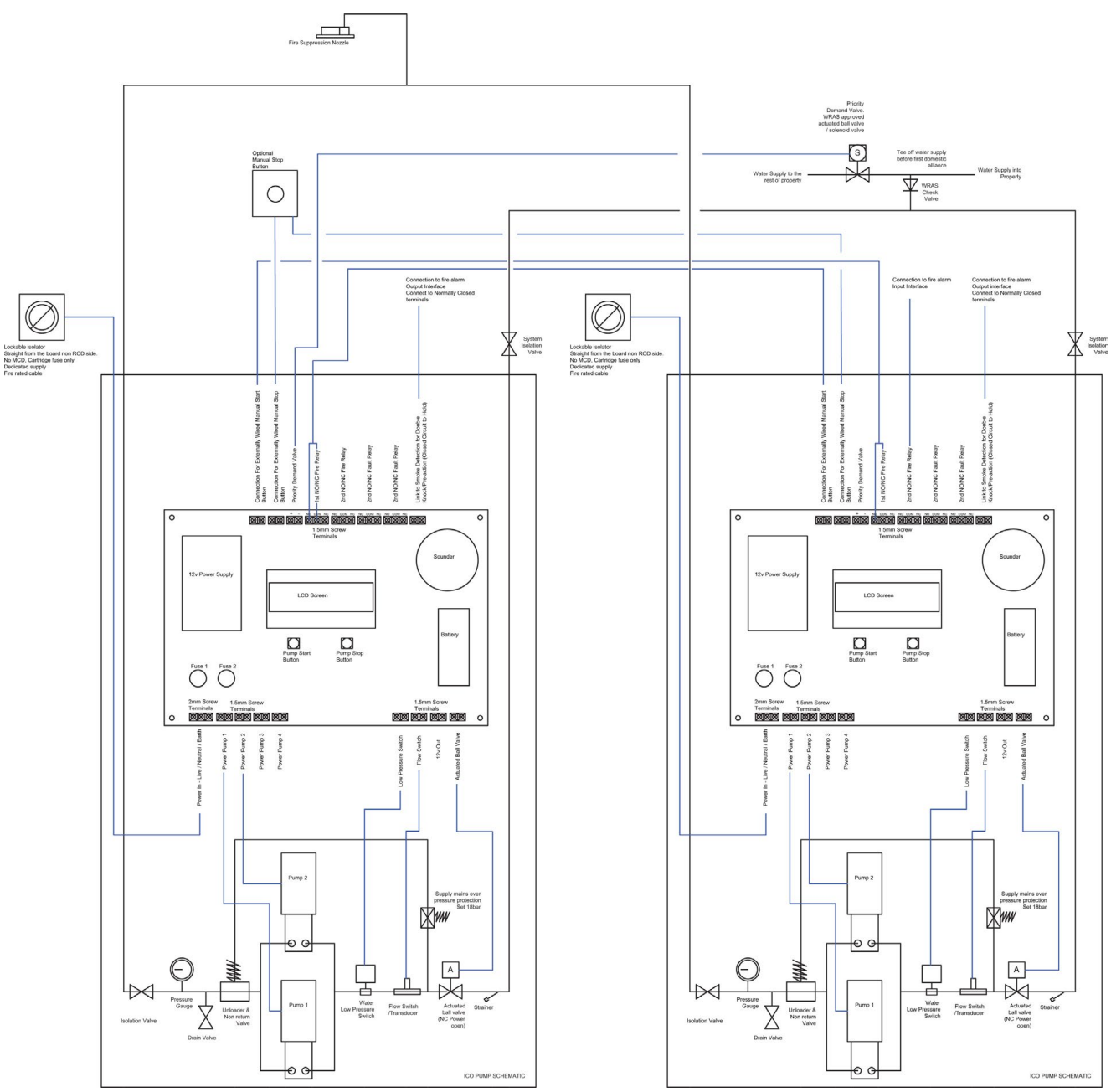




# Technical Data - iCO<sup>®</sup> Pump Unit V2 (Monitored, Non-WiFi)

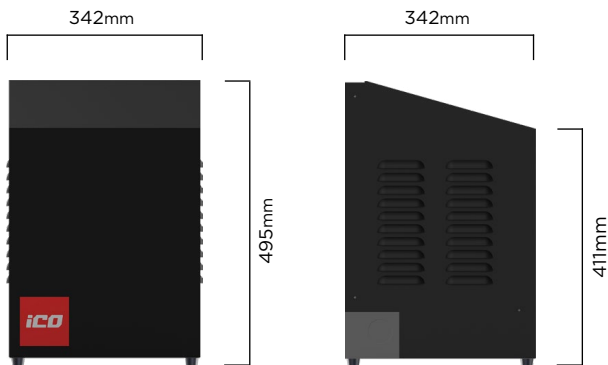
## TECHNICAL PUMP SCHEMATIC (RESIDENTIAL)

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



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## DIMENSIONS (MM)



## INSTALLATION

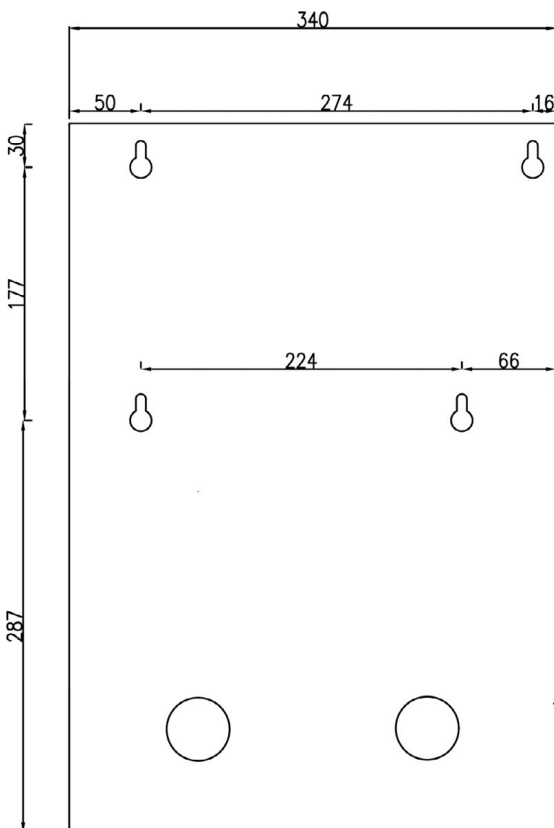
Our cost efficient and easy to install solution is designed specifically for the residential and domestic markets, offering design flexibility whilst providing faster and more reliable fire suppression.

As a leading manufacturer of fire suppression systems, iCO® sell through a network of accredited distributors in the UK and overseas.

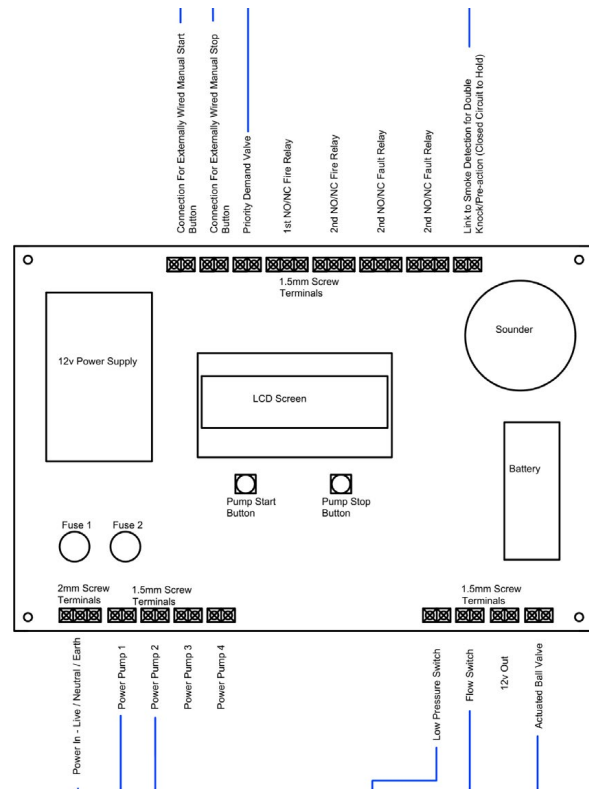
iCO® systems must be designed, installed and commissioned by an accredited installer. On-going systems should be also maintained annually by an accredited installer.

To find a local installer, visit [ico-products.com/find-installer/](http://ico-products.com/find-installer/)

## WALL MOUNT DETAILS



## CONTROL & MONITORING BOARD



## CONTINUED PROFESSIONAL DEVELOPMENT

iCO® 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® 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

