



iCO® Pump Unit V2

Technical Datasheet



Industry leaders in domestic and residential fire suppression systems

iCO Products is a trading name of HiPro Industries Ltd.
Park House, 10 Park Street, Bristol, United Kingdom BS1 5HX



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

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



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.

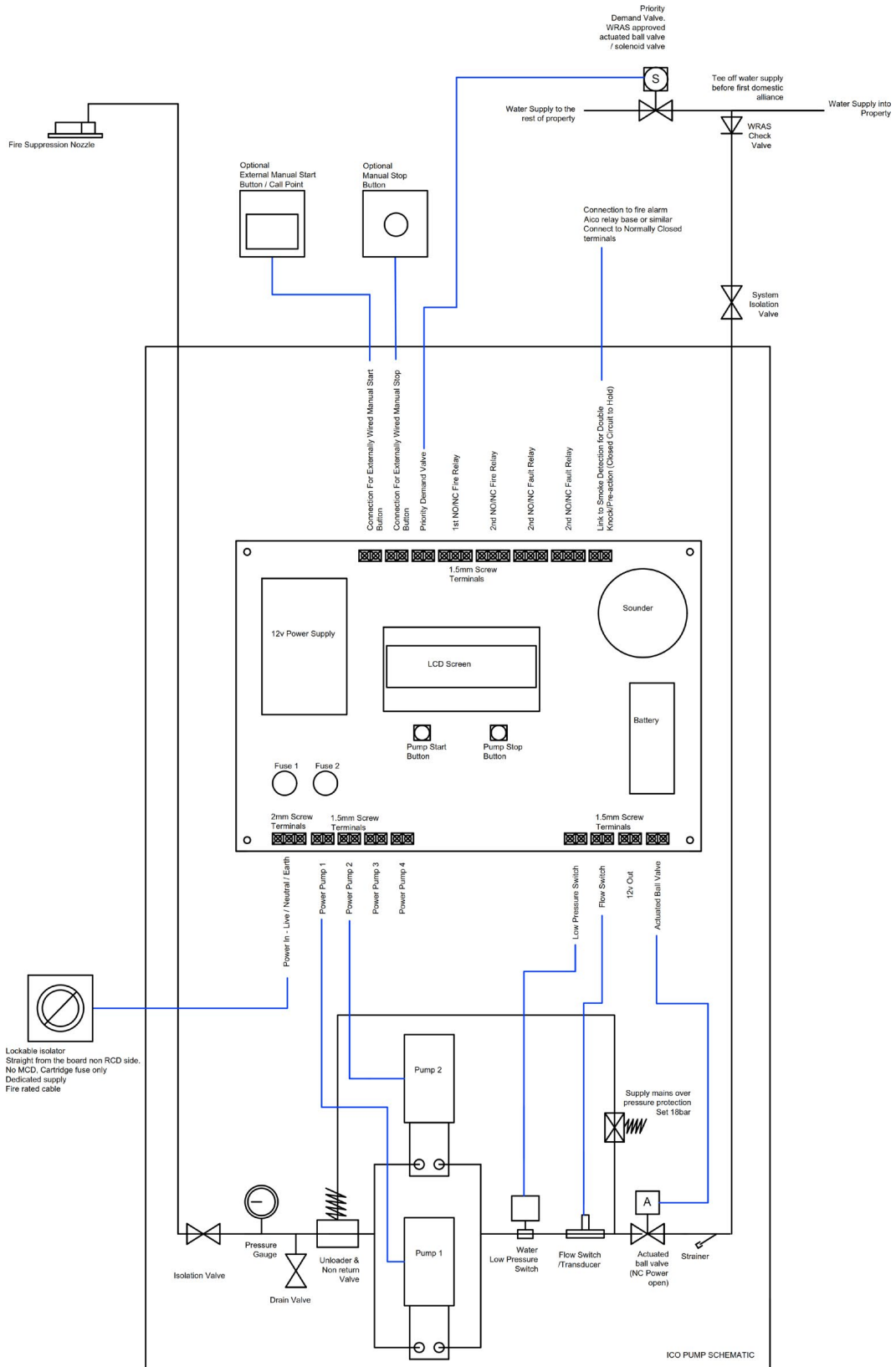
Real Time Monitoring and Alerts

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

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

TECHNICAL PUMP SCHEMATIC (DOMESTIC)

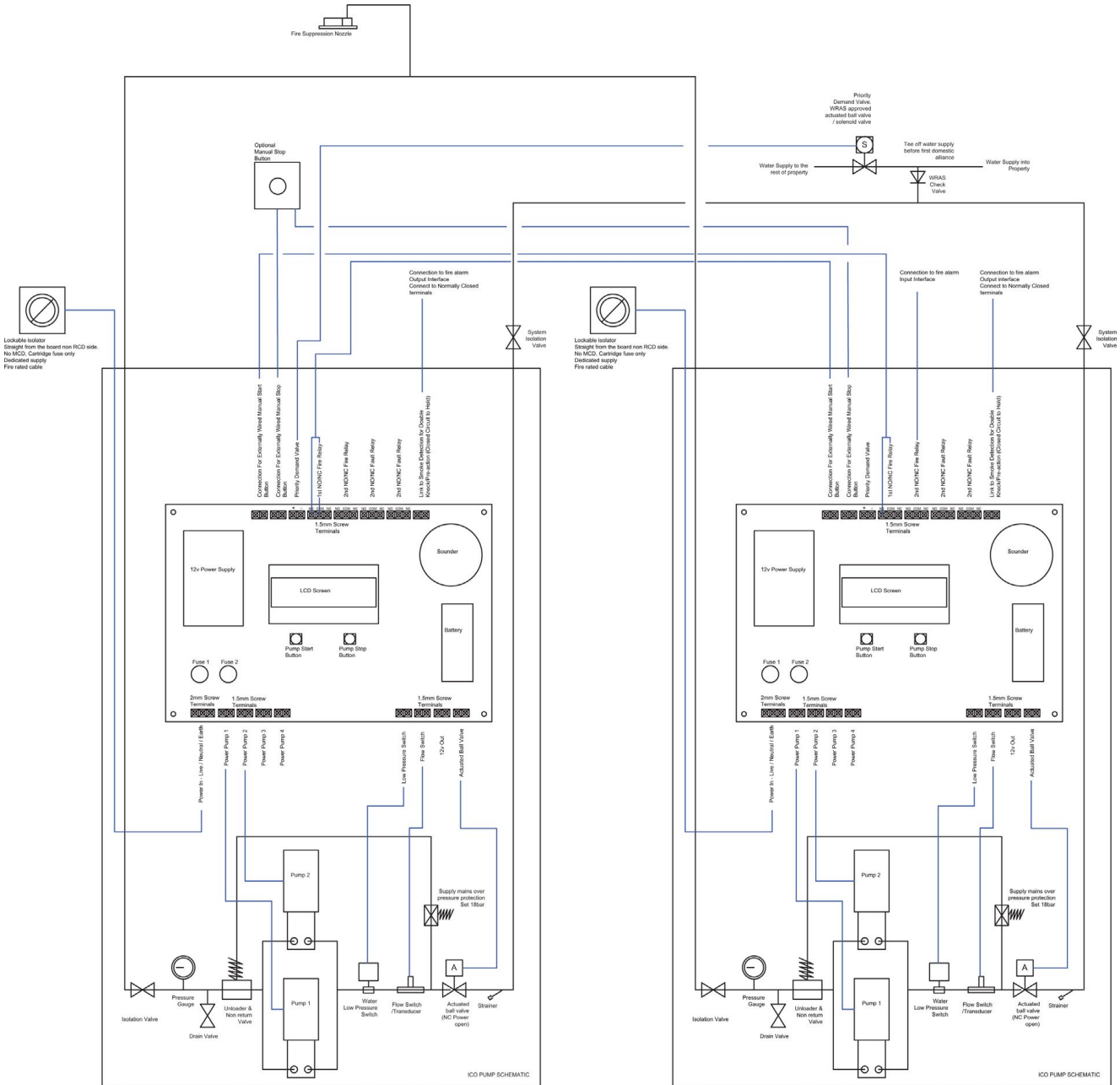
Private homes, heritage or listed buildings and new-build properties.



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

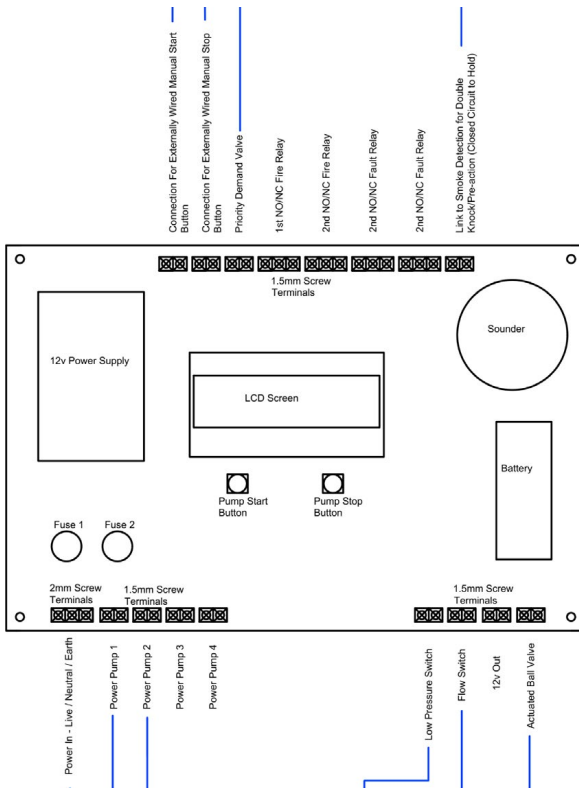
TECHNICAL PUMP SCHEMATIC (RESIDENTIAL)

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

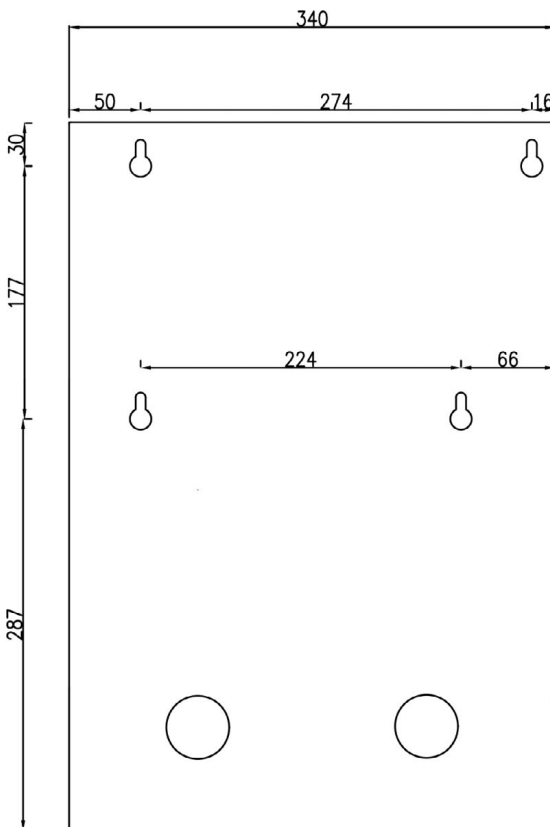


Technical Data - iCO® Pump Unit V2 (Monitored, Non-WiFi)

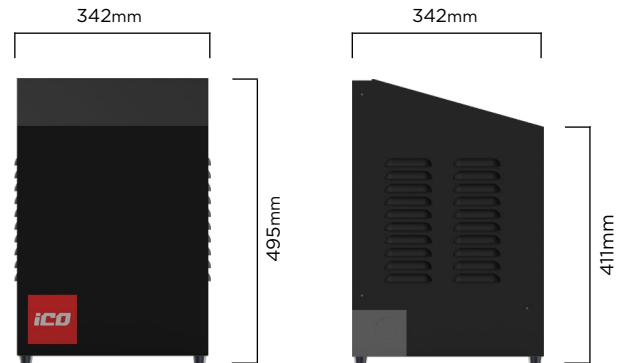
CONTROL & MONITORING BOARD



WALL MOUNT DETAILS



DIMENSIONS (MM)



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 and meets the performance requirements of BS:8458.



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/