

# KalGUARD<sup>®</sup> Pulse Splitter User Instructions

Water Treatment Equipment to Manage Hard Water Limescale

Version 2 - August 2014

## **IMPORTANT**

The Pulse Splitter must only be installed by a qualified electrician

Units must be mounted in IP65 rated housing

The Pulse Splitter must only be used in conjunction with Sentinel KalGUARD

### **Pulse Splitter User Instructions**

#### **INTRODUCTION**

The pulse splitter is designed to simultaneously feed the signal from the water meter to both the KalGUARD controller and a Building Management System (BMS). It can be used with any size of KalGUARD, water meter and both versions of the controller. The outputs are identical and completely isolated so there is no risk of interference.

Please refer to Figure 1 which shows how the Pulse Splitter is integrated into the KalGUARD, controller and water meter.



#### **SPECIFICATION**

- Powersupply: Min = 7V, Max = 30V, typical = 24V@25mA
- Resistance: Max = 0.2R, typical = 0R

10V

- Switch Power:
- Operating Temperature: Min = -20°C, Max = +85°C
- Connections: Rising clamp terminals with 3.5 x 2.5mm apertures
- FMC:
- **Dimensions:** •
- Casing:

Tested to BS EN 61000-4-21:2011

- H (on rail) = 72mm, W = 18mm, D = 62mm
  - Grey flame retardant resistant polyamide

#### INSTALLATION

Prior to installation ensure the following:

- 1. Unit must be securely mounted in an IP65 rated housing to prevent water / dust ingress.
- 2. Ensure easy access to the component.
- 3. Ensure the component is stable upon installation with minimum vibration.
- 4. Ensure no contact with other electromagnetic components or close connections to minimise interference.
- 5. Where there is need to protect the circuit as part of a big system then connect a fuse.

#### WIRING

Please refer to schematic outlined in Figure 2 before wiring. Ensure that the wiring is connected as follows, as incorrect wiring could result in shorting.



Terminal	Connection
А	OV
В	IN + (from water meter)
С	IN - (from water meter)
D	+V
E	RLY 1 (controller)
F	RLY 1 (controller)
G	RLY 2 (BMS)
Н	RLY 2 (BMS)

The terminals which the controller and BMS are wired respectively can be switched around if needs be, but terminals E&F and G&H must be paired up.

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