ITR401-0001 Water Flood Detector with KNX

Product Manual



Product Manual

TABLE OF CONTENS

| 1. | SCOPE OF THE DOCUMENT | . 3 |
|--------|-----------------------------------------|-----|
| 2. | DESCRIPTION OF THE PRODUCT | .4 |
| 3. | DETAILED SPECIFICATION OF THE FUNCTIONS | . 5 |
| 3.1. | GENERAL | . 5 |
| 3.1.1. | List of Parameters | . 5 |
| 3.1.2. | List of Objects | .7 |
| 4. | MAIN TECHNICAL CHARACTERISTICS | . 8 |

Product Manual

1. SCOPE OF THE DOCUMENT

This document contains the specifications of Interra's ITR401-0001 Water Flood Detector with KNX product and the project context. This document applies to all products involved as a common information base and is binding on KNX system equipments involved in the project. Changes are permitted only in coordination with the product management.

2. DESCRIPTION OF THE PRODUCT

Leaks can cause serious damage to your home. ITR401-0001 is a water flood detector equipped with KNX system. ITR401-0001 is an early warning system that notifies you through KNX bus. By catching it early, you may be able to avoid expensive repairs and loss of treasured items. Due to the existence of the KNX system, users have a chance to arrange any kind of additional alert system.

The detector can be placed near trouble spots like the sump pump, water heater, washer and under sinks. Each can be individually named and registered in main control panel. The detector works based on the theory of liquid conductivity. The performance is reliable and the installation is easy. The detector can be placed near trouble spots like the sump pump, water heater, washer, under sinks or any desired location such as computer rooms, warehouses, water tanks mainly any hidden areas were water can leak without notice. When the water based liquids reach to probes of detector, it will send telegrams to the KNX bus.

3. DETAILED SPECIFICATION OF THE FUNCTIONS

The most outstanding features of ITR401-0001 are:

- Module alive beacon notification.
- Device is eligible to alert the users via buzzer, LED or relay output. Users can activate the LED or buzzer via ETS parameters
- The LED is available for two colour status which operated inversely as green and red.
- Alarm detection delay selections are available. Users can determine the delay via ETS parameters.
- Device has a sensing probe extends downward up to 25cm. The sensing probe operates determined alarm condition when water presence is detected.
- Suspending the alarm for desired duration feature is available.
- Alarm reset feature is available.

3.1. GENERAL

3.1.1. List of Parameters

| PARAMETER | DESCRIPTION | VALUES |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Module Alive Beacon | This parameter allows sending the value "true" periodically while the module is running. | Disabled Enabled |
| Module Alive Beacon Interval (sec)* ¹ | This parameter determines the Module Alive Beacon sending period. | 3600 (165535) |
| Water Alarm Polarity | This parameter allows to determine telegram polarity of water alarm. | 1:Alarm; 0: No alarm / 1: No Alarm; 0: Alarm |
| Send water alarm delay (sec) | A delay time for the water alarm can be assigned via this object. | 3 (1-255) |
| Send water alarm periodically | Alarms can be sent periodically at the intervals specified in this parameter. | Disabled , 5s, 10s, 30s, 1min, 5min, 10min, 20min, 30min, 40min, 50min, 1h, 2h, 3h, 4h, 5h, 6h, 12h, 24h |
| Status Led | Status LED indicates device is energized or not. The led can be arranged as always on or always off via this parameter. | Always on Always off |
| Alarm Led | This parameter used for behavior of water alarm led. | Only alarm Always off |

Product Manual

| Alarm led blink* ² | If alarm LED is arranged as Only alarm, | Disabled | |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|
| | this parameter allows alarm LED to make blink. | Enabled | |
| Alarm led blink duration (sec) * ² | Alarm LED blink duration can be determined via this object. | 500 (300-3000) msec | |
| Buzzer | This parameter determines whether buzzer will be used on alarm condition or not. | Enabled Disabled | |
| Buzzer duration ^{*3} | If buzzer is arranged to be used on alarm condition, duration of buzzer can be determined via this parameter. | 5min (5min , 10min 20min, 30min, 40min 50min, 1h, 2h, 3h, 4h, 5h 6h, 12h, 24h) | |
| Alarm reset | Alarm reset parameter is used to end the alarm condition of device. | Disabled Enabled | |
| | Disabled: Determined alarm conditions start when the device detects water presence. As soon as probes get dry alarm conditions end. | | |
| | Enabled: When device detects water presence, alarm conditions start. Even if probes get dry, alarm conditions do not end until device is reset. | | |
| Alarm reset polarity* ⁴ | Alarm reset polarity is determined via this parameter. | 1:Reset / 0:Nothing 1:Nothing / 0:Reset | |
| Device suspend | This parameter used to mute the device on alarm condition for a certain period of time. | Disabled Suspend on value 0 Suspend on value 1 | |
| Duration of suspend (min) * ⁵ | Suspend duration is determined via this parameter. | 1h (Infinity, 30min, 40min 50min, 1h, 2h, 3h, 4h, 5h 6h, 12h, 24h) | |
| Test sensor | This parameter is used for testing of the | Disabled | |
| | sensor without and water presence. | Enabled | |

^{*1}This parameter is only visible when the parameter "Module Alive Beacon" is set to "Enabled".

^{*2}This parameters is only visible when the parameter "Alarm led blink" is set to "Enabled".

^{*3}This parameter is only visible when the parameter "Buzzer" is set to "Enabled".

^{*4}This parameter is only visible when the parameter "Alarm reset" is set to "Enabled".

^{*5}This parameter is only visible when the parameter "Device Suspend" is set to "Suspend on value 0" or "Suspend on value 1".

3.1.2. List of Objects

| OBJ NAME | FUNCTION | ТҮРЕ | FLAG | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------|------|--|--|
| General | Alive Beacon | 1 bit | CWU | | |
| This object is only visible when the "Module Alive Beacon" function is enabled. Via the group address linked, the value "true" is sent while the module is running. | | | | | |
| Water Alarm | 1:Alarm; 0: No alarm / | 1 bit | | | |
| | 1: No Alarm; 0: Alarm | | | | |
| This object indicates water on sensor. | | | | | |
| Alarm Reset | 1:Enabled / 0:Disabled | 1 bit | RW | | |
| Used to reset the water alarm object. | | | | | |
| Device Suspend | Disabled / Suspend on value 0 / Suspend on value 1 | 1 bit | CWU | | |
| This object mutes the device. | | | | | |
| Sensor state | Output | 1 bit | | | |
| Sensor status information indication object. | | | | | |
| Test Sensor | 1:Enabled / 0:Disabled | 1 bit | CWT | | |
| This object is used to test the sensor whether working or not. | | | | | |

Product Manual

4. MAIN TECHNICAL CHARACTERISTICS

| Device | ITR401-0001 | | |
|----------------------|------------------------------------------|--|--|
| Power supply | EIB power supply | | |
| Power consumption | 10mA (Alarm condition) | | |
| LED indicators | 1 x Alarm (red) / Operating (green) LED | | |
| | 1 x Programming LED | | |
| Buttons | 1 x Programming button | | |
| Output current | 0,5A @125V DC | | |
| | 1A @24V DC | | |
| Connection cable | 0,25mm ² – 1,5mm ² | | |
| Type of protection | IP 20 | | |
| Temperature range | Operation (-40°C70°C) | | |
| Maximum air humidity | <90RH | | |
| Flammability | Non-flammable product | | |
| Colour | Light Grey | | |
| Dimensions | 55x88,1x21,6 mm (WxHxD) | | |
| Configuration | ETS | | |
| Certification | KNX | | |