

T3400 Series Refrigerant Leak Detection Sensor Evaluation Kit

Overview

Amphenol Sensors has created this evaluation kit to allow you to test your Telaire T3400/T3401 Series refrigerant leak detection sensor.

Evaluation Kit Contents:

- USB to RS485 Adaptor
- Cables to connect adaptor and sensor to a PC
- T3400/T3401 Sensor
- USB drive with PC software and instructions



Telaire T3400 Series Evaluation Kit Instructions

Step 1. Install PC evaluation software

- Plug the USB
- Open the folder
- Double click setup.exe

Name	Date modified	Type
 DotNetFX48	4/7/2025 2:37 PM	File folder
 Readme Product Instruction	10/26/2024 11:04 AM	Text Document
 setup	10/31/2024 3:36 PM	Application
 T34 Evaluation kit	10/31/2024 3:36 PM	Windows Installer ...

Figure-1

Step 2. Connect the sensor and adaptor to PC

- Connect the sensor and adaptor to PC via USB port.

Step 3. Launch PC evaluation Software

- Double click the Telaire icon on the desktop (T34XX Evaluation Kit).
- Press start button to begin.
- Make sure the sensor and adaptor plugged into USB before the software is launched otherwise the software will not find the correct com port.

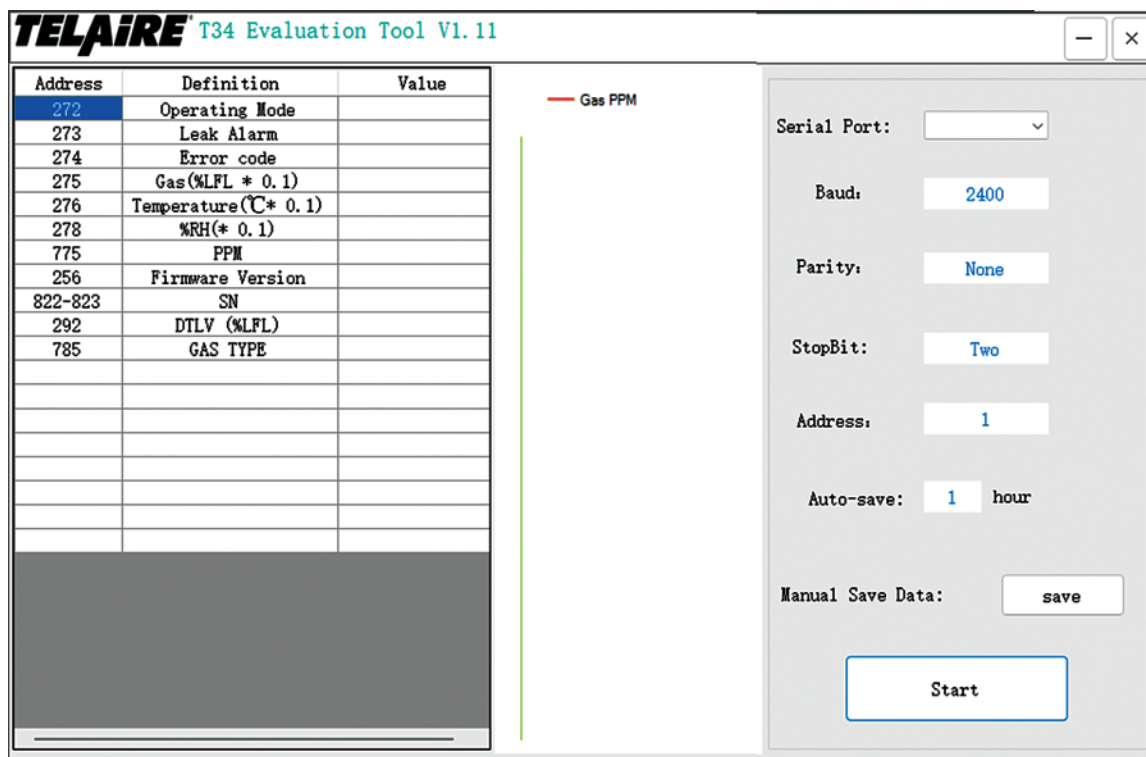


Figure-2

Telaire T3400 Series Evaluation Kit Instructions

Step 4. Save your data

- There are two ways to save data: automatically and manually. The data is saved in .CSV format.
- By setting the interval time for auto-saving, the software will save the data automatically after the interval time. Manual Save Click the Save button to save in the folder you specify (file name is automatically set).
- No matter whether autosave or manual save, the software will clear the cache and re-collect the data. Keep all files in the same unzipped folder. Do not edit or modify any files.

Appendix A: Register Definition Description

Address	Description	Definition
272	Operating mode	Operating mode of the device with no measurements available during startup. 0 : Startup; 1 : Measuring;
273	Leak Alarm	Flag that turns on when the concentration exceeds the alarm threshold. By default, the leak signal is held for 5 minutes after the concentration falls below the leak signal threshold again. 0: No leak detected; 1: Leak actively detected or for a duration after leak detection.
274	Error Code	The following list refers to the bit position. If the value at that bit is 1, then the corresponding error has occurred. 0. Internal Error Error causing measurement data to be unavailable, e.g. internal communication error. 1. Values Out of Limits The sensor detects out-of-specification temperature, relative humidity, or gas concentration. 2. - - - - 3. Self-Test Failure Internal check Error caused by incorrect operation, invalid settings, etc. 4. Sensor Module Failure Cannot be recovered error requiring replacement of the sensor module. 5. Exceeded Life Limit Warning The sensor has reached the life limit. 6. Approaching Life Limit Warning The sensor has reached the life warning threshold.
274	Gas Concentration LFL	Last measured gas concentration in %LFL multiplied by 10 (e.g. 251 means 25.1% LFL). Resolution: 0.1% LFL; Range: 0-100% LFL.
276	Sensor Module Temperature	Last measured temperature in °C multiplied by 10 (e.g.: 210 for 21.5 LFL). (e.g., 210 means 21.0°C). Resolution: 0.1°C; Range: -40 to 85°C.
278	Sensor Module Humidity	Last measured humidity in %RH multiplied by 10 (e.g., 305 for 30.0°C). (Example: 305 for 30.5% RH). Resolution: 0.1%RH; Range: 0-100%RH.
256	Firmware Version	Firmware version.
775	PPM	Gas concentration in PPM.
822-823	Serial Number	The Serial Number of sensor

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Appendix B: Description of R/W Register

Address	Description	Definition
292	DTLV	SDetection Threshold Limit Value (DTLV), the minimum refrigerant gas concentrati on that results in the initiating a SYSTEM RESPONSE. 1 Resolution: Resolution: LFL
785	Gas Type	1 : R454B