



LEAK DETECTION SYSTEM

COMMISSIONING RECORD

Company Owning or Operating Facility	Authorized nVent RAYCHEM TraceTek service representative
Building/unit	Address
Site Address	Street
Contact Person	Contact Person
Telephone	Telephone
Email	Email

1. GENERAL SYSTEM CONFIGURATION NOTES

Main Control Panel:

TT-TS12 model # serial #
 TTDM-128 serial #
 other _____

Sub Control Panel:

TTDM-128 serial #

Quantity of External SIM/SIM type:

TTSIM-1 _____ TTSIM-1A _____ TTSIM-2 _____ Power _____

List other components (for example TT-NRM):

List Sensing cable/components:

Application Type:

Beneath raised floor	Sump
Trench	Double contained piping
Buried pipeline	Around/Under tank
Overhead piping	Other:

2. TTDM-128 INSTALLATION INSPECTION

Visual Inspection Seating of circuit Boards

Wiring(Check All Applicable) **N/A** **Wired** **Verified**

Ground/earth
 Power supply wiring
 Sensing cable
 Zener barrier
 Fault relay
 Leak relay
 Service relay
 4-20 mA
 RS-232/485 Host Port
 TT-NRM (Quantity:_____)
 Internal SIM
 RS-485 SIM Network port

3. TTDM-128 INITIAL POWER UP TEST

Close enclosure and supply power to the unit.

Green LED illuminated at first
 Passes self-tests
 Finds all connected Network Modules, (TTSIM, TT-NRM, etc)

4. TTDM-128 GENERAL SETTINGS

Language selected: _____

Affix front panel label in chosen language

Change time/date to local time

Set units

ft m zones

5. SELF TESTS WITH UI SOFTWARE

UI Test Audio Tests

Memory Tests Display Test

SI Test Kepad

Alert response personnel before testing relays
or other interfaces (if connected):

Relay Test

4-20 mA Test (if installed and connected)

Host port comm. Loop back test
(requires transmit/receive jumper)

6. LEAK AND PORT SETTINGS

Leak	Default	Other
Re-alarm interval	Never	_____
Auto-Reset	Off	On
Audible Alarm	On	Off
Alarm re-flash	Off	On
Alarm Reset	Single	All

Host port		
Baud	9600	_____
485 Address	1	_____
Mode switch	RS 232	RS 485
TTDM	Master	Slave

7. SIM MODULE SETTINGS

After fully assembling the leak detection system including sensing cables/components, record SIM parameter values on Table 1 (use extra copies as necessary) for all commissioned SIM's.

8. RELAY CONFIGURATION

Complete this section for TTSIM-1A or TTSIM-2 modules,
or when TT-NRMs are installed.

TT-NRM Regions and Relays:

#	Start	End	ID	Region Relay	Trouble Relay	Service Relay
1						
2						
3						

SIGNATURES

Test performed by: Name _____ Signature _____ Date _____

Client acceptance: Name _____ Signature _____ Date _____

#	Start	End	ID	Region Relay	Trouble Relay	Service Relay
4						
5						
6						
7						
8						
9						
10						

SIM relay :

Alarm mode Leak Leak/Break Leak/Break/Service

Alarm state On Off

Alarm reset Auto Manual Safe

9. SYSTEM MAP FOR ENTIRE LEAK DETECTION SYSTEM

Record leak location readings for simulated leaks created at key points on the circuit for each relevant SIM address number.

Record in Table 2, which also can be used to document configuration. Use extra copies as necessary.

This data can be used to prepare a graphical System Map, which is very desirable for customer utilization.

10. OPERATION AND MAINTENANCE TESTING

This documentation was provided and reviewed with the end user:

Project specific documents:

Installation instructions:

Sensor installation instructions:

11. ACCEPTANCE TEST

When sensor is subjected to a simulated leak

System detects and locates simulated leak

Acceptance test was performed in presence of owner's representative:

Yes No

TABLE 1 - SIM MODULE SETTINGS

SIM Type	
SIM Address	
ID	
Serial Number	
Test length	ft / m / z
Sense Current	μA
Service alert >=	μA
Sense Resistance	KΩ
Leak alarm <=	KΩ
RG Resistance	Ω
YB Resistance	Ω
SI Version	
SI Comm	%
Ground Fault Check	

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SIM Address	
ID	
Serial Number	
Test length	ft / m / z
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Service alert >=	μA
Sense Resistance	KΩ
Leak alarm <=	KΩ
RG Resistance	Ω
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SIM Address	
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Serial Number	
Test length	ft / m / z
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Leak alarm <=	KΩ
RG Resistance	Ω
YB Resistance	Ω
SI Version	
SI Comm	%
Ground Fault Check	

TABLE 2 - LEAK DETECTION SYSTEM MAP INFORMATION

Master Control Panel
Sub Control Panel
.....
.....
.....

SIM Address No.	Circuit Name/ID	Leak Sensor Type	Simulated Leak Location Description	Reported Leak Distance

North America
Tel +1.800.545.6258
Fax +1.800.527.5703
thermal.info@nVent.com

Europe, Middle East, Africa
Tel +32.16.213.511
Fax +32.16.213.604
thermal.info@nVent.com

Asia Pacific
Tel +86.21.2412.1688
Fax +86.21.5426.3167
cn.thermal.info@nVent.com

Latin America
Tel +1.713.868.4800
Fax +1.713.868.2333
thermal.info@nVent.com



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