

# APPROVAL REPORT

## STXplus Signal Transmitter

Prepared for:

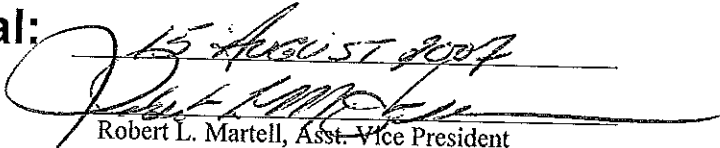
Venture Measurements  
150 Venture Blvd  
Spartanburg, SC 29306  
U.S.A.

Project ID: 3028852

Class: 3810, FMCU

Date of Approval:

Authorized by:

*15 August 2007*  
  
Robert L. Martell, Asst. Vice President

**STXplus Signal Transmitter**

from

**Venture Measurements  
150 Venture Blvd  
Spartanburg, SC 29306  
U.S.A.**

**I INTRODUCTION**

1.1 Venture Measurements (Manufacturer) requested Approval to FM Approvals Class 3810 of the STXplus Signal Transmitter for both the US and Canada. The product will be marketed under the product line name of Kistler-Morse which is owned and manufactured by Venture Measurements.

1.2 This Report may be freely reproduced only in its entirety and without modification.

**1.3 Standards**

Title	Class No.	Issue Date
Electrical and Electronic Test, Measuring and Process Control Equipment	3810	March 1989
Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use	IEC 61010-1	September 2004

1.4 **Listing:** The product will appear in the FM Approval Guide as follows:

STXplus Signal Tansmitter

1.5 As described in this report, the design and construction of the STXplus Signal Transmitter provide for the required degree of protection against electrical shock, fire and injury for process control equipment. Installation shall be in accordance with the manufacturer's instructions and applicable code requirements.

**II DESCRIPTION**

2.1 The STXplus signal transmitter is a single channel signal processor that receives an analog input from strain gage sensors/transducers and provides current, Profibus DP, AB-RIO, Modbus RTU or DeviceNet output with 2.5A AC output relays. The STXplus' 24 bit analog-to-digital (A/D) converter provides high resolution.

2.2 The standard rated input voltage is 15VDC with an optional 100/120/230 VAC.

### III EXAMINATIONS AND TESTS

The STXplus Signal Transmitter was examined by FM Approvals utilizing FM 3810 and the IEC CB Scheme TRF format with U.S. and Canadian deviations. Reference the attached IEC 61010-1 CB Scheme Test Report. No CB Scheme Certificate is issued.

### IV MARKING

Markings meet the Standard requirements as noted below:

The following information appears on the STXplus Signal Transmitter and meets Standard requirements.

- Manufacturer's name, model and date code.
- Maximum electrical ratings
- The FMCU Approvals Mark
- Manufacturer's location

### V FACILITIES AND PROCEDURES AUDIT

The manufacturing site in Spartanburg, SC is subject to follow up audit inspections. The facilities and quality control procedures have been found satisfactory to manufacture product identical to that examined and tested as described herein. This facility is currently subject to follow-up inspections and the addition of the products now examined to this manufacturer's currently approved line represented no change to manufacturing or quality control procedures that would require a special audit.

### VI DOCUMENTATION

The following drawings/documents describe the STXplus Signal Transmitter and are filed under Project 3028852.

Drawing No.	REV	Description
91-1159-01	-	Nameplate, STXplus
97-1180-01	B	STXplus Signal Transmitter Installation and Operation Manual
TI-SP.STXP-01	A	Model STXplus Enclosure / Boardset Installation Dimensions
TI-SP.STXP-02	B	Model STXplus Interconnect Diagram
91-1158-01	A	STXplus Keypad
41-1320-01	A	PCB, STXplus
18-1040-01	A	Fuse Holder
25-1030-01	A	Power Supply 15VDC
64-6081-01	A	Bracket Assy STXplus
60-6080-01	A	Final / Assy Model STXplus
63-1320-01	A	PCBA, STXplus

## VII MANUFACTURERS RESPONSIBILITIES

As part of the listing requirements, FM Approvals requires assurance that subsequent units produced will present the same quality and reliability as previously examined. The manufacturer shall maintain a Quality Assurance Program which includes as a minimum: incoming, in-process, and final inspection and testing; equipment calibration; and drawing change control. The specific procedures used to control quality are best determined by the manufacturer. No change to this information is permitted without prior written consent of FM Approvals. Requests for changes must be submitted to FM Approvals on Form 797, Approved Product-Revision Report. Unauthorized changes may result in withdrawal of approval

On 100% of production, the STXplus assembly shall be subjected to dielectric tests. The STXplus primary circuit terminals connected together shall withstand for one minute, without insulation breakdown, the application of 1000 Vrms or 1400 Vdc with respect to the protective ground terminal. Alternatively, test potentials 20% higher than the above may be applied for at least one second.

**WARNING:** The dielectric test required may present a hazard of injury to personnel and/or property and should only be performed under controlled conditions, and by persons knowledgeable of the potential hazards of such testing to minimize the likelihood of shock and/or fire.

## VIII CONCLUSION

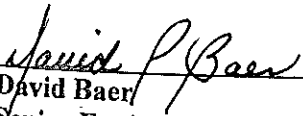
The signal transmitter described in 1.4 meet FM Approvals requirements. Since a duly signed Master Agreement is on file for this manufacturer, Approval is effective the date of this report.

TESTING BY: Steve Henney & David Baer


EXAMINATION BY: David Baer

ATTACHMENTS: IEC 61010-1 Test Report  
Nameplate Drawings 91-1159-01

REPORT BY:

  
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REPORT REVIEWED BY:

  
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