



MG-Siemens Predator
April 4, 2008

Siemens Predator (587-102) VAV Actuator Marketing Guide



Titus, the Titus Spiral, The Leader in Air Management are trademarks of Titus.

All other trademarks noted or not, are the property of their respective owners.

Contents	Page
General	3
Introduction	3
Description	3
Features	3
Application	3
Hardware	4

General

This document provides application highlights covering the Siemens 587-102 VAV actuator.

Additional information may be found at the Titus website, www.titus-hvac.com.

Introduction

The OEM Controls program provides a simpler and faster process with getting mounted controls to the field. During the manufacturing process, the controllers will be mounted on the terminal units and the controller application will be downloaded along with the minimum and maximum cfm's specified and inlet size. The terminal units will be shipped to the field with the controls ready to run. (Controls will not be addressed.)

In an effort to increase our OEM controls line offering, Titus has added another option to the OEM offering, the Siemens 587-02 Predator.

The Siemens 587-102 Predator is stocked at the Titus factories and is available to be ordered. For stocking reps that are interested in stocking this controller, you will be supplied and trained on the programming software which is a very simple tool by a Titus or Siemens representative.

In addition to the programming software, the reps will be supplied with copies of the balancing tool for the Siemens 587-102 Predator which gives an air balancer the ability to make any adjustments at start-up easier. This tool is only supplied to balancers and will not be used by the rep.

Description

The LONMARK® certified configurable Predator® VAV Actuator 1201 provides direct digital control for zone level control of VAV/CV boxes. The Predator Controller is designed to reside on a LONWORKS® network, providing seamless interaction with all LONMARK products.

Features

- Conforms to and is certified to the LONMARK interoperability guidelines, enabling information sharing with other LONMARK products.
- LONMARK-compliant with space comfort functional profile number 8505 for zone level control and the Discharge Air Controller Functional Profile 8610 for air distribution control.
- Field-selectable parameters allow entry and updating of setpoint and control parameters via the TALON® Interface.
- Integral shaft-mount of the one-piece Predator VAV Actuator further reduces installation and setup time.
- Advanced PID control minimizes offset and maintains tighter setpoint control.
- Return to service from power failure without operator intervention.

Application

For Single Duct Variable Air Volume zone units consisting of:

- VAV/CV cooling only
- VAV/CV heating only
- VAV/CV with hot water reheat
- VAV/CV with electric reheat (up to 2 stages)
- VAV cooling/heating switchover

For Fan Powered Variable Air Volume zone units consisting of:

- VAV series or parallel fan-powered with electric reheat (1 stage only)
- VAV series or parallel fan-powered with ECM motors (manual pwm only)

For Lynergy heater applications consisting of:

- LX1
- LX5

*Not available with scr heat, dual ducts, or analog applications.

Hardware

Predator VAV Actuator Hardware

The Predator VAV Actuator one-piece design combines the proven reliability of the Predator VAV controller functionality with Siemens OpenAir GDE131.1P Actuator Gear Train. By incorporating control of VAV applications directly into the compact actuator housing, installation costs can be reduced. Additionally, this Predator solution continues to meet plenum rated job requirements.

Embedded Controller Board

The Embedded Controller has on-board termination support for 1 Input, 2 Digital Outputs, 1 Room Sensor, and 1 DPS. The Controller Board communicates to all LONMARK devices via a Neuron®-chip. The controllers are shipped with pre-loaded applications, reducing engineering start-up time.

Siemens Actuator

The direct-coupled 24 Vac Non-spring Return Rotary Electric LON VAV/CV Actuator is designed for three-position (floating) control of building HVAC dampers. It features easy-to-see position indicator, and quiet, low-power operation.

Differential Pressure Sensor for all Zone Level VAV/CV Applications

The Differential Pressure Sensor connects to the air terminal box air-velocity sensing elements to provide measurement of the differential pressure. The measured value is converted to actual airflow in CFM (l/s) by the Predator VAV/CV controller.