



# VAV FLOOR DIFFUSER POWER SUPPLY MODULE

## UNDERFLOOR AIR DISTRIBUTION SYSTEMS

### MODEL: NPS

#### DESCRIPTION:

The Nailor NPS power supply module provides power for up to 12 daisy-chained VAV diffusers and a compatible analog thermostat or digital controller. Advanced micro-computer electronics and P+I control algorithms provide precise temperature control.

#### CONTROL FEATURES:

- Power supply modules allow connection of up to 12 units on each line voltage connection (6 diffusers on each side) (8 units total or 4 on each side with optional 20 ft. cables).
- Fast connection/wiring between units with RJ12 (phone jack) connections. Allows units to be quickly installed or relocated.
- Standard 12 ft. modular plenum rated cables, for interconnection between diffusers, allows diffusers to be spaced on 10 ft. intervals (20 ft. cables optional).

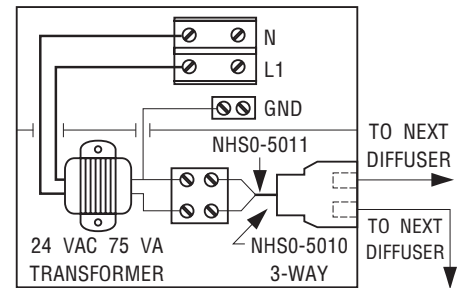
#### SUPPLY VOLTAGE:

Power Supply Module (includes NHSO-2121 transformer cable, NHSO-5010 3-way connector and 75VA Class II transformer, mounted & wired in a sheetmetal enclosure):

- 120V
- 277V
- 240V
- 480V

#### OPTIONS:

- QF Toggle Disconnect Switch
- C2 Dust Tight Enclosure (Chicago code)



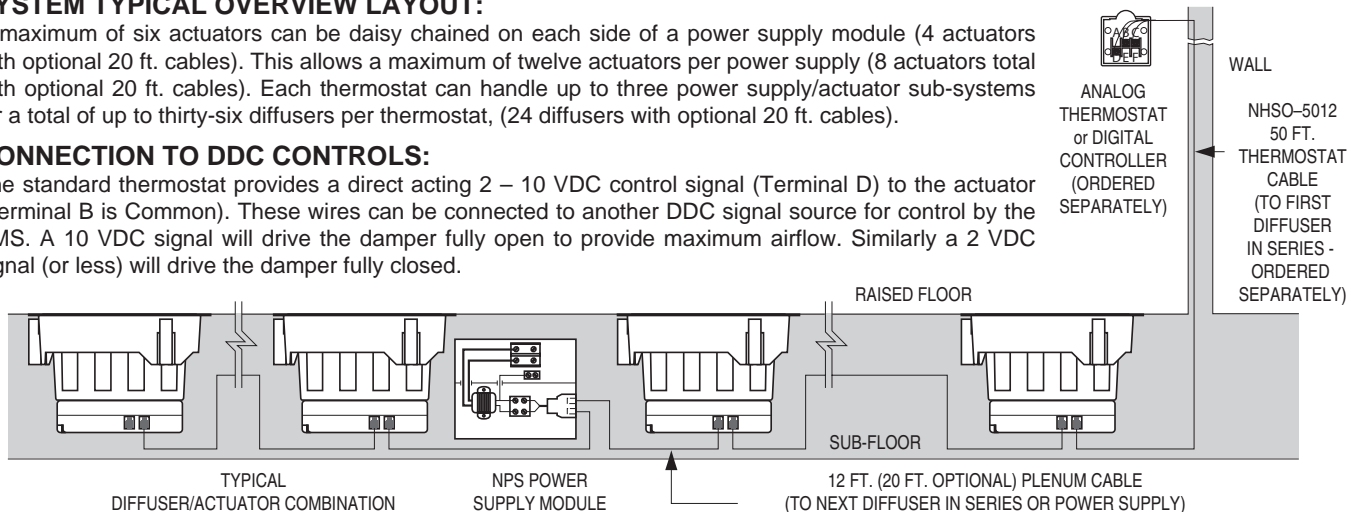
NPS (POWER SUPPLY MODULE)  
9"x8"x5<sup>3</sup>/<sub>4</sub>" (229x203x146)  
SHEET METAL ENCLOSURE

#### SYSTEM TYPICAL OVERVIEW LAYOUT:

A maximum of six actuators can be daisy chained on each side of a power supply module (4 actuators with optional 20 ft. cables). This allows a maximum of twelve actuators per power supply (8 actuators total with optional 20 ft. cables). Each thermostat can handle up to three power supply/actuator sub-systems for a total of up to thirty-six diffusers per thermostat, (24 diffusers with optional 20 ft. cables).

#### CONNECTION TO DDC CONTROLS:

The standard thermostat provides a direct acting 2 – 10 VDC control signal (Terminal D) to the actuator (Terminal B is Common). These wires can be connected to another DDC signal source for control by the BMS. A 10 VDC signal will drive the damper fully open to provide maximum airflow. Similarly a 2 VDC signal (or less) will drive the damper fully closed.



<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	6 - 24 - 14	NFD	NEW	NPS-1	