

Hoffman Controls

Product Data

706-HPFS (TB) Series

VariFlow™ Heat Pump Fan Speed Controller



VariFlow™ 706-HPFS (TB) 1
Electronic Variable Fan Speed Control

Purpose

The VariFlow™ 706-HPFS (TB) Series variable fan motor speed control is designed for use with heat pumps and electric furnaces where 230VAC power is present. This special purpose, electronic speed control is designed to provide time-based sequential variable air volume control of conventional residential furnace and heat pump installations when improvements in comfort and Indoor Air Quality (IAQ) are desired.

The Controller functions to reduce electrical consumption and operating costs by varying the flow of warm or cold air which, in turn, provides quieter system operation, improved air filtration and increased overall IAQ.

Recovery of residual energy left in the system, delivered to the home and combined with de-stratified air allows higher (heating) or lower (cooling) mean effective space temperature (MEST) to be attained. The improved MEST extends the “off cycle(s)” and precludes an earlier requirement for system operation.

Reduction of air stratification through the available continuous blower operation at reduced velocity/volume not only recovers otherwise lost energy, but increases overall comfort and air circulation.

Use of the optional **Remote Switch/Wiring Harness** (Part No. 100-0020-000) allows simplified changing of the end-of-ramp control operation. (See VariFlow™ 706-FFS (TB)

and 706-HPFS (TB) Series Remote Switch/Wiring Harness Product Data and Installation & Operating Instructions for more detailed information.)

Option

- Remote Switch/Wiring Harness (Part No. 100-0020-000)

Description

The VariFlow™ 706-HPFS (TB) 1 *time-based* control automatically varies system air flow to the space before and after each heating or cooling cycle. The Controller adjusts air flow by modulating blower fan speed as the electric heat or AC compressor cycles On and Off. An ideal balance of air temperature and air flow in the home eliminates drafts and greatly reduces stratified (layered) air. When applied to Heat Pumps, the Control ensures proper blower fan operation during the “Heat” mode of operation.

With a design based on Hoffman Controls’ successful 120VAC VariFlow™, the Control provides quiet, reliable, carefree operation.

Professional installation is recommended.

Specifications

Current, Max.	75 Amp
Voltage (nominal)	208 – 240VAC
Frequency	60 Hz
Inputs	
Heat Call	24VAC
Fan Switch	24VAC
Output	
Motor Voltage (variable, as required)	230 – 165VAC
Minimum Speed (HPFS) Adjustable,	
Factory Set Minimum Speed	450 RPM
Ramp Times	
Ramp Up	10 seconds
Ramp Down	6 minutes
Wiring	Flying leads, 12” length, stripped
Environment	
Operating, non-condensing	32°F – 100°F
Storage, non-condensing	– 40°F – 175°F
Dimensions (L x W x H)	4.20” x 2.40” x 1.20”

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