

# NEW

## By-Pass Eliminator

### MODEL BPEK

The By-Pass Eliminator™, Model BPEK is a digital static pressure control that eliminates a separate by-pass commonly used on zoning systems. The BPEK uses the closed zone dampers to bleed them open when only one or small number zones are calling and the duct systems static exceeds the set-point of the BPEK. Just as the typical by-pass damper opens and relieves air into return, as the pressure increases, the BPEK will begin to open the closed zone dampers to relieve the excess air pressure instead of a central by-pass into the return duct.

The BPEK is for use only with ZONEFIRST's exclusive Plug-In zone dampers which makes wiring literally a snap.

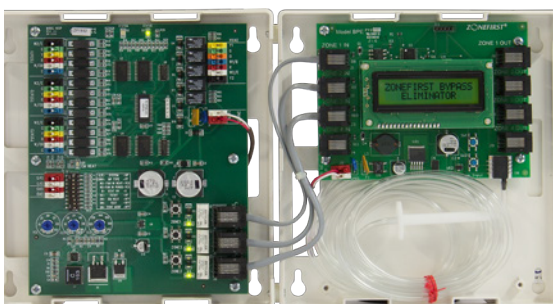
The BPEK's digital display is set with both a high and a low set-point in order to maintain a proper range of static pressure in the duct. When all zone dampers are open, and provided the duct is sized properly, the duct pressure will be low. As zone dampers close as individual zones call and therefore close off the non-calling zones, the systems' duct pressure will rise and there are fewer places for the air to go.

When the duct pressure rises above the high set-point of the BPEK, the close dampers will modulate open in order to relieve the excess pressure. Typically, once the closed dampers open slightly, the duct pressure drops below the high set-point and the dampers remain there until the pressure either drops below the low setting, as others zone dampers call, or they may modulate open more if more zones close down.

The BPEK's digital display monitors each zone's damper position based on a percentage of opening. If, for any reason, dampers move past the 50% mark, the installer may want to look into adding ducts to the calling zone in order to prevent over-conditioning to the zones that were supposed to be closed.

The use of the BPEK is especially useful where codes may limit and hinder the use of direct by-pass into the return. Specifically, California's Title 24 Code assesses an energy penalty when homes are modeled with a direct by-pass into the return. The BPEK solves this limitation issue.

The BPEK can be purchased separately or as a combination and factory pre-wired assembly with any of ZONEFIRST's Plug-In Zoning panels.



MMP2B	H32PBK	MZP4B
MMP2BK	MDP3B	MZP4BK
H32PB	MDP3BK	