DESIGN AND APPLICATION GUIDE

Pelican PEARL Economizer Controller
PEARL Economizer System Components
Economizer Actuator
Wiring Application Guide

Fig. 1: PEARL Economizer configuration with constant speed fan and BELIMO TFB24-SR actuator (22 in-lbs.) with position feedback

1. Connect to 24VAC power.
2. Refer to page 1 for thermostat options.
3. Enthalpy is provided with the PEARL and does not require a unique probe.
Fig. 2: PEARL Economizer configuration with constant speed fan and BELIMO LF24-SR actuator (35 in-lbs.) with position feedback.

1. Connect to 24VAC power.
2. Refer to page 1 for thermostat options.
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Fig. 3: PEARL Economizer configuration with constant speed fan and Honeywell MS7403/MS7405 actuator (27 in-lbs.)/(44 in.lbs.) with position feedback.

1. Connect to 24VAC power.
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Fig. 4: PEARL Economizer configuration with constant speed fan and Honeywell MS7503/MS7505 actuator (27 in-lbs.)/(44 in.lbs.) with position feedback

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Fig. 5: Stand-alone dry bulb Economizer configuration with constant speed fan and Honeywell black motor M7215 (25 in-lbs.)

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Fig. 7: Stand-alone dry bulb Economizer configuration with constant speed fan, Honeywell black motor M7415 (25 in-lbs.) and Honeywell Q769C 0-10VDC Adapter

1. NOTE HONEYWELL BLACK BOX ACTUATORS DO NOT PROVIDE POSITION FEEDBACK FOR FAULT DETECTION AND DIAGNOSTIC. THIS DOES NOT MEET BUILDING CODE IN SOME STATES.

2. As stated in the Q769C installation guide: the M7415 must be connected to a separate/isolated transformer than what is used to power the RTU and PEARL.

3. Refer to page 1 for thermostat options.

4. Enthalpy is provided with the PEARL and does not require a unique probe.
Fig. 8: PEARL Economizer configuration with constant speed fan and SIEMENS GQD151 actuator (20 in-lbs.) with position feedback

1 Connect to 24VAC power.
2 Refer to page 1 for thermostat options.
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Fig. 9: PEARL Economizer configuration with constant speed fan and Johnson Controls M90203-GGc-2(Z) actuator (27 in-lbs.) with position feedback.

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