Performer Rack Controller

The Performer Rack Controller is a multifunctional refrigeration controller designed specifically to work with commercial refrigeration parallel compressor rack systems. Its functions include pressure control of single or multistage refrigeration racks, condenser control and circuit control, in addition to control of many generic inputs and outputs.

The Performer's compressor control uses a patented fuzzy logic algorithm. This technology gives tighter control and provides superior refrigeraiton system performance and efficiency.

The Performer controller's user interface is designed for ease of use. A large, constantly lit display screen with oversized readings is easily legible from across the motor room.

The full alpha-numeric keypad makes the Performer controller exceptionally quick and easy to program and use. The Performer controller's menu structure is the ultimate in simplicity, eliminating complicated abbreviations.

Features

- Simple to Use

- Patented Fuzzy Logic Control Algorithm

- Controls compressors, condenser, circuits, and general purpose points

- Extensive graphing and logging

- Remote Communications

JOHNSON CONTROLS PENN

Performer Rack Controller

Technical Data

Simple to Use
- Full 50 key alpha-numeric keypad
- Large, constantly lit screen
- Oversized main readings for easy viewing
- Simple menu structure

Patented Fuzzy Logic Control Algorithm
- Adaptive 'self-learning' logic is the ultimate in refrigeration control
- Optimized performance with maximum use of un-loaders and variable speed
- Reduces short cycling of compressors
- Not limited to next step of capacity
- Quick response to abrupt load changes
- Excellent recovery after defrost

Compressor Control
- 3 different suction groups
- 12 stages of control for each group
- Variable speed control of each group
- Maximum unloader operation

Condenser Control
- 12 stages with variable speed fan control based on discharge pressure and drop-leg or ambient-drop leg temperature adaptive differential
- 50% auto-split control

Subcooling Control
- Multi-stage control of sub-cooling

General Purpose Control
- Up to 64 inputs and 32 outputs
- Outputs can be scheduled for lighting
- Inputs may be logged and graphed or used as a control parameter

Full Circuit Control
- Controls defrost, solenoid valve and evaporator fans
- Up to 40 circuits
- Hot gas, electric or off-cycle defrost control
- 6 defrost times per day per circuit
- Multiple temperature or digital termination
- Remote and local manual overrides
- Commnicates with Stage One case controls

Extensive Interactive Graphing and Logging
- Stores 500 logs of system inputs
- Stores last 100 alarms
- Graphing with "zoom" ability
- Moving cursor displays readings on graphs
- Overlay up to 3 graphs on each other

System Integrity
- Password Protection
- Non-volatile memory storage of all setpoints and programs, not affected by power failures

Remote Communications and Commissioning
- Windows^{TM}-based software

Specifications
- Mount on rack panel
- Size: 11.5"H x 19.2"W x 2.7"D
- Supply Voltage: 20 VCT (center tap) 50/60 Hz

JOHNSON CONTROLS
PENN