Electro-Mechanical vs. PLC Single Unit

COLMAC HPWH Features

Electro-Mechanical (Standard)

- Microprocessor PI controlled e-TCV
- Electro-Mechanical short cycle timers
- Microprocessor controlled thermal protection
- Thermo-mechanical thermal expansion valve (TXV)
- Panel mounted alarm indicator lights
- Internal or External aqua-stat control
- Phase Failure protection
- Source water flow and freeze stat
- High/Low pressure cutouts
- Circuit breaker protection
- SCCR fusing
- **Aquastat input** compressor staging control

PLC adds the following features

- Panel mount LCD
- Monitored incoming and outgoing water temperatures
- Limited system performance monitoring
- PLC PID for e-TCV control adjustable PID features
- PLC timed short cycle control
- Re-settable compressor run times
- Electronic Thermal Expansion Valve (adjustable Superheat)
- Alarms flagged on LCD screen
- Adjustability of tank and heat pump set points through screen access
- Access level control, password protection
- Service reminders
- BMS feedback of all monitored and assignable variables
- Alarm access through BMS system
- Internal or external aqua-stat controls
- Dual Aquastat control
- Saved settings / factory defaults
- Low temperature cutout settings
- High pressure cutout settings
- Source water freeze / flow monitoring
- 100 fault memory

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Electro-Mechanical vs. Modular PLC (M) HPWH Features

COLMAC HPWH Features

Electro-Mechanical (Standard)

- Microprocessor PI controlled e-TCV
- Electro-Mechanical short cycle timers
- Microprocessor controlled thermal protection
- Thermo-mechanical thermal expansion valve (TXV)
- Panel mounted alarm indicator lights
- Internal or external Aquastat control
- Phase failure protection
- Source water flow and freeze stat
- High/Low pressure cutouts
- Circuit breaker protection
- SCCR fusing
- **Aquastat input** compressor staging control

Modular PLC adds the following features

- Panel mount LCD
- Monitored incoming and outgoing water temperatures
- System performance monitoring
- Water circuit isolation capacity
- Alarms flagged on LCD Screen
- Adjustability of tank temperature set points through screen access
- Access level control, password protection
- Service reminders
- BMS feedback of all monitored and assignable variables
- Alarm access through BMS system
- Compressor staging control (including Lead Lag)
- Re-settable compressor run times
- Internal or external aqua-stat controls
- Dual Aquastat control
- Saved settings / factory defaults
- Low temperature cutout settings
- High Pressure Cutout settings
- Source water freeze / flow monitoring
- 100 fault memory

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