

REZNOR

PILOT AND GAS CONTROL OPTIONS

PILOT IGNITION SYSTEMS

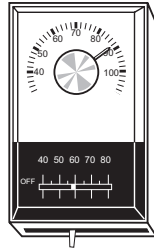
- OPTION AH2** • **INTERMITTENT SPARK PILOT:** Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. Certified by the Canadian Standards Association for use in Canada with natural gas only. RPDBL certified for use in U.S.A. for outdoor units with natural gas or propane.
- OPTION AH3** • **INTERMITTENT SPARK PILOT WITH TIMED LOCKOUT:** Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. This system also incorporates a lockout device which stops gas flow to the pilot if the pilot fails to light in 120 seconds. Reset of lockout requires manual interruption of the thermostat cycle. Approved for use with natural or propane gas.

GAS CONTROL SYSTEMS

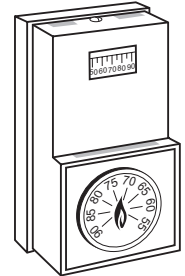
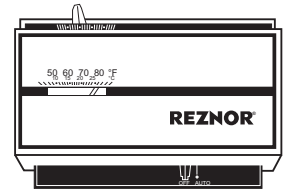
(Available with either natural or propane unless noted otherwise.)

HEATING APPLICATION OPTIONS

- AG1** • **ONE-STAGE CONTROL:** Single-stage gas valve which cycles on at 100% fire on a call for heat by a remote single-stage thermostat. Thermostat is not included.
- AG10** • **ONE-STAGE CONTROL with thermostat:** Each furnace is equipped with single-stage gas valve and relay. Each furnace cycles on at 100% fire on call for heat from remote single-stage thermostat. Thermostat is included. (Illustration, right)
- AG2** • **TWO-STAGE CONTROL:** Two-stage gas valve which fires at 100% or 50%, as required, on call by a remote two-stage thermostat. Thermostat is not included.



- AG11** • **TWO-STAGE HEATING CONTROL with thermostat:** Each furnace is equipped with a two-stage gas valve and relay. Two-stage gas valves fire at 100% or 50% as required, on call from remote two-stage thermostat. Thermostat is included (Illustration, right).
- AG7** • **ELECTRONIC MODULATION (60°-85°F):** Solid state control system, providing close temperature control through related manifold pressure. On a call for heat from a remote electronic thermostat, controls modulate between 50% and 100%. Remote thermostat is included (Illustration, right).



MAKEUP AIR APPLICATION OPTIONS

(For ductstat control illustrations Gas Control Section)

- AG3** • **TWO-STAGE CONTROL FROM DUCTSTAT (60°-110°F):** Two-stage gas valve which fires at 100% or 50% as required, on call from a unit-mounted, two-stage ductstat. **For units with two furnace sections,** Option AG3 includes a two-stage valve on each furnace and two ductstats which provide for **FOUR-STAGE CONTROL**. **For units with four furnace sections,** Option AG3 includes a two-stage valve on each furnace and three ductstats which provide for **EIGHT-STAGE CONTROL**.*
- AG15** • **ELECTRONIC TWO-STAGE CONTROL USING DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT:** Same type of control as Option AG3, but the setpoint of the ductstat is adjustable from a remote temperature-selector. Includes factory-installed sensor and field-installed temperature-selector module with an adjustable stage-adder module. **For packages with two furnace sections,** Option AG15 includes a two-stage valve on each furnace and ductstat which provides for **FOUR-STAGE CONTROL**. Includes factory-installed sensor and field-installed remote temperature-selector module with three adjustable stage-adder modules. **For packages with four furnace sections,** Option AG15 includes a two-stage valve on each furnace and ductstat which provides for **EIGHT-STAGE CONTROL**. Includes factory-installed sensor and field-installed remote temperature-selector module with five adjustable stage-adder modules.*
- AG16** • **ELECTRONIC TWO-STAGE CONTROL USING DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT AND TEMPERATURE DISPLAY:** Same as Option AG15, plus a digital (liquid crystal) temperature-display module that provides selectable set point and continuous display of sensor reading.*
- AG4** • **TWO-STAGE CONTROL FOR UNITS WITH TWO (2) FURNACES:** Each furnace is equipped with a single-stage gas valve. The gas valves are staged by a unit-mounted, two-stage ductstat (60°-110°F). Applicable only to packaged systems with two furnace sections.*
- AG17** • **ELECTRONIC TWO-STAGE CONTROL FOR MODELS WITH TWO (2) FURNACE SECTIONS USING A DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT:** Same type of control as Option AG4, but the ductstat has a remote temperature selector. Includes factory-installed sensor and field-installed remote temperature-selector module with an adjustable stage-adder module.*

*APPLICATION NOTE: If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified (See table on next page).



GAS CONTROL OPTIONS

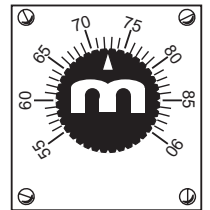
MAKEUP AIR APPLICATION OPTIONS (cont'd)

- AG18 • ELECTRONIC TWO-STAGE CONTROL FOR MODELS WITH TWO (2) FURNACE SECTIONS USING A DUCT-STAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT AND TEMPERATURE DISPLAY:** Same as Option AG17, plus a digital (liquid crystal) temperature-display module that provides selectable set point display and continuous display of sensor reading.*
- AG5 • FOUR-STAGE CONTROL FOR UNITS WITH FOUR (4) FURNACES:** Each furnace is equipped with a single-stage gas valve. The gas valves are staged in sequence by two (2) unit-mounted, two-stage ductstats (60°-110°F). Applicable only to packaged systems with four furnace sections.*
- AG22 • ELECTRONIC FOUR-STAGE CONTROL FOR UNITS WITH FOUR (4) FURNACE SECTIONS USING A DUCT-STAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT:** Same type of control as Option AG5, but the ductstat has a remote temperature selector. Includes factory-installed sensor and field-installed remote temperature-selector module with two adjustable stage-adder modules.*
- AG23 • ELECTRONIC FOUR-STAGE CONTROL FOR UNITS WITH FOUR (4) FURNACE SECTIONS USING A DUCT-STAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT AND TEMPERATURE DISPLAY:** Same as Option AG22, plus a digital (liquid crystal) temperature-display module that provides selectable set point and continuous display of sensor reading.*
- AG6 • MECHANICAL MODULATION (50°-100°F):** Nonelectric control system, hydraulic capillary-actuated. Upon sensing a requirement for heat, controls modulate between 50% and 100%. (Available with natural and propane gas on Size 800.)
- AG13 • MECHANICAL MODULATION (50°-100°F) WITH FULL FIRE BYPASS:** Mechanical modulation control is the same as Option AG6, except that the unit is also equipped with a parallel

single-stage valve and relay. On call from a remote override thermostat, the single-stage gas valve cycles on at 100% fire. Override thermostat is not included. (Available with propane gas on Size 800.)

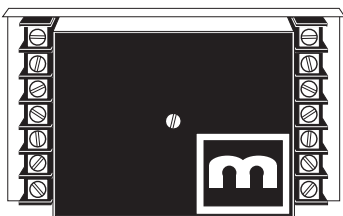
- AG8 • ELECTRONIC MODULATION (55°-90°F) WITH DUCT-STAT:** Solid state control system, providing close temperature control through regulated manifold pressure. On a call for heat from a unit-mounted ductstat, controls modulate between 50% and 100%, as required. Requires field installation of ductstat sensor.
- Includes an outside air controller. When setpoint temperature is reached, one or two furnaces will be shut down providing 25% minimum system firing rate with two furnaces and 12-1/2% minimum with four furnaces. A room override thermostat (Option CL9) is available for use with this system.
- AG9 • ELECTRONIC MODULATION WITH DUCTSTAT AND REMOTE TEMPERATURE SELECTION:** Control is the same as Option AG8 except that the duct sensor setpoint may be reset from a remote selector.

Includes an outside air controller. When setpoint temperature is reached, one or two furnaces will be shut down providing 25% minimum system firing rate with two furnaces and 12-1/2% minimum with three furnaces. Remote temperature selector is included. A room override thermostat (Option CL9) is available for use with this system (See illustration, right).



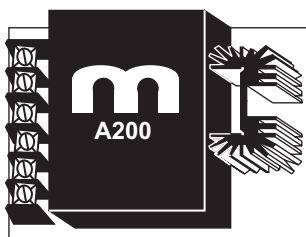
- AG21 • ELECTRONIC MODULATION WITH DDC CONTROL:** Used with customer-supplied 4-20MA or 0-10V input signal. Includes Maxitrol A200 signal conditioner and special modulating gas regulator.

Options AG7, AG8, AG9

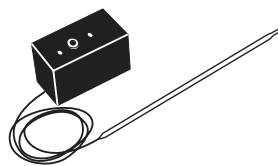


Amplifier (Maxitrol Model varies by Option and number of furnace sections)

Maxitrol A200 Signal Conditioner used in Options AG21

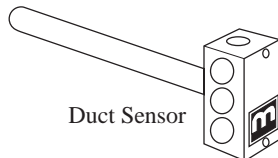


Options AG3, AG4, AG5



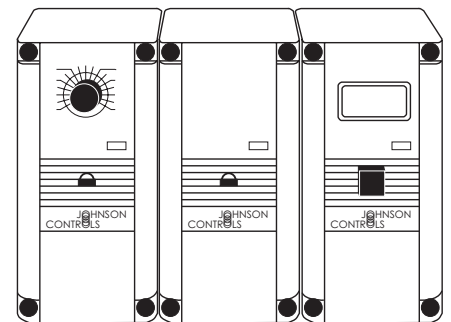
Unit-Mounted Ductstat P/N 41700 (quantity varies - see Option description)

Options AG8, AG9



Duct Sensor

Options AG15, AG16, AG17, AG18, AG22, AG23



- A = Ductstat Temperature Module P/N 115848
- B = Stage Adder Module, P/N 115849 (quantity varies - see Option description)
- C = Digital Temperature Display Module, P/N 115852 (Options AG16, AG18 and AG23 only)

***APPLICATION NOTE:** If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified.

MINIMUM QUANTITY OF RELAYS (Option BG2) REQUIRED WHEN:		Model Series	RPDBL SSCDBL	AG3	AG4	AG5	AG15 AG16	AG17 AG18	AG22 AG23
• Pkg Model w/2 or 4 furnaces			800	4	2	N/A	4	2	N/A
• with AG Option Listed (right)			1000, 1200, 1400, 1600	8	N/A	4	8	N/A	4
• plus Override Thermostat									