

ADDISON®

HOT GAS REFRIGERANT REHEAT SYSTEMS FOR PACKAGED SYSTEMS

- Helps lower energy costs and increase comfort levels- Helps to maintain specific temperature and humidity levels inside the building.
- Helps improve indoor air quality- Tempers pre-treated outside air during humid summer and part-load (high humidity) conditions.
- Helps reduce the possibility of material degradation- Delivers air at temperature and humidity levels within the recommended ASHRAE ranges.
- Helps maintain room relative humidity with sensor located in the occupied space.
- Helps optimize compressor life by reducing component cycling- Refrigerant system on 100% outside air units operates continuously when ambient conditions are above set point.
- Helps eliminate unnecessary components- No need for less-effective face and bypass dampers.

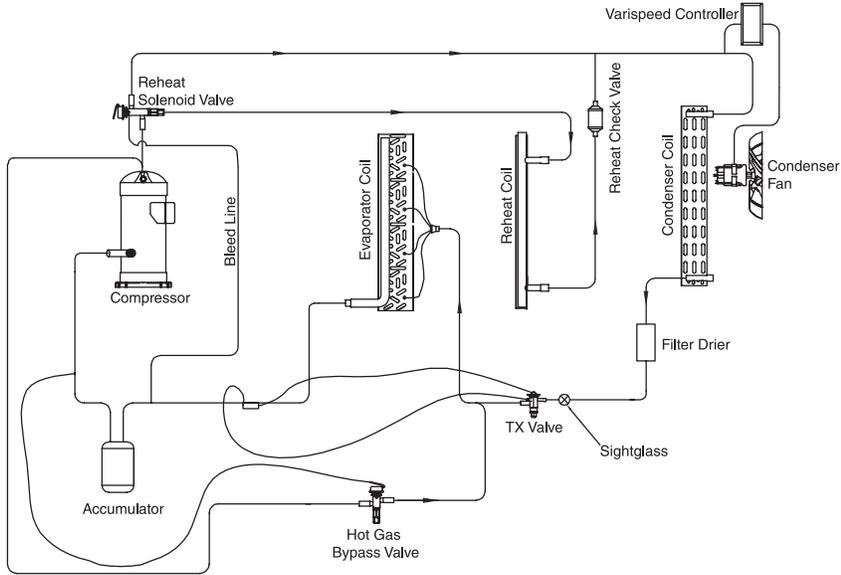
www.addison-hvac.com
Telephone: +1.407.292.4400

STANDARD REHEAT WITH STANDARD SCROLL COMPRESSOR

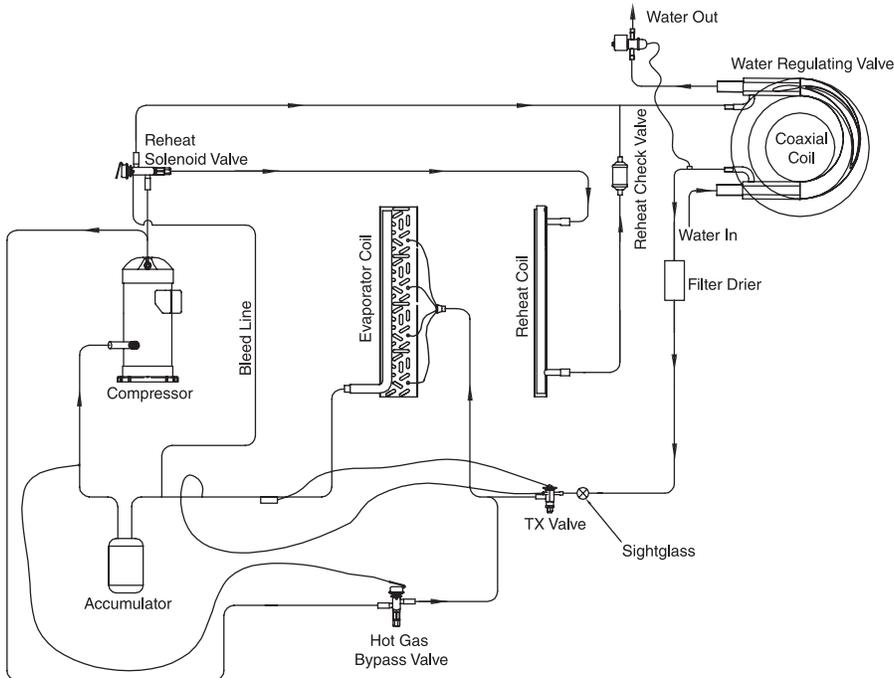
Standard reheat with a standard scroll compressor is ideal for applications requiring less-critical temperature and humidity levels, such as spot cooling applications, kitchens, factories, corridors, etc.

This standard reheat package includes reheat coil, check valves, solenoid-operated refrigerant gas control valve and one-stage thermostat. The one-row reheat coil has a face area equal to that of the evaporator coil. The thermostat is factory-mounted and controls the leaving air temperature by $\pm 3.0^{\circ}\text{F}$ ($\pm 1.6^{\circ}\text{C}$) at varying evaporator conditions.

AIRSOURCE UNITS



WATERSOURCE UNITS

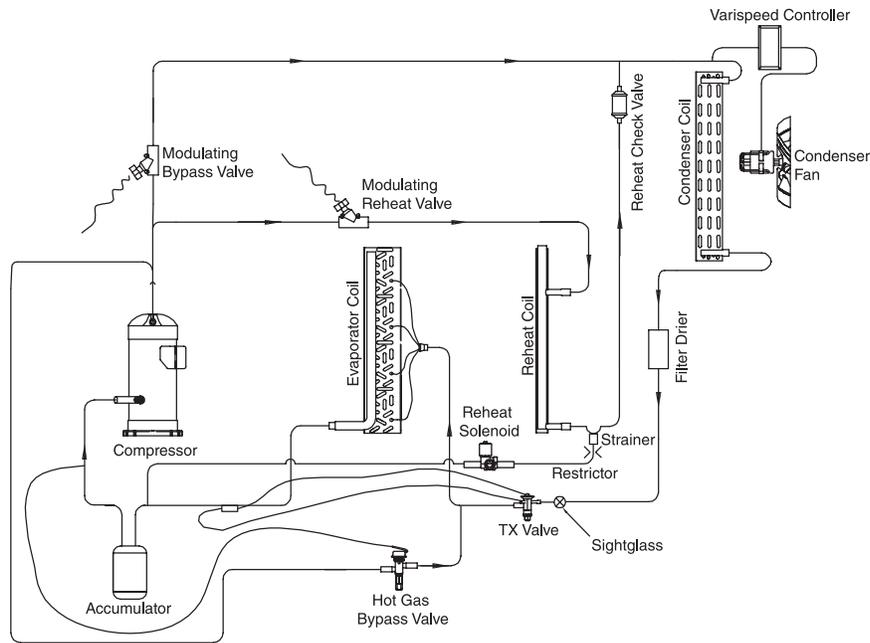


MODULATING REHEAT WITH STANDARD SCROLL COMPRESSOR

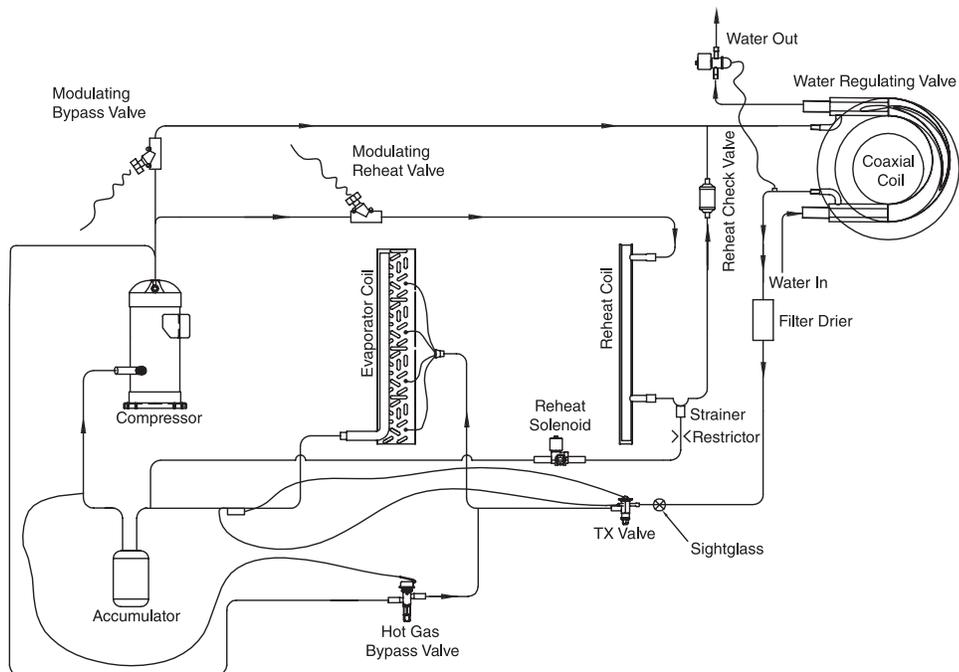
Modulating reheat with a standard scroll compressor is ideal for applications requiring a tighter range of leaving air temperature control, such as clean rooms, laboratories and outpatient operating suites.

This modulating reheat package includes reheat coil, check valve, modulating reheat/bypass valves and electronic controller. The one-row reheat coil has a face area equal to that of the evaporator coil. The electronic controller is factory-mounted and controls the leaving air temperature by $\pm 1.0^{\circ}\text{F}$ ($\pm 0.6^{\circ}\text{C}$) at varying evaporator conditions.

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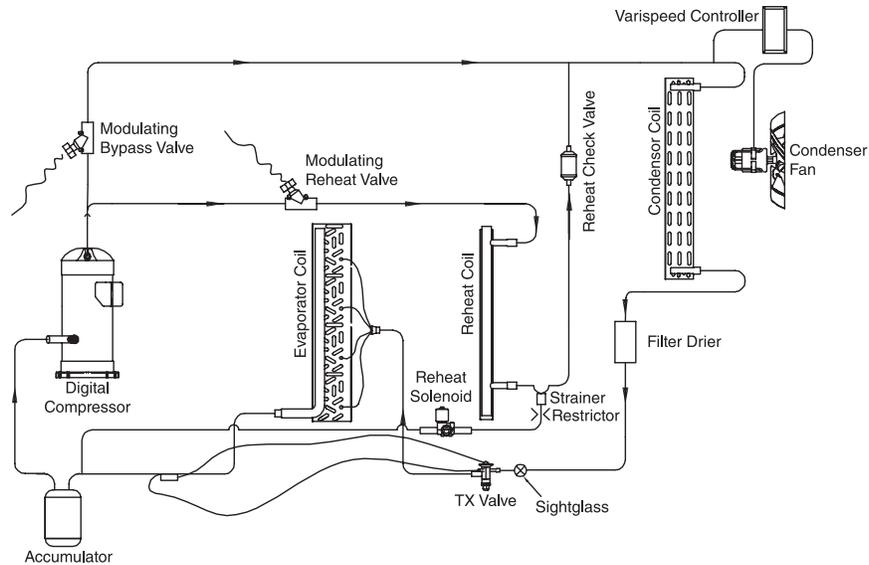


MODULATING REHEAT WITH DIGITAL SCROLL COMPRESSOR

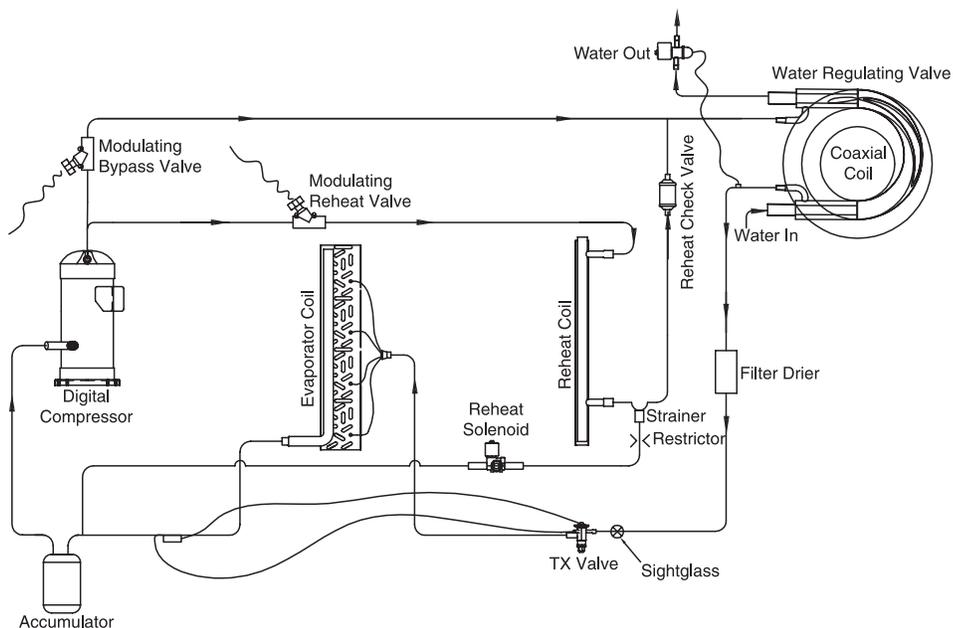
Modulating reheat with a digital scroll compressor is ideal for applications which require neutral air (70-72° F [21.1-22.2° C] leaving air) at load conditions of 60-65° F (15.6-18.3° C) ambient.

This modulating reheat package combines the components of the “modulating reheat with standard scroll compressor” package with the digital scroll compressor option, yielding a broader range of control (especially at part-load conditions). With the hot gas bypass option now no longer needed, additional energy savings can be attained with the ability to modulate compressor operation down to 10% of total capacity. The power input to the condenser fan(s) is also reduced as head pressure is tracked.

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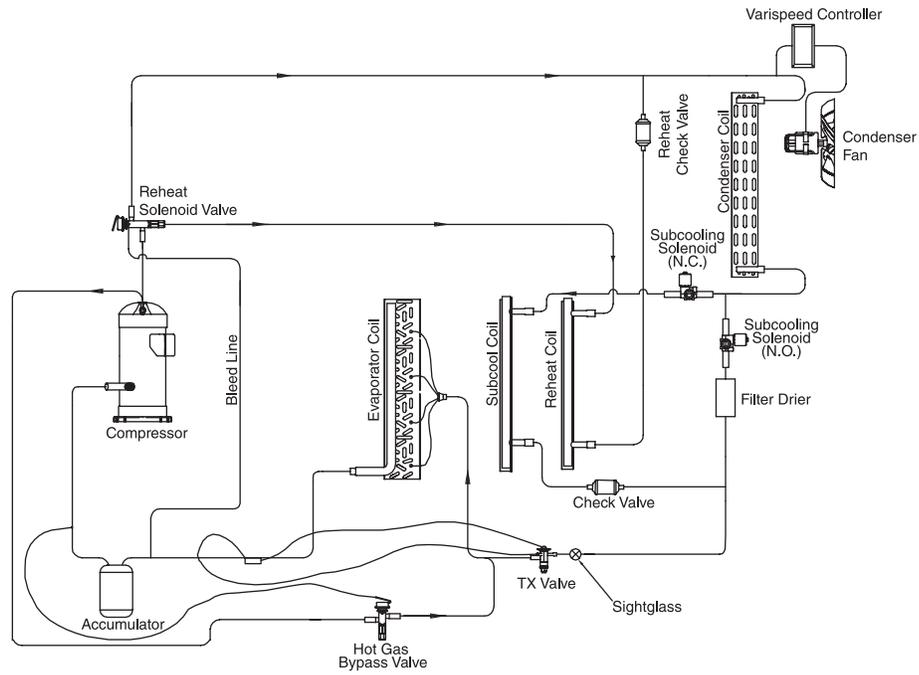


STANDARD REHEAT PLUS SUBCOOLING WITH STANDARD SCROLL COMPRESSOR

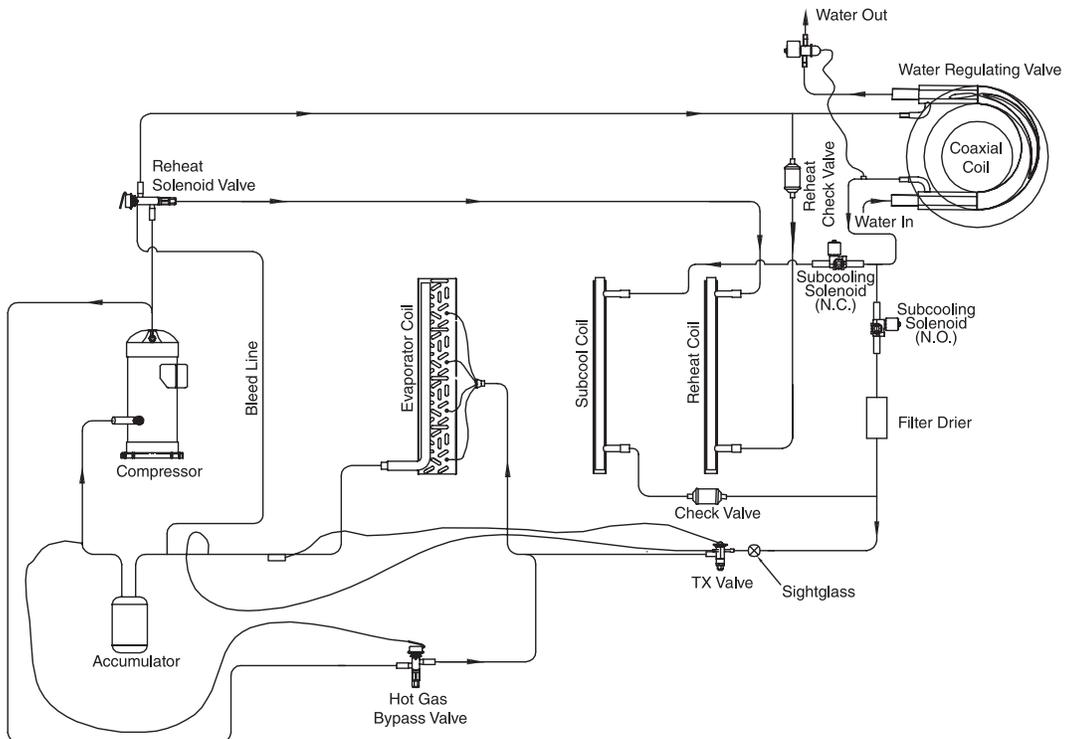
The standard reheat plus subcooling with a standard scroll compressor includes the same components as the “standard reheat with standard scroll compressor” package plus the addition of a liquid sub-cooling coil.

The one-row sub-cooling coil is installed between the evaporator and hot gas reheat coils and will help lower the leaving dew point by 2-3° F (1.1-1.6° C) with little energy penalty. The coil is piped ahead of the expansion valve and can help add up to 25° F (13.9° C) of additional sub-cooling, ensuring a continuous stream of liquid to the valve. The heat released from the liquid refrigerant is passed into the airstream as “free” reheat. As the cooled and dehumidified air passes over the sub-cooling coil, heat is absorbed and the supply air temperature increases 8-10° F (4.4-5.6° C) with 200 CFM (339 m³/h) of supply air per ton of refrigeration.

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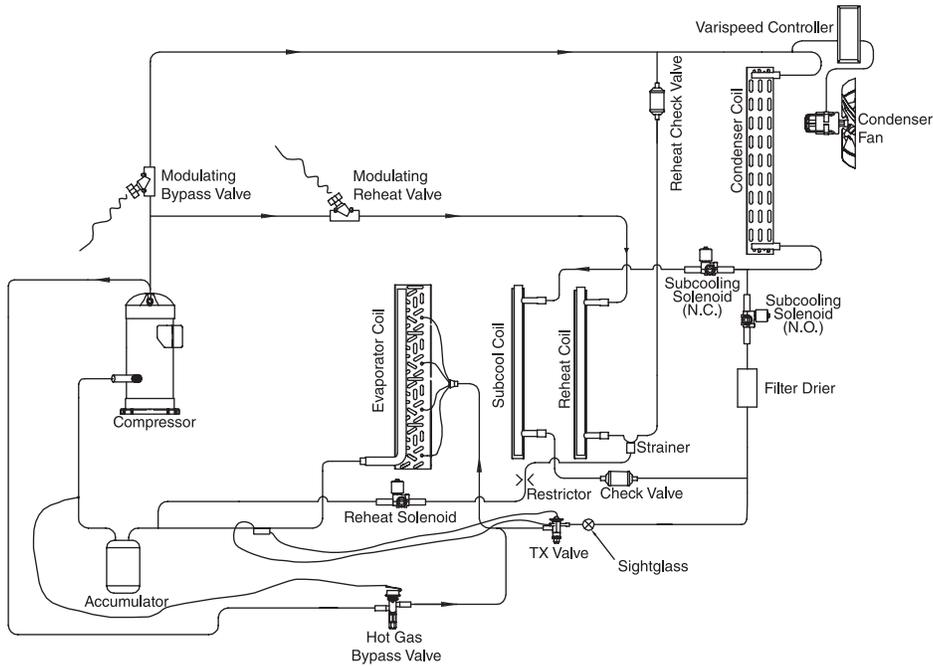


MODULATING REHEAT PLUS SUBCOOLING WITH STANDARD SCROLL COMPRESSOR

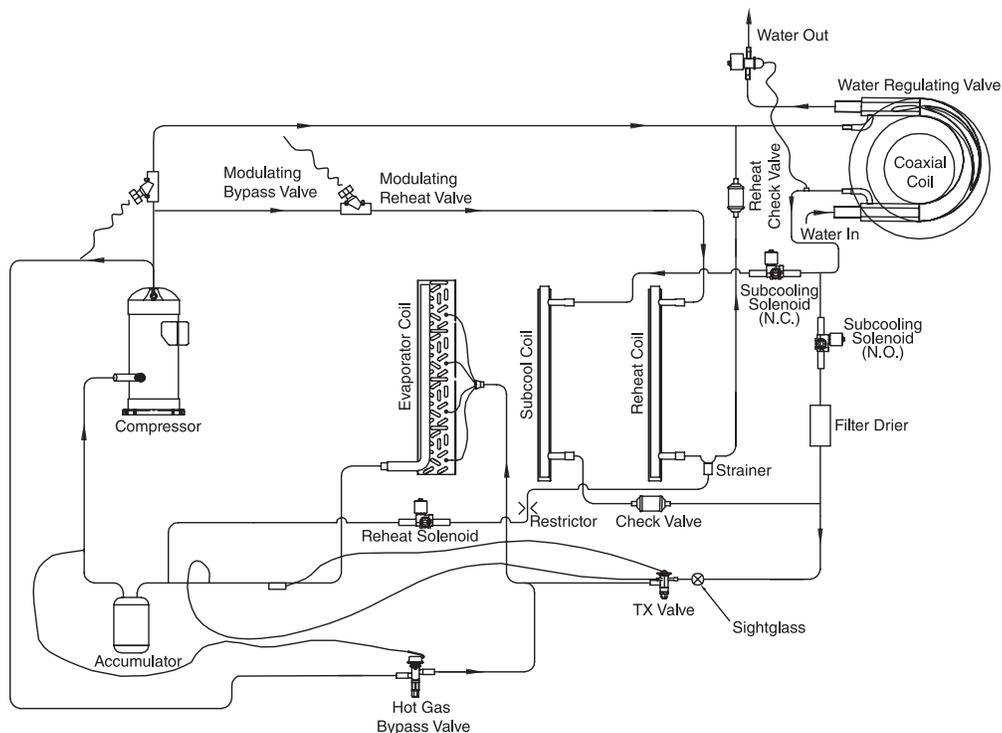
The modulating reheat plus subcooling with a standard scroll compressor includes the same components as the “modulating reheat with standard scroll compressor” package plus the addition of a liquid sub-cooling coil.

The one-row sub-cooling coil is installed between the evaporator and hot gas reheat coils and will help lower the leaving dew point by 2-3° F (1.1-1.6° C) with little energy penalty. The coil is piped ahead of the expansion valve and can help add up to 25° F (13.9° C) of additional sub-cooling, ensuring a continuous stream of liquid to the valve. The heat released from the liquid refrigerant is passed into the airstream as “free” reheat. As the cooled and dehumidified air passes over the sub-cooling coil, heat is absorbed and the supply air temperature increases 8-10° F (4.4-5.6° C) with 200 CFM (339 m³/h) of supply air per ton of refrigeration.

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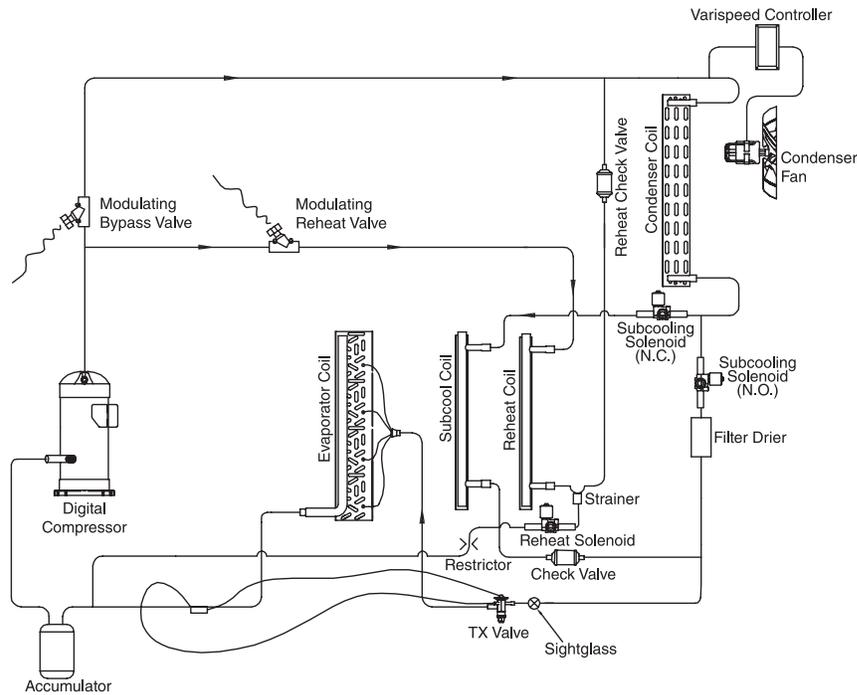


MODULATING REHEAT PLUS SUBCOOLING WITH DIGITAL SCROLL COMPRESSOR

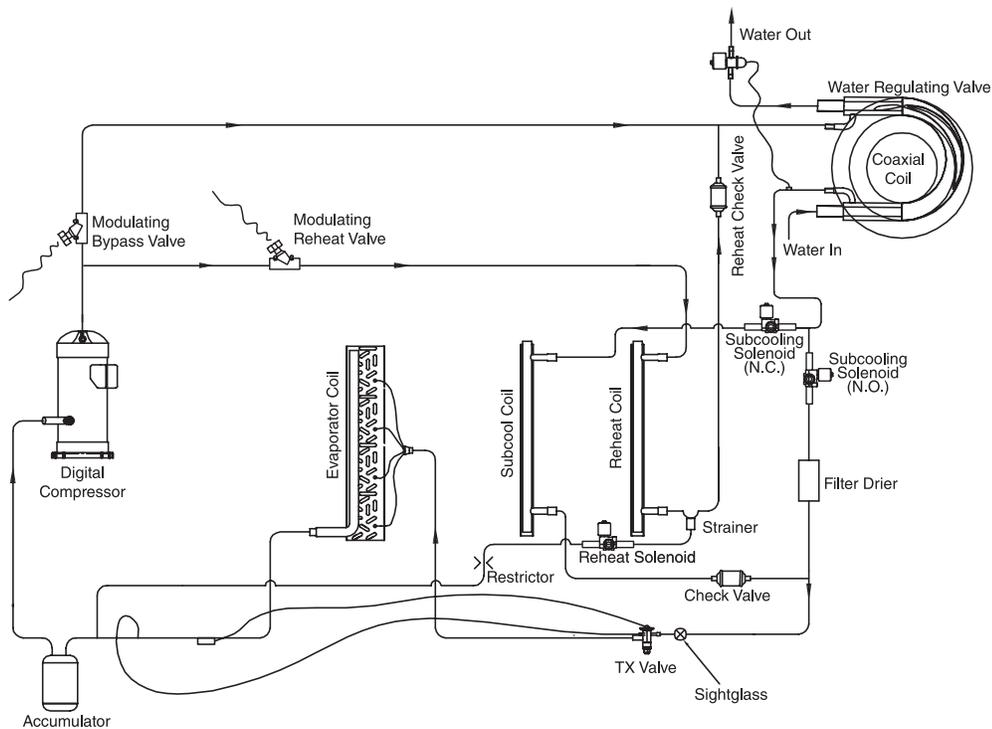
The modulating reheat plus subcooling with a digital scroll compressor includes the same components as the “modulating reheat with digital scroll compressor” package plus the addition of a liquid sub-cooling coil.

The one-row sub-cooling coil is installed between the evaporator and hot gas reheat coils and will help lower the leaving dew point by 2-3° F (1.1-1.6° C) with little energy penalty. The coil is piped ahead of the expansion valve and can help add up to 25° F (13.9° C) of additional sub-cooling, ensuring a continuous stream of liquid to the valve. The heat released from the liquid refrigerant is passed into the airstream as “free” reheat. As the cooled and dehumidified air passes over the sub-cooling coil, heat is absorbed and the supply air temperature increases 8-10° F (4.4-5.6° C) with 200 CFM (339 m³/h) of supply air per ton of refrigeration.

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THANK YOU FOR YOUR BUSINESS

ADDISON®

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Installation Code and Quarterly Inspections: All installation and service of ADDISON® equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Addison and conform to all requirements set forth in the ADDISON® manuals and all applicable governmental authorities pertaining to the installation, service, operation and labeling of the equipment. To help facilitate optimum performance and safety, Addison recommends that a qualified contractor conduct quarterly inspections of your ADDISON® equipment and perform service where necessary, using only replacement parts sold and supplied by Addison.

Further Information: Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through ADDISON® representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

These products are not for residential use.

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