

## Typical Options for Chillers and Definitions

**TOTALLY ENCLOSED FAN MOTOR** - Totally enclosed, non-ventilated fan motors are available for corrosive or hazardous environments.

**GAUGES** - Oil, high and low pressure gauges are optional on all API chillers. Gauges may be supplied with manual shut off valves.

**CYLINDER UNLOADING** - Additional steps of cylinder unloading are available to meet part load design requirements.

**HOT GAS BYPASS** - Standard hot gas bypass includes hand isolation valve, regulator and solenoid. Components are mounted, wired and piped.

**CONTROL CIRCUIT TRANSFORMER** - Factory mounted control transformer allows 115 volt control where a separate power source is not available. 115 volt convenience outlet is also available as an option.

**ALARM CIRCUIT WITH HORN** - Allows for audible alarm on oil, high or low pressure failure. Dry contacts for remote control is available.

**GUARANTEED OFF TIMER** - 3 to 30 minute timers are available to insure against compressor short cycling.

**PART WINDING START** - Factory wired part winding start to reduce in-rush power requirements during start-up.

**INDICATING LIGHTS** - When required, indicating lights can be factory installed for visual confirmation of system operation.

**PHASE FAILURE / UNDER VOLTAGE PROTECTION** - Optional factory mounted in control panel to protect against "brown-out" and phase failure conditions.

**LOW AMBIENT HEAD PRESSURE CONTROL** - Low ambient head pressure control is standard to 20°F. Additional controls are available for ambient conditions to -20°F.

**PRESSURE RELIEF** - Pressure relief valves and/or bulls-eye sight glasses are available.

**PAINT** - Enamel or epoxy paint is available. Gray color is standard, however, color selection to match specifications is available.

**PUMP PACKAGES** - Complete factory installed, wired and piped pump packages are available.

**COPPER FIN CONDENSER COILS** - Available as an option for corrosive environments. Features die formed configured fins.

**3 VALVE BYPASS** - May be factory installed to allow for drier bypass and change-out during operation.

**DISCONNECT SWITCH** - Fused and non-fused disconnects may be factory installed for single point connections.

**REFRIGERATION SPECIALTIES** - A full line of refrigeration specialties such as suction accumulators, suction/discharge vibrasorbers, hot gas mufflers, etc. are available.

**DOOR INTERLOCK** - May be installed on control panel to insure that the control panel cannot be opened until power is disconnected from the system. Additionally, a through the panel disconnect with door interlock is available.

**LOW AMBIENT LOCKOUT** - Available as an option to prevent unit operation below an adjustable set point. This prevents the unit operation in ambient below that which it was designed.

**AUTOMATIC LEAD/LAG** - Automatic lead lag switching is available to sequence starting of compressors on every system cycle.

**CIRCUIT BREAKER** - Optional on all chillers. Circuit breaker may be installed in lieu of standard system fusing.

**LOAD LIMITING PRESSURE STAT** - Available as an option to prevent nuisance safety trips on a "Hot" start. The pressure stat monitors head pressure, as a direct result of water temperature and unloads the system when water temperature becomes too high. This allows the unit to gradually satisfy the load conditions without Hot start safety trips.

**KILOWATT AND AMP METERS** - Available as a factory option for continuous monitoring of the unit kW or amperage usage. Meters with LED or needle indication are available.

**ELAPSED TIME METERS** - Meters provide a visual display of the accumulated hours that a compressor has operated. Allows for easy scheduling of preventative maintenance.

**HYDRONIC ACCESSORIES** - Full line of options for closed hydronic water systems are available including surge tanks, air separators and valves.