

NORLAKE®

# SPLIT-PAK A2L™ REMOTE REFRIGERATION SYSTEMS

Engineered for Efficiency,  
Easy Setup and Performance



**A2L**  
REFRIGERANT



# REMOTE CONDENSING UNITS

Norlake Split-Pak A2L™ condensing units are engineered for high-temperature environments.

Components are pre-wired and factory-mounted. Standard remote units up to 5 HP are available pre-charged with refrigerant and include quick-connect liquid and suction line sets up to 50 ft.

Units feature compliant scroll compressors and are available with or without matching evaporator coils. Each is factory-assembled on a galvanized steel angle leg base and offered in sizes from 1/2 to 15 HP.

Please contact us concerning larger capacities or multi-compressor system options.



**Optional head pressure control valve with heated and insulated receiver unit ensures proper operation in low ambient conditions**



**Energy-saving variable speed fans used in place of head pressure control valve in most cases**



**Standard weather hood for protection against the elements**



**Generously-sized condenser coil for dependable performance**



**Standard pre-wiring kit**



**Compliant, energy efficient scroll compressors featured in all units for added reliability**



**Standard pre-piping kit including sight glass**

Dedicated medium temp outdoor condensing units meet the DOE requirement of a minimum AWEF rating of 7.61 (Btu/W-h). Components may vary depending on horsepower and application. Consult factory for verification of standard and optional supplied components.

# EVAPORATOR COILS

Split-Pak A2L condensing units can be paired with matching evaporator coils for a complete, factory-engineered remote system.

Each evaporator is furnished with precise leak mitigation required for A2L refrigerants including the LogiTemp® electronic controller, leak sensors and safety valves.

Coils are ready to mount and available with air (off-cycle), electric, or optional LogiTemp Plus Reverse Cycle Defrost.

Other features include a properly sized expansion valve and room thermostat. Energy-efficient EC motors are standard on single-phase models.



**Safety shut-off valves and safety check valves shipped loose for field installation**



**Precise mitigation control through LogiTemp controller system**



**Pre-installed leak sensors for rapid detection**

## Built with the Installer in Mind

Split-Pak A2L systems are designed for simple, efficient installation. Tubing connections and electrical wiring can be easily traced through the circuitry. Following these pathways, an installer can have a system operational quickly, saving the customer time and money.

Split-Pak A2L systems are also designed to be easily serviced. Each component is chosen based on its ability to interchange and its availability for installers and service technicians. Individual components are conveniently located on the condensing unit base for easy access.



**Electrical wiring in Split-Pak A2L condensing units is easily traceable for the installer.**



# LOGITEMP® ELECTRONIC CONTROLLER SYSTEMS

LogiTemp is an electronic controller system designed to increase food safety while reducing energy and installation costs. [It is standard on all Split-Pak A2L systems.](#)

## Food Safety

- More precise and reliable controls than an all-mechanical system for increased food safety
- Should there be an issue with the refrigeration system, operators will know instantly through error codes and data provided online

## Installation Savings

- No wiring is required between evaporator coils and condensing units (2 pairs of low voltage wires, typically thermostat cables, are required to operate the Reverse Cycle Defrost valve and the compressor relay at the condensing unit).
- A cat5 cable is recommended for communication between the high and low pressure sides
- Less refrigerant with no winter charge necessary

## Energy Savings

- Proprietary design saves up to 27% more energy than an all-mechanical system
- Demand Defrost technology initiates defrosts only as needed for further energy savings
- Defrost time, when initiated, is also greatly shortened
- Reverse Cycle Defrost option provides additional savings (see sidebar below)
- Save 2-4% more energy with the fan cycle option which saves electricity by cycling the evaporator fans during the compressor's off cycle

## Connectivity

- Software allows remote monitoring and programming using any device with a wireless internet or cabled (cat 5) connection
- No need for a service tech to climb onto a roof or enter the walk-in to adjust refrigeration systems
- Constant data access allows users to improve refrigeration performance and avoid service issues

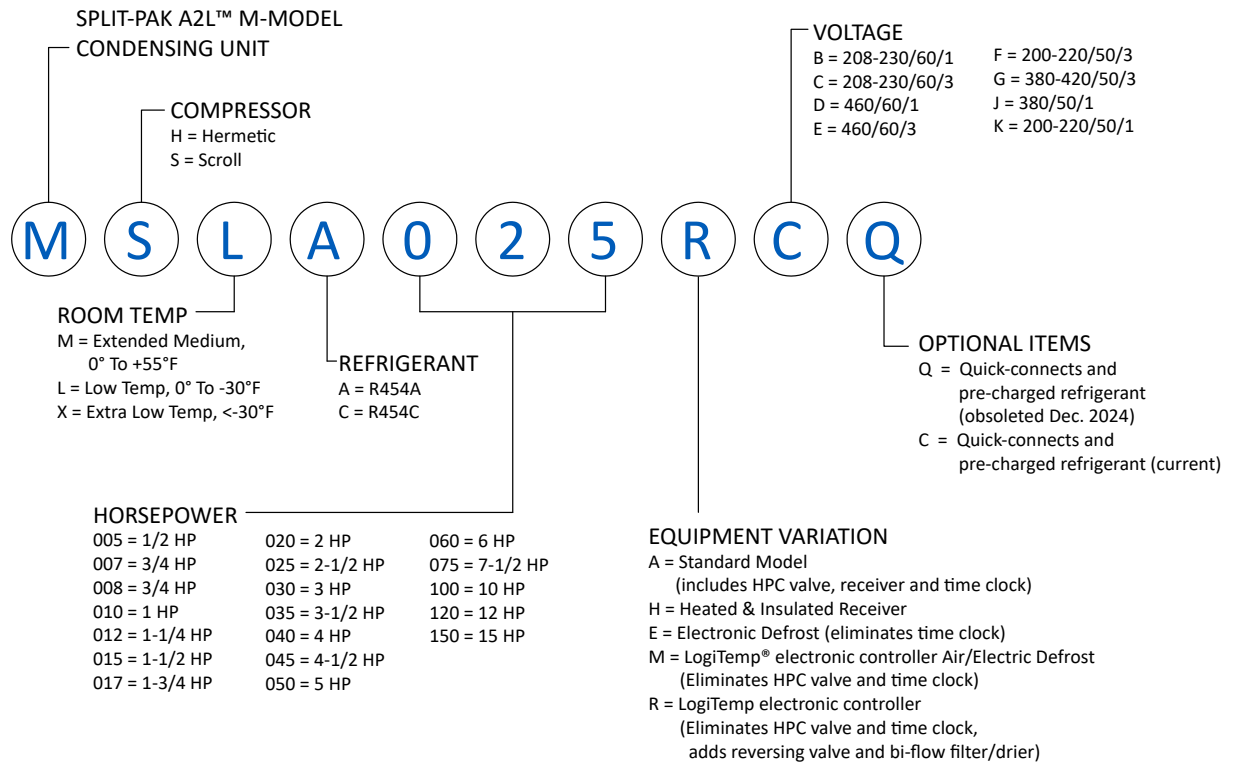
## Logitemp® Plus With Reverse Cycle Defrost Option

As an option on Split-Pak A2L systems, the LogiTemp Plus controller adds a reverse cycle defrost valve to the system which offers several advantages:

- Helps prevent food spoilage by completely and rapidly removing ice build-up in evaporator coils
- Reduces defrost energy usage by up to 80% over traditional electric heaters
- The average defrost time for a freezer with electric heaters is 20-30 minutes. Reverse cycle can perform a defrost in as little as 3-5 minutes in a freezer or 1½-2 minutes in a cooler. Shorter defrost times help protect food integrity.
- Adds refrigerant savings due to reduced charge



# CONDENSING UNIT MODEL NUMBER GUIDE



# EVAPORATOR COIL MODEL NUMBER GUIDE

## TYPE VARIATION

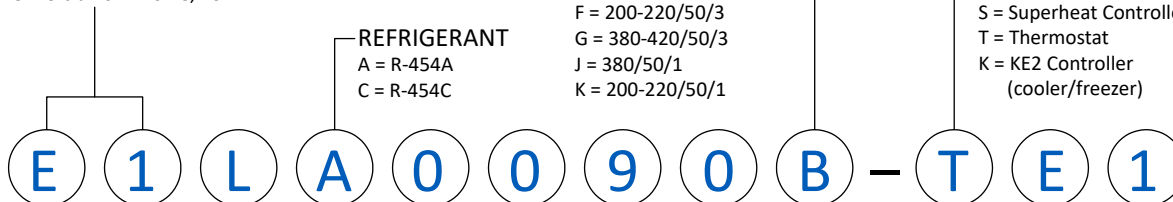
E1 = Low Profile, 6 FPI, 10°TD  
 E2 = Medium Profile, 6 FPI, 10°TD  
 E3 = High Profile, 6 FPI, 10°TD  
 E4 = All Profile, 4 FPI, 10°TD  
 L1 = Dual Flow, 6 FPI, 10° TD  
 L2 = Low Velocity, 6 FPI, 10° TD  
 L3 = Ultra-Low Profile, 10° TD

## VOLTAGE

A = 115/60/1  
 B = 208-230/60/1  
 C = 208-230/60/3  
 D = 460/60/1  
 E = 460/60/3  
 F = 200-220/50/3  
 G = 380-420/50/3  
 J = 380/50/1  
 K = 200-220/50/1

## CONTROLLER

TYPE  
 M = LogiTemp® or  
 LogiTemp® Plus  
 S = Superheat Controller  
 T = Thermostat  
 K = KE2 Controller  
 (cooler/freezer)



## REFRIGERANT

A = R-454A  
 C = R-454C

## TEMP RANGE/ TXV TYPE

M = Extended Medium Temp,  
 +5° to +55°F  
 L = Low Temp, 0° to -30°F  
 X = Extra-Low Temp, <-30°F

## BTUH CAPACITY IN HUNDREDS

(Assumed 10° TD)  
 Capacity Correction Factors  
 (Multiplier)  
 -20° Room Temp x 0.96  
 -10° Room Temp x 1.00  
 0° Room Temp x 1.04  
 +30° Room Temp x 0.98  
 +35° Room Temp x 1.00  
 +40° Room Temp x 1.02

## DEFROST SCHEME

A = Air Defrost  
 E = Electric Defrost  
 R = Reverse Cycle  
 G = Reverse Cycle With  
 Hot Gas Drain Pan Loop  
 (Plasma & Rack Applications Only)

## FACTORY PRE-ASSEMBLY OF

### COMPONENTS

Standard (blank) = Shipped Loose TXV & Temp Control  
 1 = Pre-Assembled With TXV & Temp Control Mounted  
 2 = TXV Mounted, Temp Control & Solenoid Mounted & Wired  
 3 = Slave Evaporator (LogiTemp Only)  
 Q = Quick Connects and Pre-Assembly

END suffix following the voltage ID indicates quick connects for  
 Endless merchandisers.



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