

### • NDRLHPA HIGH PERFORMANCE REAR LOAD ROLL-IN DAIRY MERCHANDISERS •

**Refrigeration Data:**

MODEL	CASE LENGTH	CASE USAGE	CAPACITY (BTUH / FT)		EVAPORATOR (°F)	UNIT SIZING (°F)	DISCHARGE AIR		AVG. REF. CHARGE (LBS/FT)
			PARALLEL	CONVENTIONAL			TEMPERATURE (°F)	VELOCITY (FPM)	
NDRLHPA	8'/12'	DAIRY w/Shelving	407*	462*	+25**	+23	+28.7	648***	0.61****
NDRLHPA	8'/12'	DAIRY w/ Roll-In Carts	416*	463*	+27**	+25	+31.2	652***	0.61****

\* Capacity data listed for cases with 2 rows of T-8 canopy lights and 1 row of T-8 top lights. Adjustments must be made to this base rating for each option installed on this case. ADD 23 BTUH/FT for each row of optional lighted shelves. For sizing all refrigeration equipment other than TYLER, use conventional BTUH values.

\*\* Evaporator temperature is based on the saturated pressure leaving the case.

\*\*\* Air velocity measured 1 hour after defrost at the top discharge air duct using an ALNOR JR. velometer with a scoop.

\*\*\*\* This is an average refrigeration charge per foot based on R22 and R404A refrigerant usage.

† **NOTE: ADD 800 BTUH/FT OF CASE OPENING TO THE NORMAL WALK-IN COOLER LOAD. USE LOW VELOCITY COILS TO BACK UP THE REAR LOAD ROLL-IN CASE FOR CEILING HEIGHTS UNDER 9'. FOR CEILING HEIGHTS OVER 9', USE HIGH VELOCITY FORCED AIR STYLE COILS.**

FOR SPECIFIC COMPRESSOR SIZING INFORMATION, REFER TO TYLER APPLICATIONS FOR RACK SYSTEM COMPRESSORS AND/OR THE COMPRESSOR MANUFACTURERS FOR SINGLE COMPRESSORS. FOR LINE SIZING INFORMATION, REFER TO THE MISCELLANEOUS SECTION "BUFF" IN THE TYLER SPECIFICATION GUIDE.

**Electrical Data:**

Fans and Heaters (120 Volt)

MODEL	CASE LENGTH	FANS / CASE	TOTAL STANDARD FANS				TOTAL ANTI-SWEATS	
			AMPS		WATTS		DISCHARGE AIR	
			UPPER	LOWER	UPPER	LOWER	AMPS	WATTS
NDRLHPA	8'	8	3.20	1.36	284.0	120.8	0.42	50.0
NDRLHPA	12'	12	4.80	2.04	426.0	181.2	0.63	75.0

T-8 Lighting with Electronic Ballasts (120 Volt)

MODEL	CASE LENGTH	CANOPY LIGHTS* (2 ROWS)		TOP LIGHTS* (1 ROWS)		SHELF LIGHTS - PER ROW								MAX. LIGHTING (7 ROWS)	
		AMPS	WATTS	AMPS	WATTS	AMPS				WATTS				AMPS	WATTS
						1	2	3	4	1	2	3	4		
NDRLHPA	8'	0.95	114.0	0.50	60.0	0.90	1.20	1.60	1.90	108.0	144.0	192.0	228.0	3.35	402.0
NDRLHPA	12'	1.40	168.0	0.70	84.0	1.35	1.80	2.40	2.85	162.0	216.0	288.0	342.0	4.95	594.0

\* Standard lighting for this case is 2 rows of T-8 canopy lights and 1 row of T-8 top lights.

**Defrost Data:**

DEFROST TYPE*	DEFROSTS PER DAY	DURATION TIME (MIN)	TERM. TEMP. (°F)	ELEK. THERMOSTAT / AIR SENSOR SETTINGS			EPR SETTINGS **		CONVENTIONAL COMPRESSOR SETTINGS ***				DEFROST WATER (LB / FT / DAY)
				USAGE	CUT IN	CUT OUT	R22 (PSIG)	R404A (PSIG)	R22 (PSIG)		R404A (PSIG)		
									CUT-IN	CUT-OUT	CUT-IN	CUT-OUT	
NDRLHPA-TIME OFF	6	24	---	MED TEMP w/Shelving	29°F	27°F	49	62	47	36	60	47	0.75
	6	24		MED TEMP w/Roll-In Carts	31°F	29°F	51	65	49	36	63	47	1.8

\* All high performance cases are OFF CYCLE defrost.

\*\* **NOTE:** 24 minutes is for EPR with suction stop for defrost isolation. Defrost times increase by four minutes when defrost isolation is pump down.

\*\*\* If EPR is utilized, use the settings shown in the chart. ADD 0.5# to EPR setting for each 1000 foot rise in elevation.

\*\*\*\* Required setup for a conventional unit uses an electronic thermostat to assure accurate temperature control.

**CASE CIRCUITS:** NDRLHPA case requires four separate 120V circuits: 1) an Upper Case Fan Circuit, 2) a Lower Case Fan Circuit, 3) an Anti-Sweat Heater Circuit, and 4) a Shelf & Canopy Light Circuit.

The minimum size coils required behind the Roll-In cases are; 8' case use a Model EFA – 130M and for a 12' case use a Model EFA – 190M. Upsize the coils as necessary based on the revised total load and size at a 9°F temperature differential. The case coils and the cooler units coils can be run on separate refrigeration circuits, but both must be defrosted at the same time.

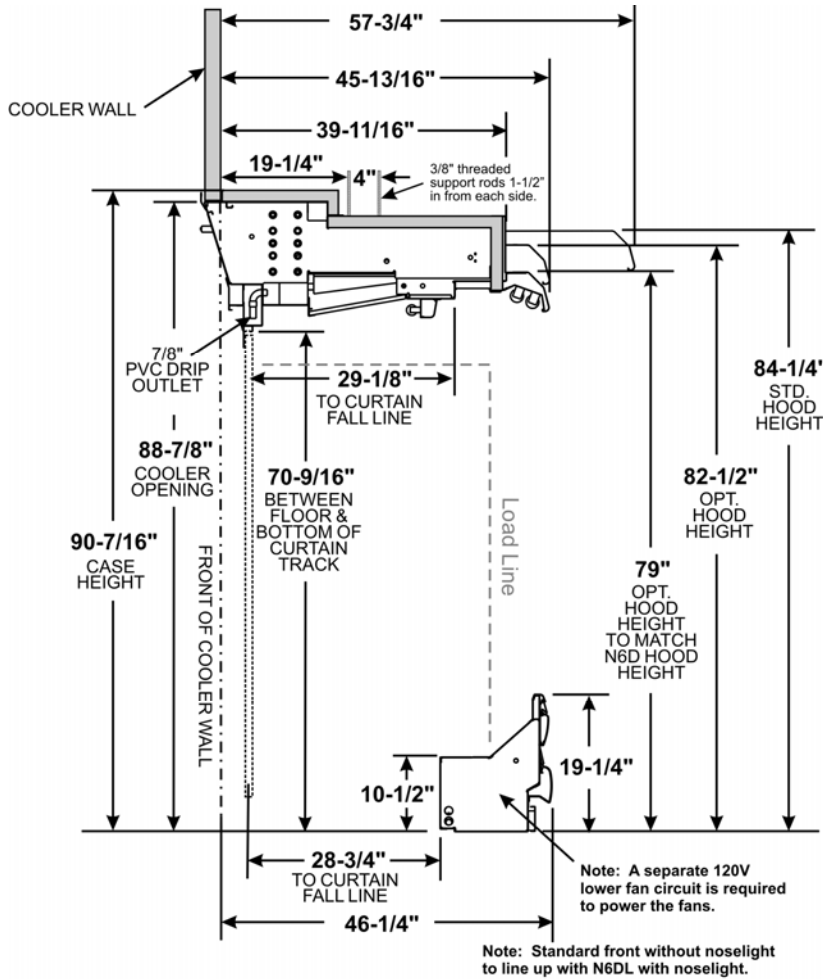
**NOTE:** The cooler and case should be controlled by a Thermostat & Solenoid or EPR. Defrost needs to be at the same time.

**UL SANITATION** approved in accordance with ANSI/NSF – 7.

**CASE BTUH REQUIREMENTS** are calculated to produce approximately the indicated entering-air temperature with absolute maximum operating ambient limits of **75°F & 55RH**.

The information contained herein is based on technical analysis and/or tests performed in a controlled lab environment that are consistent with industry practices, and is intended as a reference for system sizing and configuration purposes only and for use by persons having technical skill at their own discretion and risk. Conditions of use are outside of Tyler's control and we do not assume and hereby disclaim any liability for results obtained or damages incurred through application of or reliance on the data presented, including but not limited to specific energy consumption with any particular model or installed application. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

**NDRLHPA CROSS SECTION**



**COOLER COIL MOUNTING LOCATIONS**

