

**SPECIFICATION SHEET**

- **NFX/NFSX/NCSX SOLID FRONT OPEN WELL FF/IC/MED TEMP MERCHANDISERS •**
- **NFSGX/NCSGX GLASS FRONT OPEN WELL FF/IC/MED TEMP 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)	
NFX/NFSX	8'/12'	FROZEN FOOD	313*	327*	-25**	-28	-15	200***	0.28****
NCSX	8'/12'	ICE CREAM	390*	400*	-35**	-38	-25	200***	0.28****
NFX/NFSX	8'/12'	MED TEMP	314*	322*	+15**	+13	+22	200***	0.28****
NFSGX	8'/12'	FROZEN FOOD	366*	382*	-25**	-28	-15	200***	0.28****
NCSGX	8'/12'	ICE CREAM	458*	470*	-35**	-38	-25	200***	0.28****
NFSGX	8'/12'	MED TEMP	367*	376*	+15**	+13	+22	200***	0.28****

- \* 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 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.

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 T-8 Lighting with Electronic Ballasts (120 Volt)

MODEL	CASE LENGTH	FANS / CASE	TOTAL STD FANS		TOTAL ECM FANS		TOTAL T-8 LIGHTING (PER ROW)			
			AMPS	WATTS	AMPS	WATTS	REAR SHELF LIGHT AMPS	REAR SHELF LIGHT WATTS	OPT. SUPRSTR. LIGHT AMPS	OPT. SUPRSTR. LIGHT WATTS
NFX	8'	2	0.68	60.4	0.44	22.0	N/A	N/A	0.50	60.0
NFSX/NCSX/ NFSGX/ NCSGX	8'	2	0.68	60.4	0.44	22.0	0.50	60.0	0.50	60.0
NFX	12'	3	1.02	90.6	0.66	33.0	N/A	N/A	0.70	84.0
NFSX/NCSX/ NFSGX/ NCSGX	12'	3	1.02	90.6	0.66	33.0	0.70	84.0	0.70	84.0

**NOTE:** Optional shelving superstructures with lights have same electrical requirements per row of lights as shown in this chart. A separate electrical supply for superstructure lights must be provided since there is no plug in from the superstructure to the case.

Heaters (120 and 208 Volt)

MODEL	CASE LENGTH	TOTAL ANTI-SWEAT HEATERS (120 V)						GLASS RETAINER		HEATED GLASS (120 V)		DEFROST HEATER (208 V)	
		DISCHARGE AIR AMPS	DISCHARGE AIR WATTS	REAR SHELF (W/ LIGHT) AMPS	REAR SHELF (W/ LIGHT) WATTS	REAR SHELF (W/O LIGHT) AMPS	REAR SHELF (W/O LIGHT) WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
NFX	8'	0.95	114.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.9	1,435
NFSX	8'	N/A	N/A	1.25	150.0	2.20	264.0	N/A	N/A	N/A	N/A	6.9	1,435
NCSX	8'	N/A	N/A	1.25	150.0	2.20	264.0	N/A	N/A	N/A	N/A	13.8	2,870
NFSGX	8'	N/A	N/A	1.25	150.0	2.20	264.0	0.94	113.0	0.66	79.0	6.9	1,435
NCSGX	8'	N/A	N/A	1.25	150.0	2.20	264.0	0.94	113.0	0.66	79.0	13.8	2,870
NFX	12'	1.26	152.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.3	2,142
NFSX	12'	N/A	N/A	1.70	206.0	2.95	358.0	N/A	N/A	N/A	N/A	10.3	2,142
NCSX	12'	N/A	N/A	1.70	206.0	2.95	358.0	N/A	N/A	N/A	N/A	20.6	4,285
NFSGX	12'	N/A	N/A	1.70	206.0	2.95	358.0	1.25	150.0	1.55	186.0	10.3	2,142
NCSGX	12'	N/A	N/A	1.70	206.0	2.95	358.0	1.25	150.0	1.55	186.0	20.6	4,285

**CASE CIRCUITS:** In addition to the 208V defrost circuit, there is the 120V case fan circuit plus the 120V case anti-sweat heater circuit. Shelf or canopy lights require a separate 120V circuit which can be switched at the back room for convenience in controlling the lights.

**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.

208 VOLT DEFROST (AMPS)														
FT	8	12	16	20	24	28	32	36	40	44	48	52	56	60
FF/MED 1 PH	6.9 TG-30	10.3 TG-30	13.8 TG-30	17.2 TG-30	20.6 TG-30	24.1 TG-40	27.5 TG-40	30.9 TG-40	34.3 TG-50	37.8 TG-50	41.2 TG-50	44.6 TG-50	N/A	N/A
FF/MED 3 PH	N/A	N/A	12.0 TG-3-30	15.0 TG-3-30	18.0 TG-3-30	15.0 TG-3-30	18.0 TG-3-30	18.0 TG-3-30	21.0 TG-3-30	25.0 TG-3-40	28.0 TG-3-40	30.0 TG-3-40	33.0 TG-3-50	36.0 TG-3-50
IC 1 PH	13.8 TG-30	20.6 TG-30	27.6 TG-40	34.4 TG-50	41.2 TG-50	(Separate circuit recommended due to high amp draw) N/A								
IC 3 PH	N/A	N/A	42.0 TG-3-30	30.0 TG-3-40	36.0 TG-3-50	30.0 TG-3-40	36.0 TG-3-50	36.0 TG-3-50	43.0 TG-3-50	30/36 TG-3-50-50	36/36 TG-3-50-50	36/30 TG-3-50-50	36/36 TG-3-50-50	36/36 TG-3-50-50
CASE-TO-CASE SUCTION LINE SUB-FEED BRANCH LINE SIZING														
R404A FF	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"
R22 MED	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"
R404A IC	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"

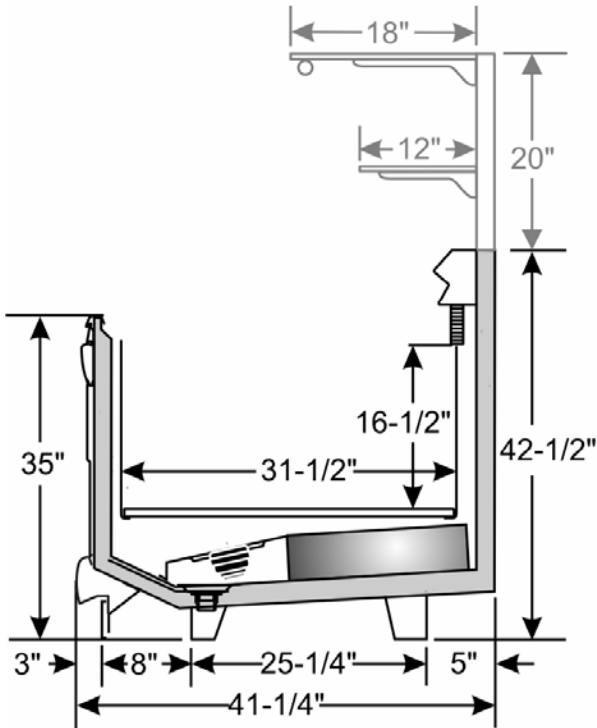
**Defrost Data:**

DEFROST TYPE*	DEFROSTS PER DAY	DURATION TIME (MIN)	TERMINATION (°F)	EPR SETTINGS **		DEFROST WATER (LB / FT / DAY)
				R22 (PSIG)	R404A (PSIG)	
ELECTRIC / FF	1	60	50	7.4	14	N/A
ELECTRIC / IC	1	36	50	2.6	8.1	N/A
ELECTRIC / MED	1	36	50	37	49.5	N/A
HOT GAS / FF	2-3	20-25	55*	7.4	14	N/A
HOT GAS / IC	1	25-30	55*	2.6	8.1	N/A
HOT GAS / MED	2-3	16-20	55*	37	49.5	N/A

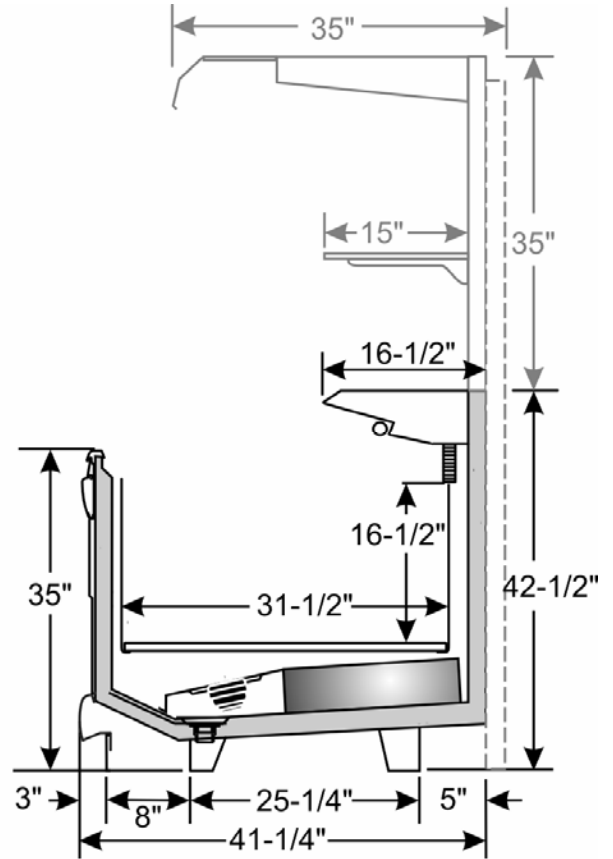
\* If an Electronic Sensor is used for termination, it should be set at 70°F termination temperature. The sensor must be located in the same location as the defrost termination klixon for that defrost type.

\*\* Set EPR to give this pressure at the case.

**NFX CROSS SECTION  
With Optional DSAL Superstructure**

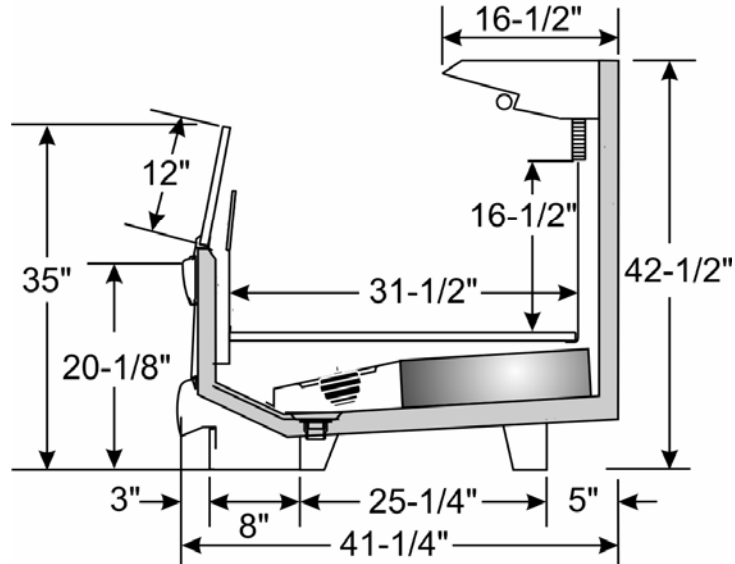


**NFSX/NCSX CROSS SECTION  
With Optional DNS Superstructure**



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**NFSGX/NCSGX CROSS SECTION**



**NFX/NF(C)SX/NF(C)SGX FLOOR PLAN**

