D5NG MEDIUM TEMP GLASS DOOR MERCHANDISERS

TYLER SPEC GUIDE SHEET — 550 Btu/Ft. 30F Discharge Air @20F Suction (Add 92 Btu/Ft when using 1500 ma lighting)

CASES 8'	CASES 12'	LINEAL FEET	75°F 24°C Store 1000 BTU/Hr Req'd
		6'	3.3
1		8'	4.4
	1	12'	6.6
2		16'	8.8
1	1	20'	11.0
	2	24'	13.2
2	1	28'	15.4
1	2	32'	17.6
	3	36'	19.8
2	2	40'	22.0
1	3	44'	24.2
	4	48'	26.4
2	3	52'	28.6
1	4	56'	30.8
	5	60'	33.0
2	4	64'	35.2
1	5	68'	37.4
	6	72'	39.6

CONDENSING UNIT SELECTION CHART R 12

AIR ENTERING THS CONDENSING UNIT. THN (Remote) Units can be selected provided condenser is sized for 15-20F° T.D. or less.

THW Water	90F 32C	85F 30C	90F 32C	95F 35C	100F 38C	105F 41C
	75S					
			100S			
				150S		
					200S	
						300H
						300S
						500H
						460S
						750H

LINE SIZING

SUCTION LINE — Equivalent Feet

M 15	E 30	T 45	E 60	R 75
50	100	150	200	250

LIQUID

LIQUID
3/8
3/8
7/8
1
1 1/8
1 3/8
1 1/2
1 5/8
5/8

First Half Size Range - STep Size
Second Half - FULL SIZE
See Note Below

ELECTRICAL DATA

DEFROST: ONE PHASE TOTAL AMPS	DEFROST: DEFROST CONTROL REQUIRED -3=3 Phased	DEFROST: THREE PHASE HIGH LEG(S)	115 VOLT DATA: CASE FANS CIRC. AMPS	GLASS DOORS: OPT. 49" Amps†	GLASS DOORS: STD. 59" Amps†	LITES 1500ma Option 800ma Std.A.
			1.6	1.9	2.1	2.9 / 1.6
	ELECTRIC DEFROST NOT REQUIRED		2.4	2.8	3.0	3.7 / 2.1
	Use TC Control		4.0	3.9	4.5	6.0 / 3.1
			4.8	5.6	6.0	7.4 / 4.2
			6.4	6.7	7.5	9.7 / 5.2
			8.0	7.8	9.0	12.9 / 6.2
			8.8	9.5	10.5	13.4 / 7.3
			10.4	10.6	12.0	15.6 / 8.3
			12.0	11.7	13.5	17.4 / 9.3
			12.8	13.4	15.0	18.3 / 10.4
			14.4	14.5	16.5	20.6 / 11.4
			16.0	15.6	18.0	24.0 / 12.4
			16.8	17.3	19.5	13.5
			18.4	18.4	21.0	14.5
			20.0	19.5	22.5	15.5
			20.8	21.2	24.0	16.5
			22.4	22.3	25.5	17.6
			24.0	23.4	27.0	18.6

†ANTI-SWEAT HEAT. There is one circuit for all of the A-S heat on these cases. The mullions operate all of the time, but the electrically heated door frame circuit is wired so that a Tyler ES-4 energy saver control can be plugged in at the top of the case to cycle this heat off and on in response to store humidity. With no ES-4 control, a jumper plug completes the circuit.

ANNUAL COMPARATIVE OPERATING COST PER FOOT OF CASE (C.O.C.)

CASE	FANS	Opt. GLASS Std.		LIGHTS◊	208V Defrost	Compressor Unit	TOTALS@1cKWH
	1.83	2.83	3.24	1.35		5.92	$11.83/12.34/Ft.
8'	150W	238Wt 98Wc	274Wt 107Wc	255W		W/ES-4 Door Cycling	$11.24/11.66/Ft.
12'	250W	387Wt 161Wc	444Wt 185Wc	370W		NET SAVINGS	$.59 or $.68/Ft.

CONTROL SETTINGS

DEFROST CONTROL		PRESSURE	
PER DAY MODE FAILSAFE	MINUTES	CUT IN	34#
1 60 minute/Day Off-Cycle Def.		CUT OUT	12-18#

Case Ft.x C.O.C."Cost"per year@1c/KWH. **USE TOTALS TO COMPARE CASES & OPTIONS! Watts @115V. Opt. Front, 49" Doors, Std. Front, 59" Doors. ES-4 Door Heat Cycling Savings based on 50% off time of cyclable load. (Wt=total Watts, Wc=cyclable W.)**

CASE BTUH REQUIREMENTS are calculated to produce approximately the indicated entering case air temp with operating ambient limits of 75F & 55%RH. **SUCTION LINE SIZING:** Select the point of intersection of the case line-up and the equivalent footage. Allow for all fittings in addition to actual line length. **STEP SIZING** is suggested for selections falling in the first half of a size range. Pipe one size smaller can be used on the 50' of the run closest to cases when entire run is 100 equivalent feet or more. **LIQUID LINE SIZING** is based on **5# pressure drop in 150' of line.** See complete line size charts in front of the **TYLER SPEC GUIDE BOOK.**

D5FG GLASS DOOR MERCHANDISER FOR FROZEN FOOD

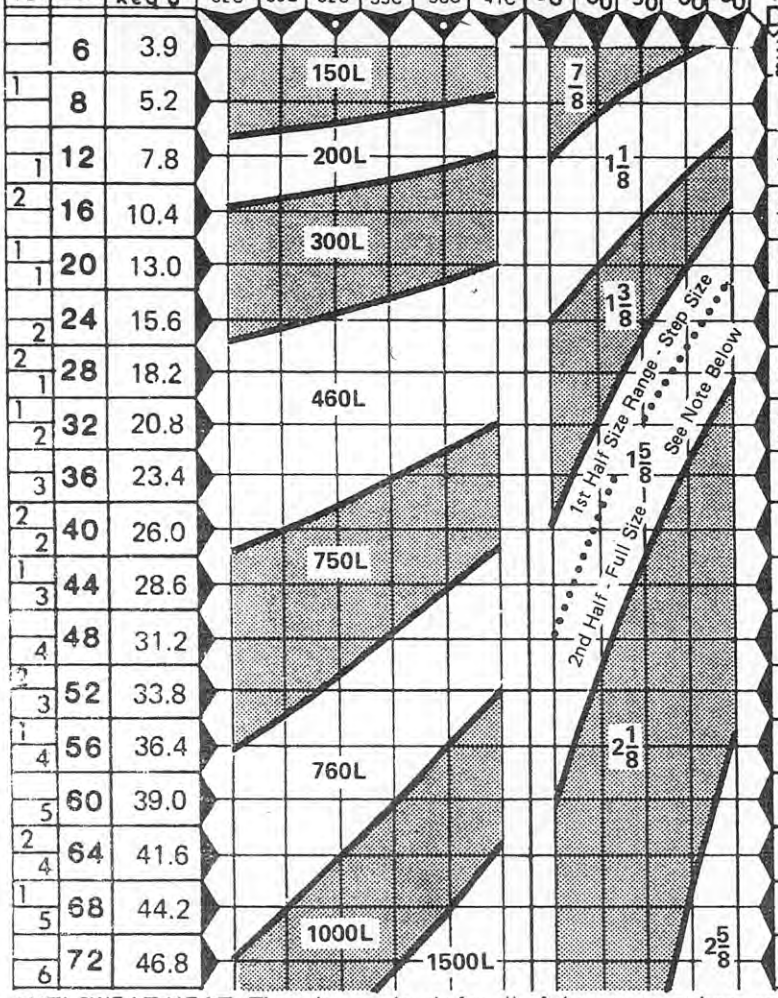
TYLER SPEC GUIDE SHEET **650 Btuh/Ft. @–20F** Suction with –4F Discharge Air. **(Add 92 Btu/Ft. when using 1500 ma lighting)**

CASES 8'	CASES 12'	LINEAL FEET	75°F (24°C) Store 1000 Btu/hr Req'd
	6	6	3.9
1		8	5.2
	12	12	7.8
2		16	10.4
1	1	20	13.0
	24	24	15.6
2	1	28	18.2
1	2	32	20.8
	36	36	23.4
2	2	40	26.0
1	3	44	28.6
	48	48	31.2
2	3	52	33.8
1	4	56	36.4
	60	60	39.0
2	4	64	41.6
1	5	68	44.2
	72	72	46.8

CONDENSING UNIT SELECTION CHART R502

AIR ENTERING THS CONDENSING UNIT — THN (Remote) Units can be selected provided condenser is sized for 10-15°F T.D. or less.

THW Water	85F 30C	90F 32C	95F 35C	100F 38C	105F 41C
90F 32C					



LINE SIZING

SUCTION LINE — Equivalent Feet

M 15	E 30	T 45	E 60	R 75
50	100	150	200	250

LIQUID

208 VOLT DEFROST			115 VOLT DATA			
ONE PHASE TOTAL AMPS	DEFROST CONTROL REQUIRED -3=3 Phased	THREE PHASE HIGH LEG(S)	CASE FANS CIRC. AMPS	GLASS DOORS OPT. 49" Amps†	GLASS DOORS STD. 59" Amps†	LITES 800ma STD.
9.6	TG-30		1.6	3.4	3.9	*2.9 1.6
13.0			** .9 2.4	5.0	5.7	3.7 2.1
19.2			1.5 4.0	7.8	9.1	6.0 3.1
26.0	TG-40 TG-3-30	23A	1.8 4.8	10.0	11.4	7.4 4.2
32.2	TG-3-40	28A	2.4 6.4	12.8	14.8	9.7 5.2
38.4	TG-50 TG-3-40	34A	3.0 8.0	15.6	18.2	12.9 6.2
	TG-3-40	28A	3.3 8.8	19.6		13.4 7.3
	TG-3-40	34A	3.9 10.4			15.6 8.3
		34A	4.5 12.0			17.4 9.3
	TG-3-50	39A	4.8 12.8			18.3 10.4
	TG-3-40-40	34/28	5.4 14.4			11.4
	TG-3-40-40	34/34	6.0 16.0			12.4
ELECTRIC DEFROST ONLY!		34/23	6.3 16.8			13.5
		34/34	6.9 18.4			14.5
		34/34	7.5 20.0			15.5
		34/34	7.8 20.8			16.5
		34/34	8.4 22.4			17.6
		34/34	9.0 24.0			18.6

USE SUITABLE CIRCUITS

*1500ma option

**OPT. HEF FAN MOTORS

†ANTI-SWEAT HEAT: There is one circuit for all of the ant-sweat heat on these cases. The mullions are wired to operate all the time but the electrically heated door glass and door frame circuit is wired so a Tyler ES-4 energy saver control can be plugged in on top to the case, to cycle this heat off & on in response to store humidity. The drier the store air, the less energy used. If the ES-4 control is not used, a jumper plug in the receptacle on top of the case completes the circuit.

D5FG cases are suitable for Frozen Food or Ice Cream usage if properly machined. ELECTRIC DEFROST IS STANDARD.(208V amps x 1.06 =220V amps) OPTIONAL GAS DEFROST IS AVAILABLE; CASE IS DESIGNATED D5FG(8 or 12)G when so equipped. The fan circuit powers drain pan heaters during defrost & does not exceed fan load. EXCEPT if HEF are used, 8' case=1.8A, 12' case=2.2A @115V

ANNUAL COMPARATIVE OPERATING COST PER FOOT OF CASE (C.O.C.)

CASE	FANS	Opt. GLASS	Std.	LIGHTS	208V Defrost	Compressor Unit	TOTALS@1c/KWH
	1.83	7.05	8.10	1.35	1.22	10.59	$22.04/23.09/Ft.
8'	150W	638Wt 288Wc	723Wt 333Wc	255W	2700W	W/ES-4 Door Cycling	$20.34/21.14/Ft.
12'	250W	966Wt 466Wc	1109Wt 534Wc	370W	4000W	NET SAVINGS	$ 1.70/$ 1.95/Ft.

CONTROL SETTINGS

DEFROST CONTOL				PRESSURE	
PER DAY	MODE	FAILSAFE	MINUTES	CUT IN	20–25 *
1	ELECTRIC	60		CUT OUT	9–12 *
2	GAS DEFR.	26			

Case Ft. x C.O.C.="Cost" per year @ 1c/KWH. **USE TOTALS TO COMPARE CASES & OPTIONS! Watts@115V. 208VA x 1.06=220VA** *Opt. Front= 49" Doors, Std. Front= 59" Doors. ES-4 Door Heat Cycling Savings based on 50% off time of cyclable load. (Wt=total W. Wc=cyclable W.)

CASE BTUH REQUIREMENTS are calculated to produce approximately the indicated entering case air temp with operating ambient limits of 75F & 55%RH. **SUCTION LINE SIZING**: Select the point of intersection of the case line-up and the equivalent footage. Allow for all fittings in addition to actual line length. **STEP SIZING** is suggested for selections falling in the first half of a size range. Pipe one size smaller can be used on the 50' of the run closest to cases when entire run is 100 equivalent feet or more. **LIQUID LINE SIZING** is based on **5# pressure drop in 150' of line.** See complete line size charts in front of the **TYLER SPEC GUIDE BOOK.**

D5FG GLASS DOOR MERCHANDISER FOR ICE CREAM

TYLER SPEC GUIDE SHEET 750 Btu/Ft. @ –30F Suction with –12F Discharge Air, (Add 92 Btu/Ft. when using 1500 ma lighting)

CONDENSING UNIT SELECTION CHART R502

CASES	LINEAL FEET	75°F (24°C) Store 1000 BTU/Hr. Req'd.
8	6' 2 Drs	4.5
12	8' 3 Drs	6.0
1	12' 5 Drs	9.0
2	16' 6 Drs	12.0
1 1	20' 8 Drs	15.0
2	24' 10 Drs	18.0
2 1	28' 11 Drs	21.0
1 2	32' 13 Drs	24.0
3	36' 15 Drs	27.0

(Drs = Doors)

AIR ENTERING THS CONDENSING UNIT. THN (Remote) Units can be selected provided condenser is sized for 10-15F T.D. or less.

THW Water 90F 32C	85F 30C	90F 32C	95F 35C	100F 38C	105F 41C
200L					
300L					
460L					
750L					
760L					
1000L					

LINE SIZING

SUCTION LINE

M 15	E 30	T 45	E 60	R 75

Equivalant Feet

50	100	150	200	250
7/8				
1-1/8				
1ST Half Size Range, Step Size				
1-3/8, Full Size				
2ND Half, See Note Below				
1-5/8				
2-1/8				

LIQUID 3/8 1/2 5/8

ELECTRICAL DATA

208 Volt Defrost: ONE PHASE TOTAL AMPS	DEFROST CONTROL REQ'D –3=3 Phased	THREE PHASE HIGH LEG(S)	115 VOLT DATA: CASE FANS CIRC* AMPS	GLASS DOORS OPT. 49" Amps†	GLASS DOORS STD. 59" Amps†	LITES 800ma Std. A
9.6	TG-30		▲.6 1.6	3.4	3.9	⊗2.9 1.6
13.0			.9 2.4	5.0	5.7	3.7 2.1
19.2			1.5 4.0	7.8	9.1	6.0 3.1
26.0	TG-40 TG-3-30	23A	1.8 4.8	10.0	11.4	7.4 4.2
32.2	TG-3-40	28A	2.4 6.4	12.8	14.8	9.7 5.2
38.4	TG-50 TG-3-40	34A	3.0 8.0	15.6	18.2	12.9 6.2
REQUIREMENT ELECTRICAL DEFROST ONLY		28A	3.3 8.8	19.6		13.4 7.3
		34A	3.9 10.4	Use Suitable Circuits		15.6 8.3
		34A	4.5 12.0			17.4 9.3

▲Optional HEF Motors ⊗1500MA OPTION

† ANTI-SWEAT HEAT: There is one circuit for all the anti-sweat heat on these cases. The mullions are wired to operate all of the time, but the electrically heated door glass and door frame is wired so a Tyler ES-4 energy saver control can be plugged in at the top of the case to cycle this heat off & on in response to store humidity. The drier the store air, the less energy is used. If the ES-4 control is not used, a jumper plug in the receptacle on top of the case completes the circuit.

OTHER CIRCUITS: a 115 volt fan circuit plus a 115 volt case light circuit are also required. Lights can be controlled from the back room or by the standard case light toggle switch.

D5FG cases are suitable for Frozen Food or Ice Cream usage as properly machined. ELECTRIC DEFROST IS STANDARD (208V amps x 1.06 = 220V amps). OPTIONAL GAS DEFROST AVAILABLE. Case designated D5FG (8 or 12)G when so equipped. The fan circuit powers drain pan heaters during defrost - does not exceed fan load, except if HEF motors are used. Size circuit using 1.8A for 8' and 2.2A for 12'.

NOTE: Thermostats & Liquid Solenoids are required for Ice Cream applications w/boosters to prevent running cases too cold.

SIX FOOT CASE NOTE: See Information on Page LT-20(D-6). Case is 64-1/4" Long - - 68-3/4" With Two Ends

High Efficiency Fan Motors (HEF) can save $.91/Ft. in C.O.C. figures shown below

ANNUAL COMPARATIVE OPERATING COST PER FOOT OF CASE (C.O.C.)

CASE	FANS	Opt. GLASS Std.		LIGHTS	208V Defrost	Compressor Unit	TOTALS@1c/KWH
	1.83	7.05	8.10	1.35	1.22	$13.69	$25.14/26.18/Ft
8'	150W	638 Wt 288 Wc	723 Wt 333 Wc	255W	2700W	W/ES-4 Door Cycling	$23.44/24.23/Ft
12'	250W	966 Wt 466 Wc	1109 Wt 534 Wc	370W	4000W	NET SAVINGS	$1.70 or $1.95/Ft.

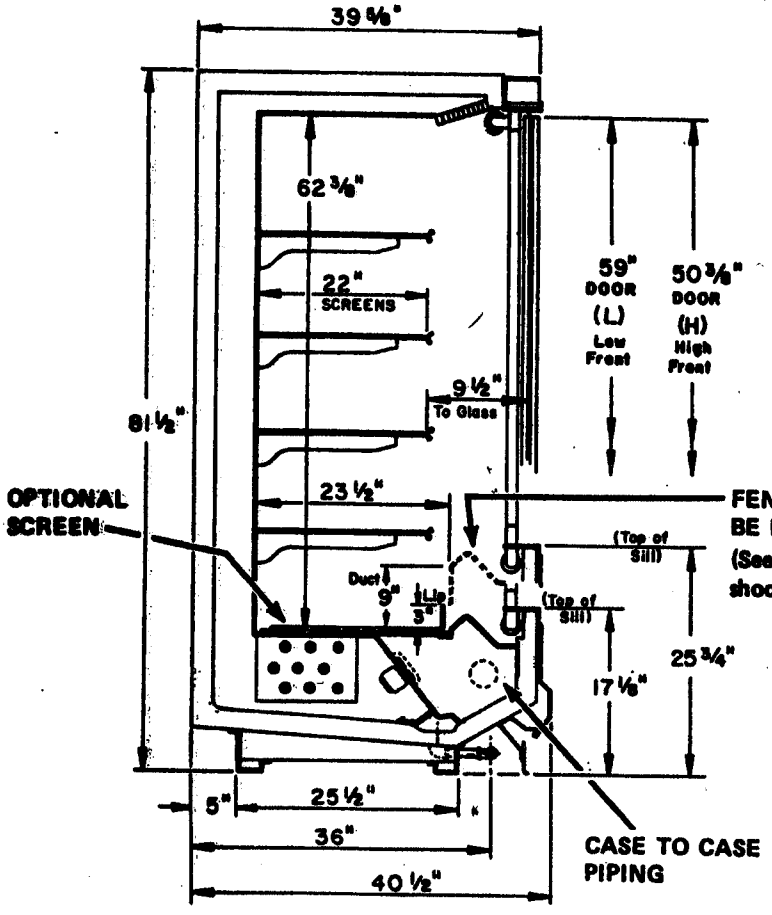
CONTROL SETTINGS

DEFROST CONTROL		PRESSURE	
PER DAY MODE FAILSAFE 1 ELECTRIC 60 2 GAS DEFR. 26	MINUTES	CUT IN	18#
		CUT OUT	8#

Case Ft x C.O.C. = "cost" per year @ 1c/KWH. USE TOTALS TO COMPARE CASES & OPTIONS! Watts @ 115V. 208 VA x 1.06 = 220VA
*Opt. Front, 49" Doors - Std. Front, 59" Doors. ES-4 Door Heat Cycling Savings based on 50% off time of cyclable load. (Wt. = Total W./Wc = cyclable W.)

CASE BTUH REQUIREMENTS are calculated to produce approximately **–12F** entering case air temp with operating ambient limits of **75F & 55%RH. SUCTION LINE SIZING:** Select the point of intersection of the case line-up and the equivalent footage. Allow for all fittings in addition to actual line length. **STEP SIZING** is suggested for selections falling in the first half of a size range. Pipe one size smaller can be used on the 50' of the run closest to cases when entire run is 100 equivalent feet or more. **LIQUID LINE SIZ**ing is based on ***5#* pressure drop in 150' of line.** See complete line size charts in front of the **TYLER SPEC GUIDE BOOK.**

CASE CROSS SECTION AND FLOOR PLAN



CROSS SECTION

CASE FEATURES

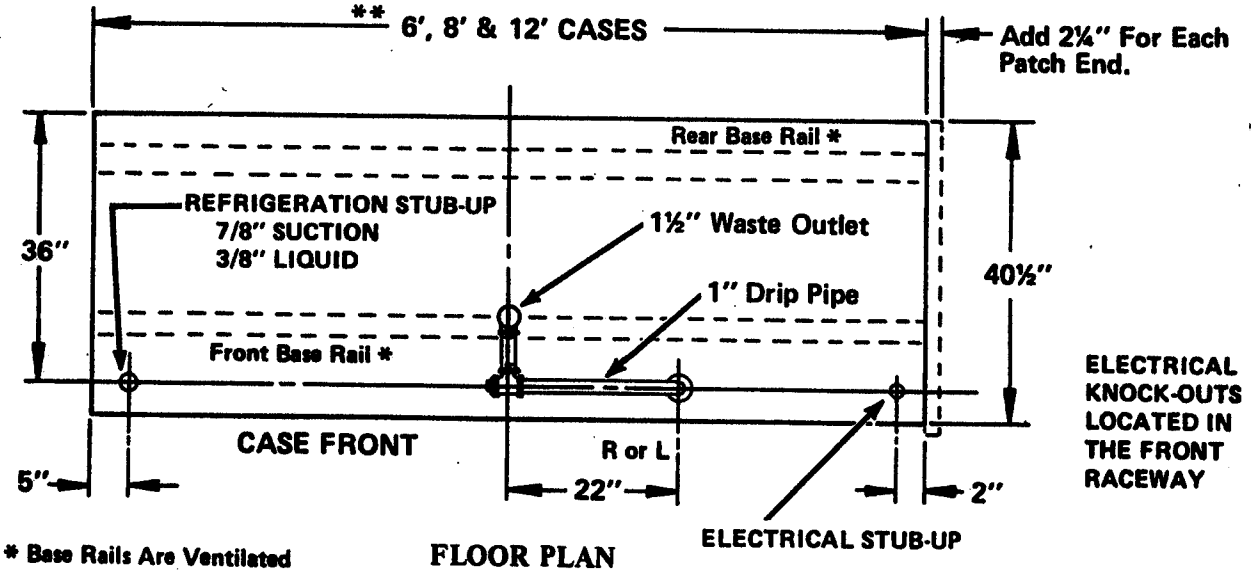
- Removable Fan Panels
- Removable Front Ducts
- Ventilated Base Rails
- 2 Horizontal Rows - 800 ma Lights Standard
- 22" Powder Coated Wire Shelves
- Tempered, Full View, Heat Reflective Glass Doors
- Ample Space For Case to Case Piping
- 1½" Diameter Cast-in Brass Drain - Fully Accessible
- Price Tag Moulding Standard

DOOR WIDTHS:

6' Case - 31" Nominal
(Clear opening - 28¾" Nominal)
8' Case - 31" Nominal
(Clear opening - 28¾" Nominal)
12' Case - 28" Nominal)
(Clear opening - 25½" Nominal)

**** CASE LENGTHS:**

6' CASES = 64¼" LONG
8' CASES = 96" LONG
12' CASES = 144" LONG
(Add 2¼" for each patch end)



* Base Rails Are Ventilated

FLOOR PLAN