



Inter-Flo

Medium Profile Unit Cooler

Catalog 420



Air Defrost - 12,600 to 69,000 BTUH
Electric Defrost - 10,500 to 52,000 BTUH
Hot Gas Defrost - 10,500 to 52,000 BTUH

Walk-In
Coolers & Freezers

Medium to Large
Applications

WITT

435 Washington St. • P.O. Box 580 • Collierville, TN 38027 • (901) 853-2770 • FAX (901) 853-8622



Features

- **APPLICATIONS** — Inter-Flo unit coolers are ideally suited for a wide range of coolers and freezers. IFA models are designed for use in coolers 35° F and above. IFE, IFG, and IFH units are suited for 35° F coolers (if mechanical defrost is required) and for room temperatures down to -30° F.
- **SIZES** — There are 37 models offered with capacities from 10,500 BTUH up to 69,000 BTUH @ 10° TD. Air flow ranges from 3,320 CFM to 9,130 CFM.
- **HOUSING** — Each unit is constructed with a heavy-gauge mill-finish aluminum housing—light weight yet extremely durable. All drain pans are hinged for convenient servicing and maintenance. Slotted hangers are provided for fast installation.
- **COIL** — Seamless copper tubes are staggered and mechanically expanded into heavy-gauge corrugated aluminum fins to assure maximum heat transfer. Die-formed fin collars are provided for accurate fin spacing. Heavy-gauge hangers are fastened directly to the tube sheet of the coil to provide high structural strength.
- **REFRIGERANTS** — Inter-Flo unit coolers are designed for most refrigerants including R-22, R-404A, R-134a, R-502 and R-507. Please specify system refrigerant requirements when ordering. A separate compartment is provided for all refrigerant connections which allows ample room for internal mounting of expansion valves. Inter-Flo units can also be used with chilled water or glycol solutions—contact the factory for selection.
- **FANS** — Powerful heavy-duty aluminum fans are individually balanced to provide vibration free operation.
- **WIRE FAN GUARDS** — Standard heavy-gauge wire fan guards are epoxy coated for corrosion resistance. Optional air straighteners are available for increased air throw where required.
- **MOTORS** — All motors are high-efficiency PSC ball-bearing type—life lubricated and thermally protected. Inter-Flo unit coolers use either 1/8 HP 1050 rpm or 1/3 HP 1075 rpm motors.
- **ELECTRICAL** — Inter-Flo units are available in 60 Hz 115/1, 208/230/1, 208/230/3, 460/1 or 460/3 power characteristics. They can also be operated on 50 Hz 220/1, 220/3, 380/1 and 380/3 power. All components are factory wired to convenient screw-type terminal blocks. A large compartment is supplied for all electrical components—easily accessible by removing the end panel.
- **AIR DEFROST** — For use in coolers +35° F and above. Complete air defrost systems are available from Witt.
- **ELECTRIC DEFROST** — The heaters are located inside the refrigeration coil itself to promote a more efficient and rapid defrost cycle than other designs. This arrangement enables the energy from the heaters to be conducted from the center of the core out, providing an even defrost pattern. All heaters are factory-installed and wired to screw-type terminal blocks, allowing for quick field hook-up or change-over from 1 to 3 phase with the installation of jumper wires. Three separate controls (fixed defrost termination, fan delay and heater safety controls) are factory-mounted for optimum performance of each control function. Drain pans are heated for fast reliable drainage. Defrost Kits are available as options. Complete Electric Defrost Systems are available from Witt. Contact the factory for details.
- **HOT GAS RE-EVAP DEFROST** — These units include separate fixed defrost-termination and fan-delay controls which are factory-mounted for optimum performance of each control function. A hot gas drain pan circuit is provided to eliminate the need for electric heat and additional wiring. **A heat exchanger/re-evaporator is supplied as standard with every unit.** Complete Hot Gas Re-Evap systems are available from Witt – contact the factory for details.
- **HOT GAS REVERSE-CYCLE DEFROST** — These units include separate fixed defrost-termination and fan-delay controls which are factory-mounted for optimum performance of each control function. A hot gas drain pan circuit is provided to eliminate the need for electric heat and additional wiring. This unit is also used for Alternating Evaporator System.

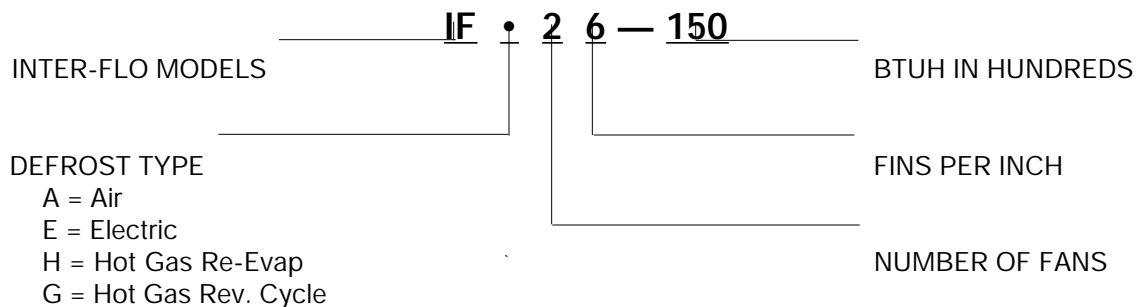
Options

- *Copper Fins*
- *Coated fins (air and hot gas defrost models only)*
- *Galvanized steel housing*
- *Insulated drain pan*
- *Custom circuiting for chilled water or glycol applications*
- *High-throw fan guards (air straighteners)*
- *Reheat Kit*
- *Adjustable Defrost Termination/Fan Delay Control*
- *Contact factory for other requirements*

Air Throw

Air throw is greatly affected by installation variables. Optimum air throw is obtained by high ceiling with no interference from beams or return air restrictions. Inter-Flo unit coolers will throw air up to 50 feet under ideal conditions; 60 to 70 feet with air straighteners.

NOMENCLATURE





PERFORMANCE DATA †

Air Defrost Units

8 FPI		
Model Number IFA	CFM	BTUH +25° F S.T.
28-151	3530	15100
28-210	3320	21000
38-260	5300	26000
38-320	4750	32000
28-410	5250	41000
28-450	5020	45000
38-540	8250	54000
38-690	7470	69000

4 FPI		
Model Number IFA	CFM	BTUH +25° F S.T.
24-126	3830	12600
24-169	3620	16900
34-224	5750	22400
34-287	5200	28700
24-340	5710	34000
24-395	5430	39500
34-465	8990	46500
34-585	8140	58500

6 FPI		
Model Number IFA	CFM	BTUH +25° F S.T.
26-145	3680	14500
26-191	3470	19100
36-240	5510	24000
36-305	4960	30500
26-370	5460	37000
36-415	8620	41500
36-490	8580	49000
36-620	7770	62000

50 Hertz Applications:
Divide the BTUH requirement by 0.94, then select
the unit cooler directly from the table above.

† BTUH @ 10° TD — R-22, 404a, 507

Electric & Hot Gas Defrost Units

6 FPI						
Model Number IF*	CFM	Suction Temperature ° F				
		-30	-20	-10	+10	+25
26-130	3780	12400	13000	13600	14200	15000
26-150	3470	14300	15000	15600	17000	19100
36-185	5510	17600	18500	19300	21000	24000
26-270	5720	25700	27000	28100	29200	30500
26-320	5480	30500	32000	33300	35600	37000
36-385	9130	36700	38500	40100	43600	49000
36-460	9090	43800	46000	47900	52000	54800
36-520	8190	49500	52000	54100	58800	62000

4 FPI						
Model Number IFA	CFM	BTUH +25° F S.T.	BTUH +25° F S.T.	BTUH +25° F S.T.	BTUH +25° F S.T.	BTUH +25° F S.T.
24-105	3940	10000	10500	11100	11700	12100
24-140	3620	13400	14000	14600	15900	16900
34-175	5750	16700	17500	18200	19800	22400
24-230	5930	21900	23000	24000	26000	28700
24-325	5430	31000	32500	33800	36800	40100
34-390	8990	37100	39000	40600	44100	46000
34-510	8150	48600	51000	53100	57700	58500

* E = Electric defrost G = Hot gas defrost - Reverse cycle H = Hot gas defrost - Re-evap

PHYSICAL DATA Air Defrost Units

8 FPI											
Model Number IFA	Fan Dia. (in)	Motor Data			Optional Heat Exch. (Loose)	Re-Evap Heat Exch. (Loose)	Connections (in.)				Ship Wt. (lbs.)
		Qty.	HP	RPM			Liquid ODS	Suction ODS	H.G. ODS	Drain MPT	
28-151	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	125
28-210	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	145
38-260	14	3	1/8	1050	RXH250	N/A	1/2	1 1/8	N/A	3/4	295
38-320	14	3	1/8	1050	RXH250	N/A	1/2	1 1/8	N/A	3/4	330
28-410	20	2	1/3	1075	RXH250	N/A	7/8	1 3/8	N/A	3/4	370
28-450	20	2	1/3	1075	RXH250	N/A	7/8	1 1/8	N/A	3/4	390
38-540	20	3	1/3	1075	RXH350	N/A	7/8	1 3/8	N/A	3/4	430
38-690	20	3	1/3	1075	RXH350	N/A	7/8	1 3/8	N/A	3/4	540
6 FPI											
26-145	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	120
26-191	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	140
36-240	14	3	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	290
36-305	14	3	1/8	1050	RXH250	N/A	1/2	1 1/8	N/A	3/4	320
26-370	20	2	1/3	1075	RXH250	N/A	7/8	1 1/8	N/A	3/4	360
36-415	20	3	1/3	1075	RXH250	N/A	7/8	1 1/8	N/A	3/4	395
36-490	20	3	1/3	1075	RXH250	N/A	7/8	1 3/8	N/A	3/4	415
36-620	20	3	1/3	1075	RXH350	N/A	7/8	1 3/8	N/A	3/4	520
4 FPI											
24-126	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	115
24-169	14	2	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	130
34-224	14	3	1/8	1050	RXH150	N/A	1/2	7/8	N/A	3/4	280
34-287	14	3	1/8	1050	RXH250	N/A	1/2	1 1/8	N/A	3/4	310
24-340	20	2	1/3	1075	RXH250	N/A	7/8	1 1/8	N/A	3/4	345
24-395	20	2	1/3	1075	RXH250	N/A	7/8	1 1/8	N/A	3/4	375
34-465	20	3	1/3	1075	RXH250	N/A	7/8	1 3/8	N/A	3/4	400
34-585	20	3	1/3	1075	RXH350	N/A	7/8	1 3/8	N/A	3/4	505

Electric & Hot Gas Defrost Units

6 FPI											
Model Number IF*	Fan Dia. (in)	Motor Data			Optional Heat Exch. (Loose)	Re-Evap Heat Exch. (Loose)	Connections (in.)				Ship Wt. (lbs.)
		Qty.	HP	RPM			Liquid ODS	Suction ODS	H.G. ODS	Drain MPT	
26-130	14	2	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	125
26-150	14	2	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	140
36-185	14	3	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	295
26-270	20	2	1/3	1075	RXH250	HEA4A	1/2	1 3/8	7/8	3/4	320
26-320	20	2	1/3	1075	RXH350	HEA4A	7/8	1 3/8	7/8	3/4	365
36-385	20	3	1/3	1075	RXH350	HEA4A	7/8	1 5/8	7/8	3/4	450
36-460	20	3	1/3	1075	RXH500	HEA5A	7/8	1 5/8	7/8	3/4	490
36-520	20	3	1/3	1075	RXH500	HEA5A	7/8	1 5/8	7/8	3/4	535
4 FPI											
24-105	14	2	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	120
24-140	14	2	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	135
34-175	14	3	1/8	1050	RXH150	HEA3A	1/2	1 1/8	7/8	3/4	285
24-230	20	2	1/3	1075	RXH250	HEA4A	1/2	1 3/8	7/8	3/4	315
24-325	20	2	1/3	1075	RXH350	HEA4A	7/8	1 3/8	7/8	3/4	350
34-390	20	3	1/3	1075	RXH350	HEA4A	7/8	1 5/8	7/8	3/4	435
34-510	20	3	1/3	1075	RXH500	HEA5A	7/8	1 5/8	7/8	3/4	530

* E = Electric defrost G = Hot gas defrost - Reverse cycle H = Hot gas defrost - Re-evap



ELECTRICAL DATA

Air Defrost Units

8 FPI				
Model Number IFA	Total Motor Amps 60 HZ			
	115V	208/230 V		460 V
	1 Ph	1 Ph	3 Ph	1 Ph
28-151	4.0	1.8	—	0.9
28-210	4.0	1.8	—	0.9
38-260	6.0	2.7	1.8	1.4
38-320	6.0	2.7	1.8	1.4
28-410	14.2	6.4	—	2.6
28-450	14.2	6.4	—	2.6
38-540	21.3	9.6	5.5	3.9
38-690	21.3	9.6	5.5	3.9

4 FPI				
Model Number IFA	Total Motor Amps 60 HZ			
	115V	208/230 V		460 V
	1 PH	1 Ph	3 Ph	1 Ph
24-126	4.0	1.8	—	0.9
24-169	4.0	1.8	—	0.9
34-224	6.0	2.7	1.8	1.4
34-287	6.0	2.7	1.8	1.4
24-340	14.2	6.4	—	2.6
24-395	14.2	6.4	—	2.6
34-465	21.3	9.6	5.5	3.9
34-585	21.3	9.6	5.5	3.9

6 FPI				
26-145	4.0	1.8	—	0.9
26-191	4.0	1.8	—	0.9
36-240	6.0	2.7	1.8	1.4
36-305	6.0	2.7	1.8	1.4
26-370	14.2	6.4	—	2.6
36-415	21.3	9.6	5.5	3.9
36-490	21.3	9.6	5.5	3.9
36-620	21.3	9.6	5.5	3.9

50 Hertz Applications:

208-230 volt units are suitable for 50 Hz voltage from 187-220. Contact factory if jobsite voltage is beyond that range. 50 Hz motor watts = 60 Hz. motor watts x 0.83

Electric & Hot Gas Defrost Units

6 FPI												
Model Number IF*	Total Motor Amps 60 HZ				Electric Defrost Only Heater Amp Ratings @ 60 HZ							
	115V †	208/230 V		460 V	208 V		230 V		460 V		Watts	
	1 Ph	1 Ph	3 Ph	1 Ph	1 Ph	3 Ph	1 Ph	3 Ph	1 Ph	3 Ph		
26-130	4.0	1.8	—	0.9	18.3	10.5	20.3	11.7	10.1	5.9	4685	
26-150	4.0	1.8	—	0.9	18.3	10.5	20.3	11.7	10.1	5.9	4685	
36-185	6.0	2.7	1.8	1.4	26.6	15.3	29.5	17.0	14.7	8.5	6774	
26-270	14.2	6.4	—	2.6	26.6	15.3	29.5	17.0	14.7	8.5	6774	
26-320	14.2	6.4	—	2.6	26.5	15.3	29.5	17.0	14.7	8.5	6774	
36-385	21.3	9.6	5.5	3.9	38.2	22.1	42.4	24.5	21.2	12.2	9747	
36-460	21.3	9.6	5.5	3.9	38.2	22.1	42.4	24.5	21.2	12.2	9747	
36-520	21.3	9.6	5.5	3.9	38.2	22.1	42.4	24.5	21.2	12.2	9747	

4 FPI												
24-105	4.0	1.8	—	0.9	18.3	10.5	20.3	11.7	10.1	5.9	4685	
24-140	4.0	1.8	—	0.9	18.3	10.5	20.3	11.7	10.1	5.9	4685	
34-175	6.0	2.7	—	1.4	26.6	15.3	29.5	17.0	14.7	8.5	6774	
24-230	14.2	6.4	—	2.6	26.6	15.3	29.5	17.0	14.7	8.5	6774	
24-325	14.2	6.4	—	2.6	26.5	15.3	29.5	17.0	14.7	8.5	6774	
34-390	21.3	9.6	5.5	3.9	38.2	22.1	42.4	24.5	21.2	12.2	9747	
34-510	21.3	9.6	5.5	3.9	38.2	22.1	42.4	24.5	21.2	12.2	9747	

* E = Electric defrost G = Hot gas defrost - Reverse cycle H = Hot gas defrost - Re-evap

† Hot Gas Defrost Only

ELECTRICAL DATA

Electric Defrost Kits

Model Number IFE	6 FPI											
	1 Evaporator				2 Evaporators				3 Evaporators			
	230/1	230/3	460/1	460/3	230/1	230/3	460/1	460/3	230/1	230/3	460/1	460/3
26-130	ED-10	ED-11	ED-12	ED-12	ED-23	ED-21	ED-22	ED-22	ED-35	ED-33	ED-34	ED-32
26-150	ED-10	ED-11	ED-12	ED-12	ED-23	ED-21	ED-22	ED-22	ED-35	ED-33	ED-34	ED-32
36-185	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
26-270	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
26-320	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
36-385	ED-13	ED-11	ED-12	ED-12	ED-25	ED-23	ED-24	ED-22	ED-37	ED-35	ED-36	ED-34
36-460	ED-13	ED-11	ED-12	ED-12	ED-25	ED-23	ED-24	ED-22	ED-37	ED-35	ED-36	ED-34
36-520	ED-13	ED-11	ED-12	ED-12	ED-25	ED-23	ED-24	ED-22	ED-37	ED-35	ED-36	ED-34

Model Number IFE	4 FPI											
	1 Evaporator				2 Evaporators				3 Evaporators			
	230/1	230/3	460/1	460/3	230/1	230/3	460/1	460/3	230/1	230/3	460/1	460/3
24-105	ED-10	ED-11	ED-12	ED-12	ED-23	ED-21	ED-22	ED-22	ED-35	ED-33	ED-34	ED-32
24-140	ED-10	ED-11	ED-12	ED-12	ED-23	ED-21	ED-22	ED-22	ED-35	ED-33	ED-34	ED-32
34-175	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
24-230	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
24-325	ED-11	ED-11	ED-12	ED-12	ED-25	ED-23	ED-22	ED-22	ED-35	ED-35	ED-34	ED-32
34-390	ED-13	ED-11	ED-12	ED-12	ED-25	ED-23	ED-24	ED-22	ED-37	ED-35	ED-36	ED-34
34-510	ED-13	ED-11	ED-12	ED-12	ED-25	ED-23	ED-24	ED-22	ED-37	ED-35	ED-36	ED-34

Electric Defrost Kit Components

Model Number ED-	Timer	Aux. Switch	Blockout Relay	Contactors		Sequencing Relays
				Heater	Fan	
10	1	—	1-30A	—	—	—
11	1	1	—	1-30A	—	—
12	1	1	—	1-30A	1-25A	—
13	1	1	—	1-50A	—	—
14	1	1	—	1-50A	1-25A	—
15	1	1	—	2-50A	—	—
16	1	1	—	2-50A	1-25A	—
20	1	—	1-30A	—	—	2
21	1	1	—	2-15A	—	2
22	1	1	—	2-15A	1-25A	2
23	1	1	—	2-25A	—	2
24	1	1	—	2-25A	1-25A	2
25	1	1	—	2-50A	—	2
26	1	1	—	2-50A	1-25A	2
27	1	1	—	2-75A	—	2
28	1	1	—	2-75A	1-25A	2
30	1	—	1-30A	—	—	3
32	1	1	—	3-10A	1-25A	3
33	1	1	—	3-15A	—	3
34	1	1	—	3-15A	1-25A	3
35	1	1	—	3-30A	—	3
36	1	1	—	3-30A	1-25A	3
37	1	1	—	3-50A	—	3
38	1	1	—	3-50A	1-25A	3

Timer

Initiates the defrost cycle; also acts as an override protection device for defrost termination.

Auxiliary Switch

Mounted on the compressor contactor, it prevents the defrost contactor from operating when the compressor is energized.

Block-out Relay

Serves the same function as the auxiliary switch, except used when a defrost contactor is not required (single phase only).

Fan Contactor

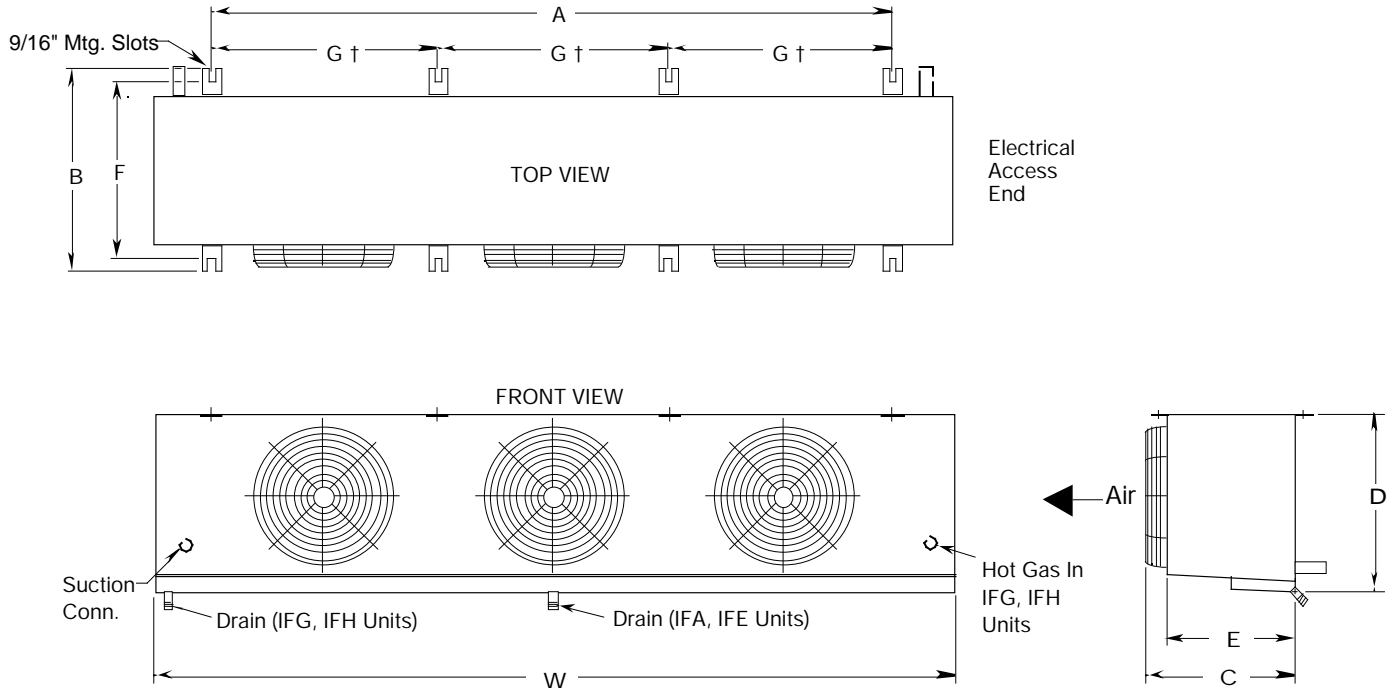
Used with 460V motors or when 230V motors are wired for three phase operation.

Defrost Contactor

Carries the amperage load for the heaters circuit. Contactor selection is based upon the maximum resistive load rating of the contactor.

Sequencing Relays

Provides interconnection of multiple unit coolers and a single compressor system. This allows each unit cooler to individually terminate defrost on temperature.



Note: All dimensions in inches.
3/4" MPT drain connections on all units.

DIMENSIONAL DATA

Electric & Hot Gas Defrost Model IF*		Air Defrost Model IFA			Dimensions in Inches								
					W	A	B	C	D	E	F	G†	
24-105	26-130	24-126	26-145	28-151	55	42	19	18 3/4	19	15	17	—	
24-140	26-150	24-169	26-191	28-210	55	42	19	18 3/4	19	15	17	—	
34-175	36-185	34-224	36-240	38-260	76	63	19	18 3/4	19	15	17	—	
—	—	36-287	36-305	38-320	76	63	19	18 3/4	19	15	17	—	
24-230	26-270	24-340	26-370	28-410	76	63	20	20	25	16	18	31 1/2	
24-325	26-320	24-395	—	28-450	76	63	20	20	25	16	18	31 1/2	
—	36-385	—	36-415	—	106	94 1/2	20	20	25	16	18	31 1/2	
34-390	36-460	34-455	36-490	38-540	106	94 1/2	20	20	25	16	18	31 1/2	
34-510	36-520	34-585	36-620	38-690	106	94 1/2	20	20	25	16	18	31 1/2	

* E = Electric defrost G = Hot gas defrost - Reverse cycle H = Hot gas defrost - Re-evap
† Models with no "G" dimension have only two hangers. See dimension "A" for hanger spacing.

WITT reserves the right to make design changes and modifications to its products without notice.