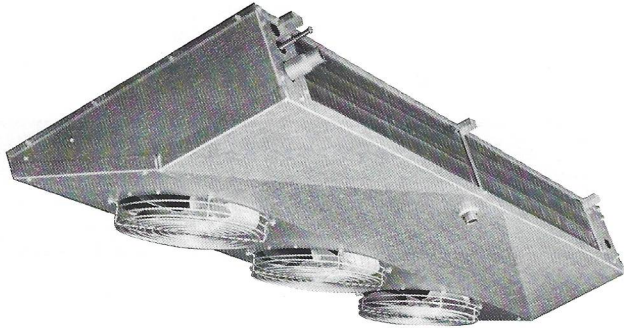


RUSSELL

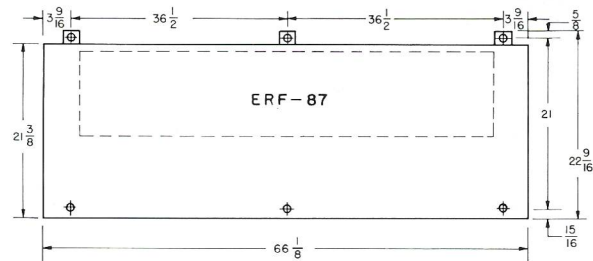
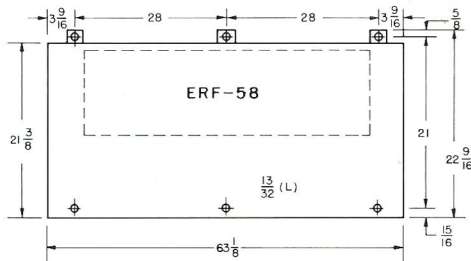
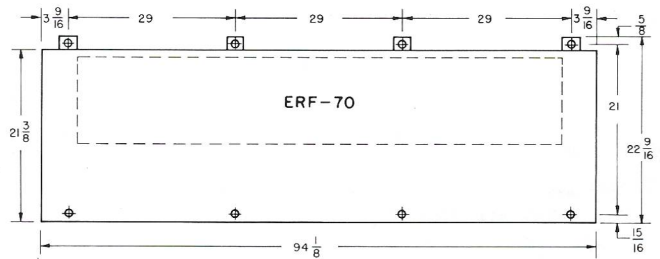
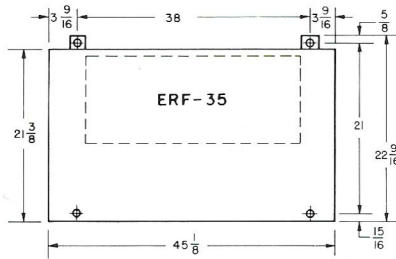
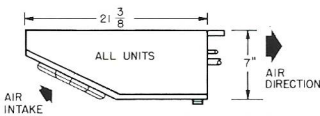
COIL COMPANY

RUSSELL
"ERF" MODEL
COILS



THE RUSSELL MODEL "ERF" COIL is a 4 fin per inch low-temperature, Electric Defrost coil, specifically designed for Reach-in Freezers and small, low ceiling Walk-In Freezers. All models include factory installed Heater Safety and Fan Delay Klixon controls and Packless Metal Hose Heat Exchanger or equivalent. Capacities based on -20° suction.

MOUNTING DIMENSIONS FOR RUSSELL MODEL "ERF" COIL UNITS



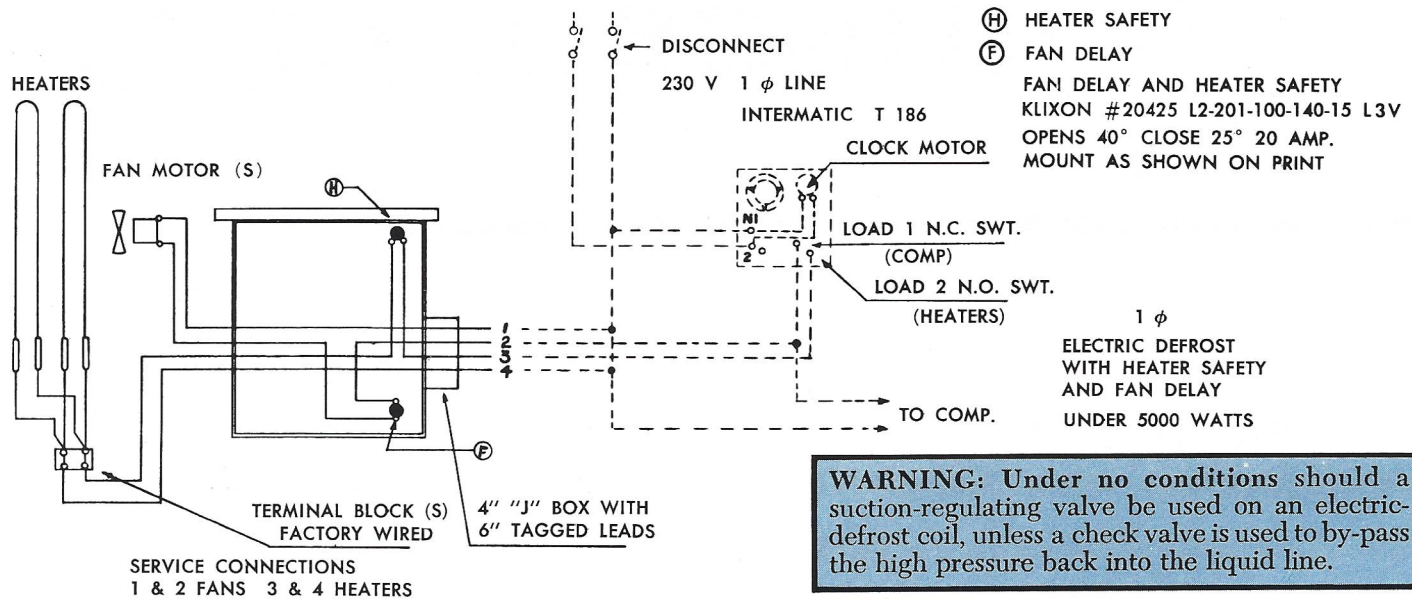
COIL SPECIFICATIONS

MODEL NO.	BTUH		CFM	FAN	FAN MOTOR DATA				NO. CIRCUITS	CONNECTION SIZES				HEATER WATTS	HEATER AMPS 230V
	10°	15°			HP	RPM	MOTOR HEAT BTU 24 HRS.	AMPS 230V		HX LIQ.	COIL INLET	SUCT.	DRAIN		
ERF-35	3500	5250	900	2-10"	2-1/47	1550	2626	2.2	1	3/8" OD	1/2" FN	7/8" OD	1/2" FPT	3100	13.4**
ERF-58*	5800	8700	1350	3-10"	3-1/47	1550	3940	3.3	2	3/8" OD	5/8" OD	7/8" OD	1/2" FPT	4300	19.0**
ERF-70*	7000	10500	1350	3-10"	3-1/47	1550	3940	3.3	2	3/8" OD	5/8" OD	7/8" OD	1/2" FPT	5880	17.2***
ERF-87*	8700	13050	1800	4-10"	4-1/47	1550	5253	4.4	3	1/2" OD	7/8" OD	1 1/8" OD	1/2" FPT	6040	22.0***

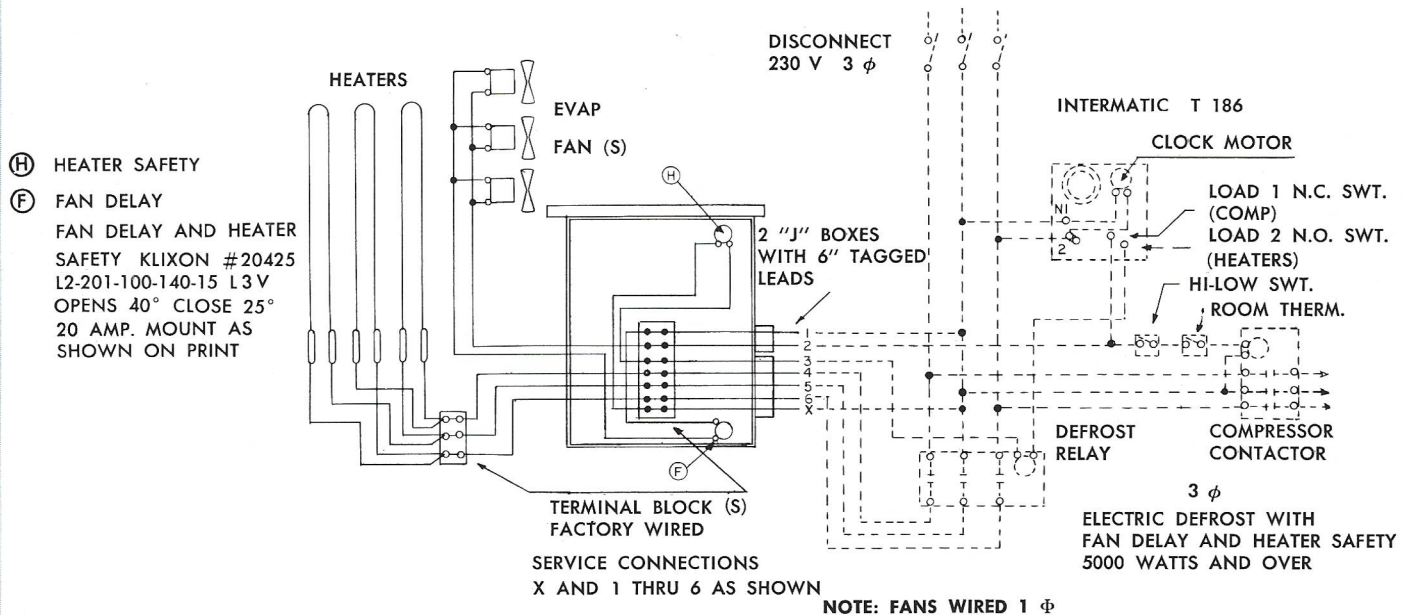
* Use externally equalized valve.
** Factory wired 1 ϕ only.
*** Factory wired 3 ϕ as standard.
(1 ϕ heater wiring only if ordered.)

N.B. Fan motors wired 1 ϕ only.
Coils standard circuited for R-12.
Please specify if other refrigerant to be used.

TYPICAL WIRING DIAGRAM FOR 230 V 1 Φ ELECTRIC HEATER INPUT UNDER 20 AMPERES



TYPICAL WIRING DIAGRAM FOR 230 V 3 Φ ELECTRIC HEATER INPUT OVER 20 AMPERES



N.B. APPLICABLE WIRING DIAGRAM SHIPPED WITH EACH ELECTRIC DEFROST UNIT

The operation of the Russell Electric Defrost Coils is extremely simple. Each of the clock switch details (upper right-hand corners of wiring diagrams) show position of the contacts when the system is on the cooling cycle. The Compressor and Fan Motors (load No. 1) are operating. Contacts in both Klaxons "F" (Fan circ.) and "H" (Heater circ.) are closed. Note that Klaxons "F" and "H" open at approximately 40°F. and close at approximately 25°F. During the cooling cycle, the contact on the clock to load No. 2 circuit to the heaters is open.

The time required for the defrost operation is controlled 100% by the clock. Because of varying defrosting conditions, the defrost period must be determined by observation, after which the pins in the clock should be set accordingly.

After the pre-determined cooling time, the contacts in the clock are reversed, opening the circuit to the fan motors

and compressor. Simultaneously, the circuit to load No. 2 is closed, directing current to the heaters through the closed Klaxon "H" circuit. The sole function of Klaxon "H" is simply that of a safety control in the heater circuit.

When the defrost period terminates and the clock switches again are reversed, the circuit to the heaters opens and the circuit to the compressor and fan motors closes. This puts the compressor into immediate operation; however, because the coil temperature is approximately 40°F. at the start of the cooling cycle, the contact in Klaxon "F" remains open until its temperature is reduced to approximately 25°F. by the pull-down. At this point, the contacts close, putting the fans back into operation. This fan-delay feature allows water to drain off coil, helps prevent overloading the compressor on start-up and eliminates warm air being circulated into the cold room, warding off possible warm-up of the product and fog conditions within the cold room area.