

Defrost Controls, Timers & Monitors

Defrost Controls

PARAGON

Nos. 5X454 to 5X456 are CSA Certified. No. 1TGD6 is UL873 NSF Certified.

TIMERS FOR WATER SPRAY DEFROST CONTROL WITH PUMP-DOWN DRAIN OR FAN DELAY CYCLES

Defrost initiation: 1 to 8 cycles per day, at least 3 hrs. between cycles. Delay or pump-down cycles: 0 to 30 min. in 3-min. increments; for stopping fans, reducing refrigerant pressure, or hot gas pump-down cycle. Defrost cycles: 3 to 45 min. in 3-min. increments. Drain or fan cycles: 3 to 15 min. in 3-min. increments.



No. 5X450

TIME-INITIATED AND TIME-TERMINATED DEFROST CONTROLS

Choice of 4 contact arrangements for electric heat, hot gas, or compressor shutdown defrost. Defrost/initiation cycles: 1 to 6 per day, at least 4 hr. between operations. Dial overlay changes defrost time from even- to odd-numbered hours. Defrost cycles: 4 to 110 min. in 2-min. increments. Case has heavy steel enclosure with padlock hasp.

TIME-INITIATED, REMOTE-TEMPERATURE, OR PRESSURE-TERMINATED DEFROST CONTROLS

Work with external temperature or pressure sensor. Choice of 3 contact arrangements for electric heat, compressor shutdown, or hot gas defrost. Defrost cycles: 1 to 6 per day, at least 4 hr. between cycles. Dial overlay changes defrost time from even- to odd-numbered hours. Backup defrost termination: 4 to 110 min. in 2-min. increments. Case has heavy steel enclosure with padlock hasp.

TIME-INITIATED, PRESSURE-TERMINATED DEFROST CONTROLS

Direct readout dial. Modular pressure bellows. 3 contact arrangements for hot gas, electric heat, or compressor shutdown defrost. Defrost cycles: 1 to 6 per day, at least 4 hr. between

cycles. Dial overlay changes defrost time from even- to odd-numbered hours. Backup defrost termination: 4 to 110 min. in 2-min. increments. Adjustable cut-in pressure-setting dial calibrated from 36 to 100 lb. Case has heavy steel enclosure.

UNIVERSAL DEFROST TIMER

Multivoltage timer is easy to program with time and defrost start/finish. Manual defrost can be initiated in 15-min. intervals. Fits standard Paragon enclosures. Provides 100 hr. of power loss protection. System status indicators and lighted display.

Voltage	Contact Type*	Amps	Mr. Model	Item No.	\$ Each
Timers for Water Spray Defrost Control with Pump Down Drain or Fan Delay Cycles					
120	2 NO,2 NC	10	632-00	5X450	✓ 359.75
208/240	2 NO,2 NC	10	632-20	5X451	✓ 369.00
Time-Initiated and Time-Terminated Defrost Controls					
120	SPDT	40	8045-0	5X454	✓ 184.75
208/240	SPDT	40	8045-20	5X455	✓ 193.00
208/240	2 NO,1 NC	40	8047-20	5X456	✓ 207.75
Time-Initiated, Remote-Temperature, or Pressure-Terminated Defrost Controls					
120	1 NO,2 NC	40	8141-0	5X457	✓ 213.25
120	SPDT	40	8145-0	5X458	✓ 201.00
208/240	SPDT	40	8145-20	5X459	✓ 185.50
Time-Initiated, Pressure-Terminated Defrost Controls					
208/240	SPDT	40	8245-20	5X460	✓ 384.25
Universal Defrost Timer					
120/208/240	1 SPDT, 1 SPST	30	9145-00	1TGD6	✓ 204.75

* NO=Normally Open; NC=Normally Closed.

Refrigeration/Defrost Control

PARAGON RANCO



No. 1TGD4

Microprocessor-based controller manages all temperature and defrost functions in a typical piece of commercial refrigeration equipment, replacing up to 5 controls. Features 2 NSF-approved temperature sensors for the case and the evaporator, and 4 relay outputs for compressor, fan, defrost, and alarm. Line voltage input power is selectable 120/208/240VAC at 50/60 Hz, enabling use on a wide range of equipment. UL873 NSF Certified. Replacement sensor includes 10-ft. cable. Sensor can be expanded to 100 ft. using additional 18-ga. shielded cable. For use with electric, hot gas, or timed-off defrost applications controls.

Item	Switch Type	Control Range (°F)	Temp. Differential (F)		Brand	Mfr. Model	Item No.	\$ Each
		High	Low					
Refrigeration/Defrost Control	4 SPDT	-40 to 60	25	1	Paragon	ERC2-212111-370	1TGD4 ✓	268.75
Item		For Use With		Brand		Mfr. Model	Item No.	\$ Each
Mounting Bracket		1TGD4, ERC2 Series Sensors		Ranco		1397002-045	1TGD5	3.80
Replacement Sensor		1TGD4		Paragon		1309007-045	5PWD7	19.68

Residential Defrost Timers

PARAGON

Direct replacements for defrost timers in household refrigerators and freezers. No drilling, tapping, or adapter plugs needed. 10A noninductive, 1/2 HP, 120VAC.

Limited availability.



No. 6X629

Max. On/Off Cycles	Defrost Time (Minutes)	Mr. Model	Item No.	\$ Each
6	21	E-1111*	6X629	24.04
8	20	D-1111**	6X630	24.53
8	21	E769-00	6X631	27.95
6	25	A-1111†	6X632	23.00
6	25	B-1111‡	6X633	24.53
8	21	E931-00	4E057	25.05
8	30	D-769-00	6X869	27.25

* Direct replacement for JE-539 and A-769.
† Direct replacement for NE-539 and F-769.
‡ Direct replacement for NA-539 and G-769.

Refrigeration Defrost Thermostats

Supco



No. 2FBY5

Moisture-resistant thermostats can be used as exact OEM replacements for most refrigerators and icemakers. Short trim is ideal for reaching into tight places. SPDT switch opens on rise. 120/240V.

Switch Type	Amp Rating	Temp. Range (°F)	Diff.	Switch Opens @ (°F)	Switch Closes @ (°F)	Mr. Model	Item No.	\$ Each
SPDT	25	55 to 35	20	55	35	SL5709	2FBY5	✓ 54.50
SPST	10	80 to 30	50 ±4°F	80	30	ML80	3CHK2	7.45

3-Phase Line Voltage Monitors

ICM CONTROLS



No. 3UW93

Independently monitor voltage imbalance, high/low voltage, phase loss, reversal, incorrect sequencing, and rapid short cycling. UL Listed and CSA Certified.

LCD

Programmable 25-fault memory storage. Independent high/low voltage settings. Programmable line voltage, manual or automatic reset, push-button setup.

LED DISPLAY

Knob-adjustable features.

		Volts	% Volts Unbalance	Control Volts (AC)	N.O. Output (A)	NC Output (A)	Diversified Model	Motorsaver Model	Cross-Reference*				Mr. Model	Item No.	\$ Each
Includes	50/60 Hz	2 to 25, Adj.	18 to 240	18 to 240	10	6	AC-2020AC-301AC-302	455	SSAC Model	TimeMark Model	Wagner Model	Watso Model	ICM450	3UW93	✓ 266.25
LCD Display	190-630	2 to 25, Adj.	18 to 240	18 to 240	20	10			QLM/QLV	265	WPC-800	EAC-800 EAC-8000	ICM400	3UW89	✓ 205.50

* Physical dimensions vary by manufacturer.