



B201

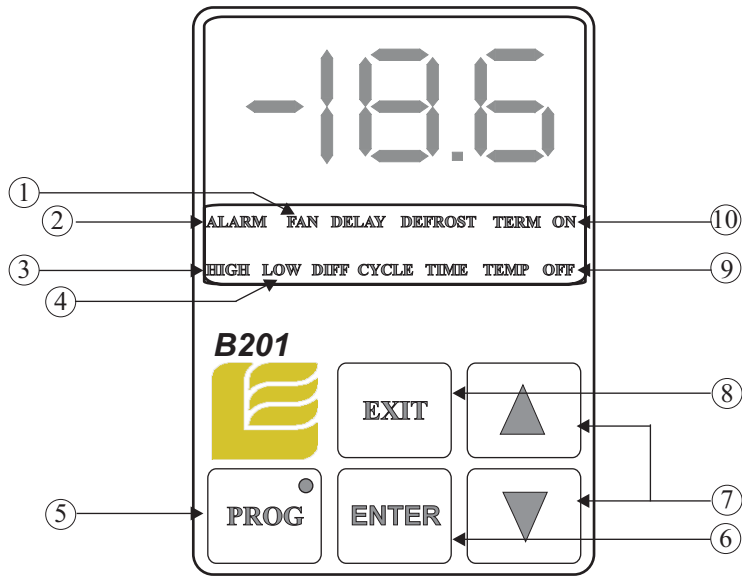
REFRIGERATION CONTROLLER



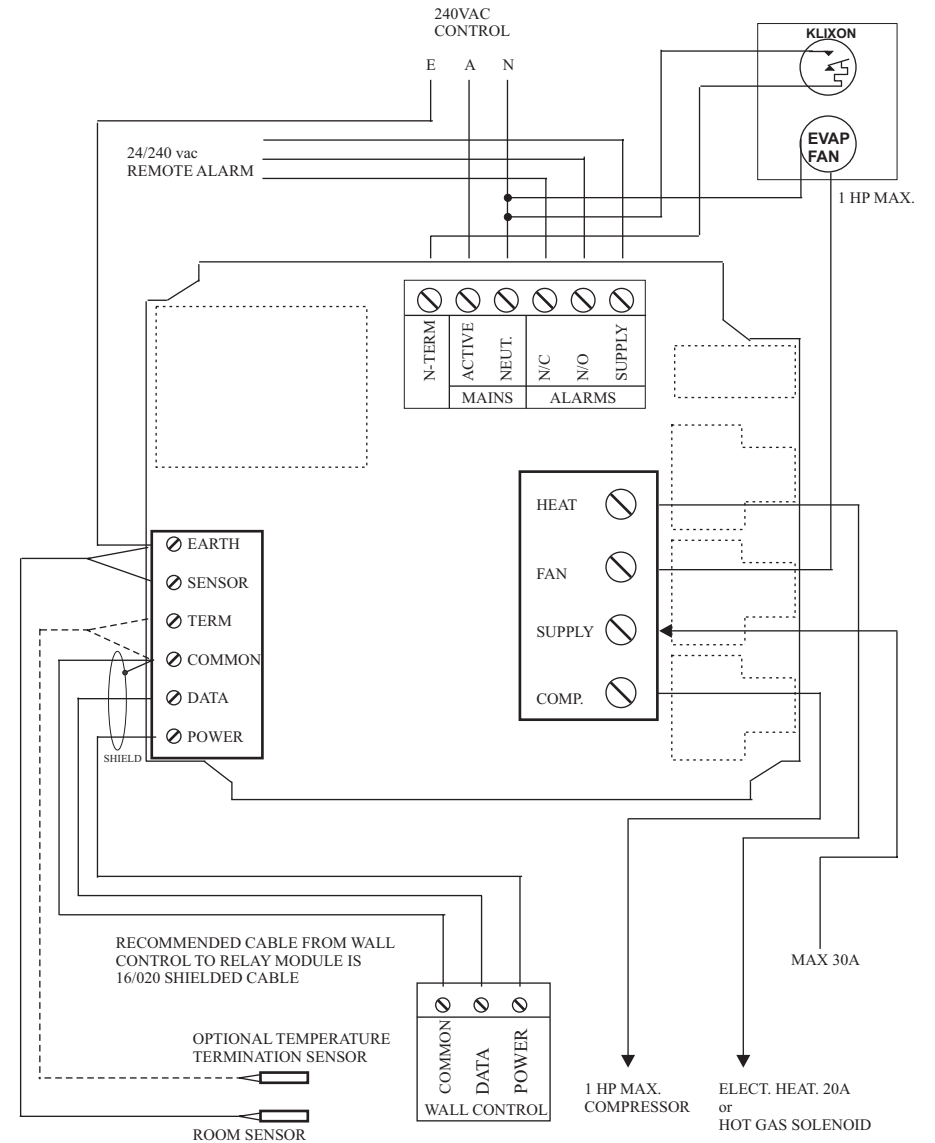
FEATURES

- EXTRA LARGE DISPLAY SCREEN
- REAL-TIME CLOCK WITH BATTERY BACKUP
- HOT GAS OR ELECTRIC DEFROST SELECTABLE
- EIGHT SELECTABLE DEFROST CYCLES
- ADJUSTABLE DEFROST TERMINATION TIME AND OR TEMPERATURE
- FAN DELAY AFTER DEFROST
- COMPRESSOR ANTI CYCLING ON TIME
- COMPRESSOR ANTI CYCLING OFF TIME
- ADJUSTABLE TEMPERATURE SET POINT AND SWITCHING DIFFERENTIALS
- SENSOR CALIBRATION
- HIGH/LOW TEMPERATURE ALARM WITH DELAY
- ALL PARAMETERS MENU ADJUSTABLE



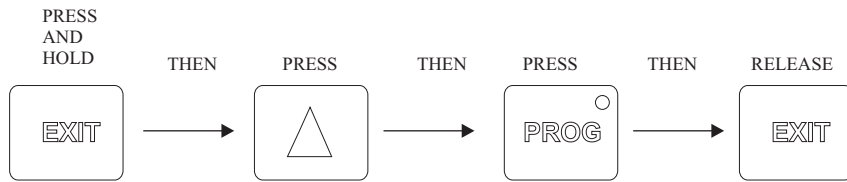


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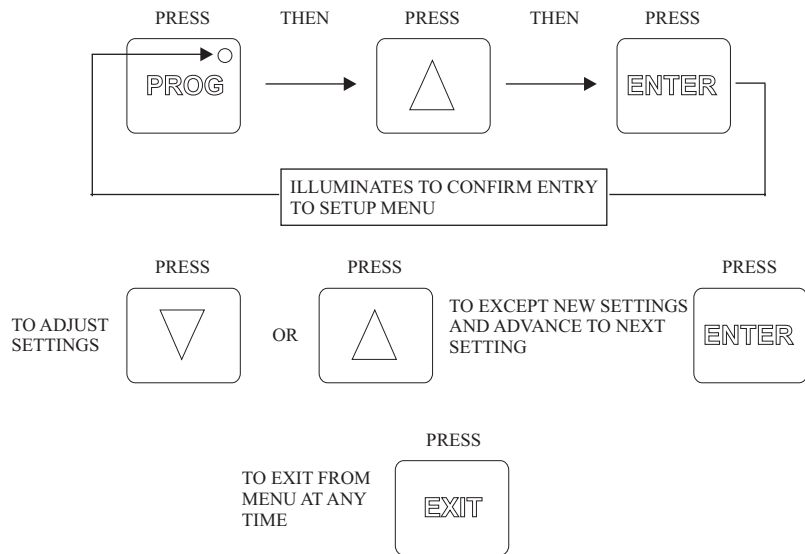


NB.
SENSORS 202AT TYPE. 2K @ 25°C

8. FACTORY DEFAULT SETTING.



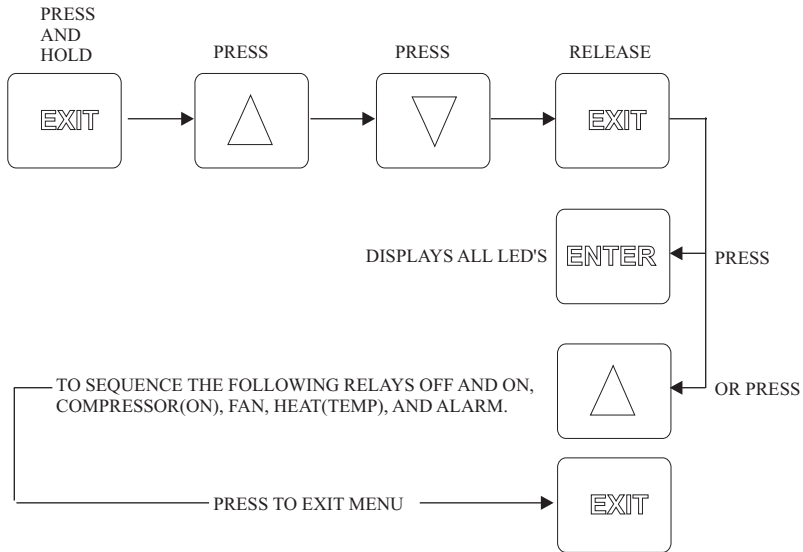
9. TO ENTER PROGRAM MENU



	PROGRAM REQUEST	DISPLAY LED'S	FACTORY DEFAULT	ADJUSTMENT INCREMENTS	RANGE
A	SET POINT	TEMP	-18oC	1.0oC	-40oC to 40oC
B	DIFFERENTIAL	DIFF	1.0oC	0.1oC	0.1oC to 10oC
C	HIGH ALARM	ALARM TEMP HIGH	3.0oC	0.1oC	0.1oC to 10oC
D	LOW ALARM	ALARM TEMP LOW	1.0oC	0.1oC	0.1oC to 10oC
E	ALARM DELAY	ALARM DELAY TIME	30 Min	1 Min	0 to 180 Mins
F	CYCLE ON TIMER	CP 0.0 ON	0.0 Min	0.1 Min (6 Secs)	0 to 6 Mins
G	CYCLE OFF TIMER	CP 3.0 OFF	3.0 Min	0.1 Min (6 Secs)	0 to 6 Mins
H	OFFSET CALIBRATION	DIFF TEMP	0.0oC	0.1oC	-5oC to 5oC
I	DEFROST DURATION	DEFROST TIME	30 Min	5 Min	0 to 90 Mins
J	TERMINATION TEMPERATURE	DEFROST TEMP	15oC	5oC	5oC to 20oC
K	FAN DELAY	FAN DELAY TIME	0.5 Min	0.1 Min (6 Secs)	0 to 5 Mins
L	DEFROST CYCLES	DEFROST ON CYCLE 0000 1200 0300 1500 0600 1800 0900 2100	ON ON ON ON	OFF OFF OFF OFF	Use Arrow Keys to select ON or OFF
M	HOT GAS or ELECT DEFROST		ELEC	GAS	Use Arrow Keys to select GAS or ELEC
A	Compressor Off set point.				
B	Compressor On point above set point.				
C	Alarm Temperature setting above set point.				
D	Alarm Temperature setting below set point.				
E	Alarm time delay. Please note that ALARM will indicate on controller during delay.				
F	Minimum ON time for compressor.				
G	Minimum OFF time for compressor.				
H	Calibration adjustment between Sensor and Wall Control temperature indication.				
I	See Defrost Operation on Page 4.				
J	See Defrost Operation on Page 4. Applicable with optional termination temp. probe				
K	See Defrost Operation on Page 4.				
L	Allows selection of up to eight defrost cycles.				
M	Select Hot Gas or Electric defrost mode. Compressor is off in Electric defrost mode.				

11. TEST MODES

IN TEST MODE , RELAY OUTPUTS AND REMOTE DISPLAY LED'S CAN BE CHECKED



12. DEFROST OPERATION

A. THE LE201 CAN HAVE UP TO EIGHT DEFROST SEQUENCE PER DAY ON THREE HOUR INTERVALS. EACH OF THE DEFROST SEQUENCES CAN BE PROGRAMMED "ON" OR "OFF".

B. "DEFROST TIME" IS COMMON TO ALL SEQUENCES.

C. "FAN DELAY" DELAYS THE START OF THE EVAPORATOR FAN WHEN DEFROST IS TERMINATED.

D. "DEFROST INITIATION". DEFROSTS ON PROGRAMMED TIMES.

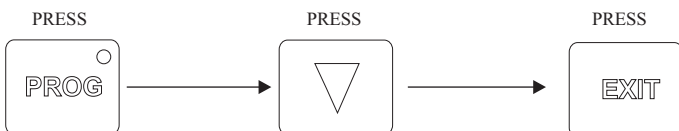
E. "DEFROST TERMINATION"

DEFROST WILL TERMINATE ON TIME, OPTIONAL TEMPERATURE TERMINATION PROBE OR WHEN BYPASSED BY KLIXON VIA "N-TERM"(SEE WIRING DIAGRAM).

F. ELECTRIC OR HOT GAS DEFROST MODE

THE EVAPORATOR FAN IS OFF IN BOTH DEFROST MODES. THE COMPRESSOR IS "OFF" IN ELECTRIC DEFROST MODE THE COMPRESSOR IS "ON" IN HOT GAS DEFROST MODE

G. MANUAL DEFROST



NB

WHEN MAINS POWER IS FIRST APPLIED TO CONTROLLER THE SYSTEM MAY GO TO A DEFROST MODE. TO REMOVE MOMENTARILY APPLY WIRE LINK BETWEEN "N/TERM AND "N" ON RELAY MODULE. SEE WIRING DIAGRAM.

1. MEMORY

THE B201 RETAINS ALL SETTINGS INTO PERMANENT MEMORY

2. HIGH AND LOW TEMP ALARMS.

THE B201 HAS AN UPPER AND LOWER ALARM SETTING. AN ALARM IS SIGNALLED BY THE "ALARM" LED FLASHING AND WALL CONTROL BEEPING.. THE RELAY MODULE ALSO HAS 16AMP VOLT FREE CONTACTS FOR REMOTE ALARM. THERE IS ALSO A PROGRAMABLE ALARM DELAY WHICH CAN BE SET FROM THE KEYBOARD.

2B. TO SET ALARM DELAY

WHEN AN ALARM DELAY HAS EXPIRED THE KEYBOARD BUZZER WILL SOUND AND THE ALARM RELAY ACTIVATES.

TO RESET THE ALARM DELAY. PRESS



3. ANTI CYCLE TIMERS

IF THE ANTI CYCLE ARE ACTIVATED WHEN A CALL TO RUN OR STOP IS INITIATED THE "DELAY" LED WILL FLASH.

4. PROBE FAULT

SHOULD THE TEMPERATURE PROBE OR ASSOCIATED WIRING BECOME FAULTY THE "ALARM" LED AND KEYBOARD BUZZER WILL SOUND, THE ALARM RELAY WILL GO INTO ALARM CONDITION E-15 WILL BE SHOWN ON DISPLAY AND THE COMPRESSOR CALL IS SHUT DOWN.

5. TEMPERATURE SET POINT AND TIME.

NB. ROOM TEMPERATURE IS THE NORMAL DISPLAY.



6. TO CHANGE SET POINT



7. TO ADJUST CLOCK

