Johnson Controls Unitary Products
5005 York Drive
Norman, OK 73069
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DATE September 29, 2011 **ST-007-11**

TO: All York Service Managers
All Field Service Supervisors
All Regional Managers

SUBJECT: Defrost Control S1-03101975000 SAP#10211

UNITS: B*HX, B*HQ, B*HZ

We had a few reports this past winter of the units listed above with noise issues entering and exiting defrost mode. A change had previously been made to pin # 4 of the defrost control listed above which allowed to initiate at 26 degrees and terminate at 55 degrees, which resolved issues with the coil not completely defrosting. At that time, the logic in the board was updated to cycle the compressor off 30 seconds upon an initiation of defrost, and 30 seconds upon a completion of the defrost period, eliminating the possibility of noise issues. The compressor shutdown function is only active on pin # 4.

The program settings for this module are as follows:

NOTE: PIN #4 ONLY SELECTION, ALSO, ALLOWS COMPRESSOR SHUTDOWN FOR 30 SECONDS GOING IN AND COMING OUT OF DEFROST IN CONTROL 1157-900 (10211) ONLY.

10211 (1157-900) / 174552 (1157-903)				
JUMPER POSITION	1	2	3	4
COUPLING ASSUMED	100%	100%	100%	100%
INITIATE 1	21°F @ 35°F AMB.	25°F @ 35°F AMB.	22°F @ 35°F AMB.	26°F @ 35°F AMB.
INITIATE 2	0°F @ 10°F AMB.	0°F @ 10°F AMB.	0°F @ 10°F AMB.	0°F @ 10°F. AMB.
TEMPERATURE INHIBIT (INITIATING DEFROST)	40°F (COIL)	40°F (COIL)	40°F (COIL)	40°F (COIL)
TIMED INHIBIT (BETWEEN DEFROSTS)	20 MINUTES	20 MINUTES	20 MINUTES	20 MINUTES
TERMINATE	40°F	40°F	32°F	55°F

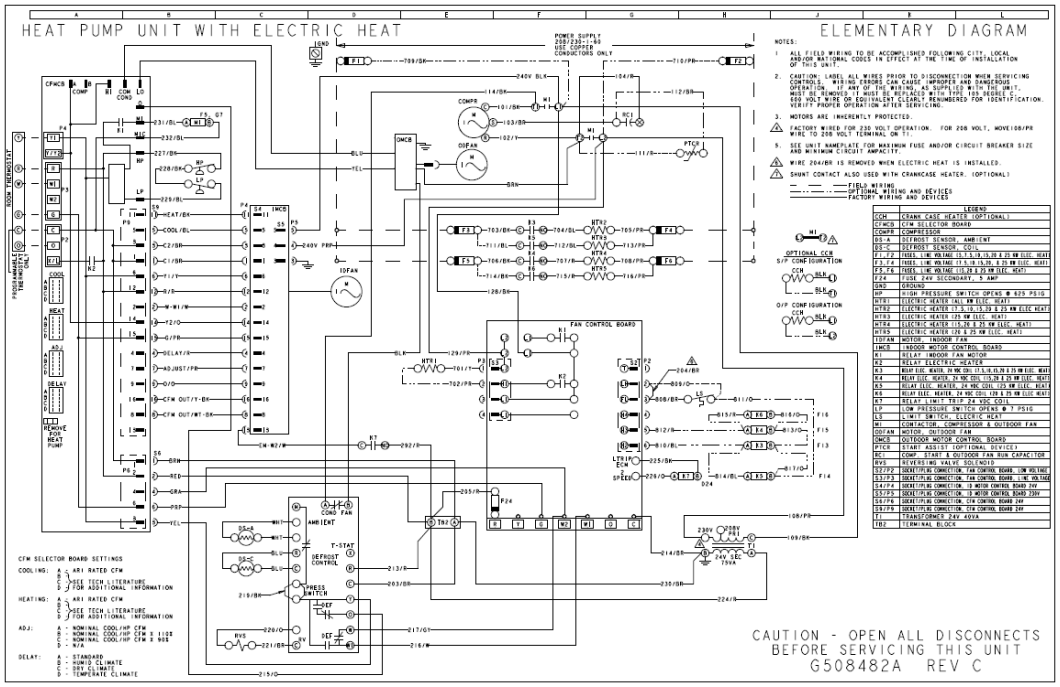
The units are factory shipped with the standard settings below:

UNIT	PIN POSITION
B*HZ036, 048, 060	1
B*HZ024, 030	2
B*HZ042	3
Service Pin	4
B*HX024-060	2
B*HQ024-060	2

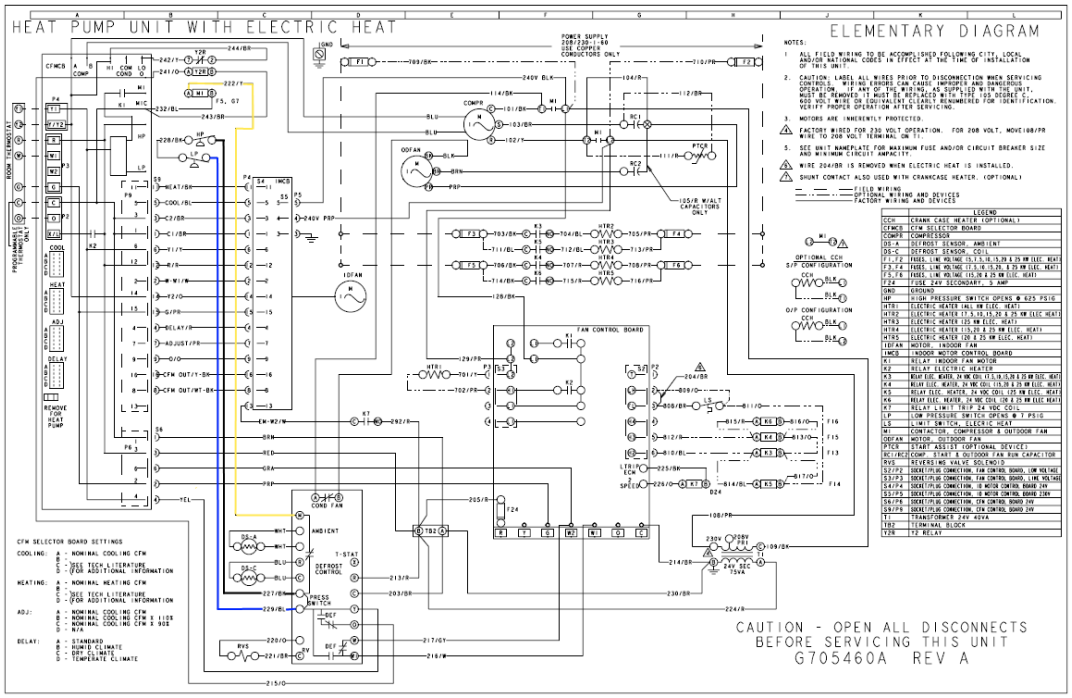
The pin # 4 setting could be used for adjusting the defrost settings for any of the above listed product. If defrost issues exist, ensure the pin setting matches up with the chart above before going directly to pin # 4. Also, make sure the unit charge is correct, air flow is correct, and the liquid line sensor is functioning properly and making contact with the line. If these are ok, change the pin position to # 4 and run through a cycle. Note there is a small COP loss when keeping the units in defrost mode for longer periods of time.

The compressor off delay function is only active on pin # 4 as stated above. Units incorporating an ECM motor require a wiring change to allow the compressor function to be controlled by the defrost board. Units with PSC or X-13 indoor blower motors do not require a wiring change. The wiring change to route compressor control through the defrost board took place in production 7/15/11.

Original Wiring:



Revised wiring to route compressor control through defrost board:



For questions regarding this letter, please contact your local distribution service manager.

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