

JTL SOFTWARE VARIATIONS		ECCS ECCR
VERSION	DESCRIPTION	DATE
v0.00.0	Original issue.	Feb 88
v0.00.1	Unit number allowed up to 899.9 Defrost termination valve closed if the evaporator temperature goes above the termination temperature at any time, regardless of the defrost cycle status. Temperature probe selection added. Associated compressor pack number allowed up to 899.9.	Oct 88
v0.00.2	Door open alarm timer functions added.	Apr 89
v0.00.3	Excitation voltage test function added on item 89. Fast communications available. New executive program used. Data logging data retrieval speed increased on communications. Alarm added for all temperature probes faulty, disconnected or disabled.	Sep 89
v0.00.4	Defrost initiation via comms added. Period over which averages taken made variable on item 47. Elm probe selection added on item 102. Item 89 added on comms. Defrost initiation temperature allowed up to 30C. Bit switch setting displayed on maintenance unit item 8. Controller type now displayed on maintenance unit item 0. Defrost input state shown on maintenance unit item 74. Defrost relay can be selected to operate defrost termination or defrost control on maintenance unit item 75.	Jan 91
v0.00.5	Comms initiated forced defrost added. Defrost commands (not sensed on suction line) close liquid valve. Associated compressor pack no removed from maintenance unit item 100.	Mar 91
v0.00.6	Text on item 75 changed to d.tEr/d.con from GAS/ELEC. Item 58 disabled in comms defrost mode.	Mar 91
v0.00.7	Comms fail time-out increased for comm defrost.	Mar 91
v0.00.8	Temperature probes now read up to 70 C for hot gas. Liquid hold-off time for contact/comms initiated defrost added on item 49. Default defrost mode changed to suction line initiated from comms unit initiated defrost. Expected number of defrosts per day alarm added on item 94 with setting on item 69.	Jan 92
v0.00.9	Choice of defrost valve type added on item 68. Forced refrigeration added on item 79. Item 72 display format changed to show when in control or termination mode. Upper limit on the air on integral adjustment raised from 2 to 10 degrees to improve control when air off probe deselected or faulty. Watchdog operation changed on software restart. Network defrost commands cleared on suction initiated defrost. Defrost termination temperature only checked after defrost has been initiated (gas valve operation unchanged) Number of defrosts a day alarm operation corrected. Forced defrost operation amended to prevent controller getting "stuck" in defrost recovery. For 30 minutes after power up (hardware restart) the suction initiated sequence is amended so that defrost is not initiated until the suction temperature falls to 5 degrees below the initiation temperature. Liquid hold off added to mode.	Dec 94
v0.01.0	Software relinked to support 93C06 serial NVRAM. No program changes.	Dec 97