JTL FIRMWARE VARIATIONS		EPIC
VERSION	DESCRIPTION	DATE
v0.00.1	Original issue.	June 2007
v0.00.2	Inverter gain range increased to 250 with. default set at 100. Items 345 and 346 added to show inverter proportional and integral terms. Forced inverter off error corrected. Inverter control sums signed integral and gain terms.	June 2007
v0.00.3	Forced no of inverter output steps error corrected.	June 2007
v0.00.4	Condenser steps allowed up tp 127. Compressor fault timer error corrected. Run hours error corrected. Compressor I/O info added on item 111-114.	July 2007
v0.00.5	Compressor output configuration choice added on 167 to allow compressors 1 and 3 to have 50% unloader Compressor output status extended on item 115-118 to enable remote terminals to display useful information with output configuration use. Inverter pressure error added on item 347. R22&R502 support dropped. Low suction pressure safely shutdown introduced on items 195 & 196. Inverter disabled when compressor 1 selected as a 2 stage machine using item 167. Compressor / condenser display operation corrected. Compressor fault repeat alarm feature added using item 158.	Apr 2008
v0.00.6	Operation of second compressor board corrected. Note, this version reported incorrectly as v0.00.5.	Aug 2008
v0.00.7	Compressor 2 can be set for 1 stage.	Nov 2008
v0.00.8	Compressors 1-3 can be set for unequal stage capacity 66/100% as well as 50/100%. System alarms added on items 900 - 919. Liquid pressure monitoring added.	July 2009
v0.00.9	Plant zone communications amended to allow 2 wire operation by connecting Tx & Rx pairs together. Interface baud rate programmable on item 909 for use with new IF3x modules. Night time setback added for condenser fan speed control using items 368 & 369. Liquid pressure averaging error corrected. Support for Mk1 HT suction pressure optimisers added. Discharge pressure safety unload timer initialised to 5 secs instead of 60 secs. Suction pressure available for display on MU and comms in manual operation.	Nov 2009
v0.01.0	Compressor healthy input error with IF35 corrected. Compressor 1 can be run independently of inverter. Legacy support for automatic switching to stage control on inverter fault maintained by setting item 210 to 4 (1.con) Item 330 text enhanced to show inverter compressor healthy. Plant zone comms reliability improved. This solved problem of intermittent stopping of the inverter. Jnet Zone polling status added on item 967 to assist site communications fault finding. Inverter and condenser analogue output errors in backup mode corrected.	Apr 2010
v0.01.1	Correction to error in compressor input logic introduced to v0.01.0 Mk2 assembly option added. Inverter relay status added for IF35 interfaces on item 393	Apr 2010
v0.01.2	Mk2 assembly 4 wire plant zone communications error corrected.	June 2010
v0.01.3	Latest plant zone communications code used. This does not affect operation.	July 2010
v0.01.4	Enable suction optimiser choice added for input 2. Floating head pressure control added. Inverter run status available on comms on item 338	Nov 2010

	EPIC	
VERSION	DESCRIPTION	DATE
v0.01.5	Virtual bitswitch operation added. Restore parameter data from network facility added. Refrigerant type R408A added. Error in compressor inverter capacity when compressor not running removed. Last step operation includes a check for inverter running to allow unloading to a minimum capacity of inverter controlled compressor at minimum speed.	July 2011
v0.01.6	Download parameter fail status error corrected.	Aug 2011
v0.01.7	Output relay code amended to prevent intermittent spurious operation of network communications. Pressure data dependent on transducer selection and fault status. Compressor control data available in manual mode.	Nov 2011
v0.01.8	Latest library code used. Restart inverter pressure setting added. Refrigerant types 407F, R290, R407C added. start year 2016. Controller based data logging including discharge pressure log enhancements. Safety discharge pressure unload delay increased to 10s per stage. Safety discharge pressure unload sets inverters to minimum speed and unloads the inverter when no further staged compressors are available to unload. Error corrected in floating discharge pressure control when using liquid pressure monitoring feature. Exclude from suction optimisation network mode added. Interface fault error corrected. Stage change and start timers defaults changed. Choice of inverter or step control added to compressor 1 setup. Compressor fault alarm set when inverter compressor faulty. Inverter run hours calculation error corrected. Dew figures used in condenser calculations rather than bubble.	Jan 2018