H-Max Software Release Notes - Eaton

FW0091V013.vcx   released: September 2019

- Added support for Winter Mode operation:
  - Enables operation below -10C (previously Faulted at -10C)
  - Undertemp Alarm triggers at -10C
  - Undertemp Fault triggers at -20C
- Added Group P2.11 Winter Mode
  - P2.11.1 Lower Temp Enable used for enable/disable of this feature
  - P2.8.2.11 UnitUnderTempFlt allows for F13 auto reset
    - P2.8.2.11 UnitUnderTempFlt allows for F13 auto reset in tandem with P2.8.2.1 Auto Reset

FW0091V012.vcx   released: September 2018

- Motor efficiency optimization minor enhancements
- Control panel communication improvements
- CPU load improvements
- Control panel memory problems fixed. It could occur that panel started blinking and became unresponsive after some time of use. This could happen with certain usage related to e.g. momentary heavy CPU load or certain control panel view
- Optimizations to drive CPU load
- Hysteresis added to cooling fan stop at low temperatures to avoid fan starting and stopping at short intervals
- Software can be reset using ID 2594

FW0091V010.vcx   released: September 2016

- Fix for Fault code 8, Sub Code 649 resource overload issue

FW0091V009.vcx   released: July 2016:

- Added Current Limit warning Alarm Code 90
- Added Under voltage regulator warning Alarm Code 91
- Added Over voltage regulator warning Alarm Code 92
- Added Torque Limit Warning Alarm Code 93
- Added P8.1.21.1 Current Limit Warning Enable
- Added P8.1.21.2 Under voltage regulator active Warning Enable
- Added P8.1.21.3 Over Voltage regulator active Warning Enable
- Added P8.1.21.4 Torque Limit Warning Enable
- Interlocks now function in all start stop modes not just interlock start
- Fixed Bug where programmable V/Hz curve settings could not be set
- Fixed bug where drive would run to forward min speed if rev command was given and a 0 speed reference
- Changed default setting for P2.8.2.6 under voltage auto restart enable to Yes
- Changed default service factor to 1.1 when service factor is set the current limit will be set automatically
- Fixed bug in PID sleep function where preset speeds would not wake the drive
- Fixed Bacnet IP points AV26, AV27, AV28, AV29
- Fixed Fieldbus relay output pass-through control.

FAT•N

Powering Business Worldwide

- Added PID 1 active status to status word Bit 22 and General status word bit 6
- Added Motor Regulator Active status to status word Bit 23 and General status word bit 7
- Fixed Bug When reference unit changed to % the reference could not be set above 60Hz

FW0091V008.vcx   released: April 2015

- Fix loss of Keypad reference on power cycle with min frequency set to zero
- Added Degrees symbol circle to F for Process Unit Select Parameter
- Prevent the Keypad reference from multiplying on each power cycle if % is selected
- Added Austrialian Fire Mode
- Heatsink temperature alarm level is changed. Level is now 5 K below trip limit. Previous limit was 10 K below trip limit.
- Motor voltage calculation improved near field weakening point when maximum voltage scaling value is used.
- Frequency S-ramp retardation accuracy is improved
- Undervoltage controller robustness improved in case of start during underload situation
- Energy counter calculation accuracy improvements. Energy counter accuracy will be verified with this FW revision.
- If value zero was set to fieldbus data mapping parameters, it caused F69 -alarms (ID1310, ID1311, ID1312).
- BACnet IP: IP address and net mask handling fixed in case of multicast messages

FW0091V007.vcx

- Fix: There were a possibility of F8 ID602 watchdog fault when using 24V external power supply and cycling the 3-phase supply on and off multiple times.

- Ethernet communication not initialized properly with 70CVB01418 control board of revision F and previous software releases. Note! No drives with control boards of revision F and earlier system software versions has been produced at the factory. This is only a potential problem if new drives are loaded with old system software versions on the field.

FW0091V006.vcx

- Index changes in System Menus (M3 Diagnostics, M4 I/O and Hardware, M5 User Settings), hence harmonization.
- Motor Thermal protection has been changed to support new UL requirements.(UL 508C Standard for Safety)
- Motor temperature is saved when power unit is powered down.
- Motor thermal model is initialized using the saved temperature when power unit is powered up.
- If a battery is connected to the real time clock, motor temperature is calculated based on the saved temperature, real time and motor thermal time constant

- If there's not a battery connected, initialization temperature is 33 % of the saved temperature.
- Changes above are internal only, and do not affect the user interface.
- Lifetime counter added for the main cooling fan of the drive. The alarm limit can be set and counter also re-set at maintenance.
- Change in handling of IP addresses when switching between DHCP-Auto IP and Fixed IP. Previously the IP address, Default Gateway and Subnet Mask parameter were overwritten with the value given through DCHP. This caused problems when switching back to fixed IP through e.g. MaxConnect as the fixed ad-dress to switchover to could not be defined in advance. Now the parameter always states the address used with fixed IP, and a monitor value has been added for showing the settings used at the moment. (Monitor value and parameter might differ if DCHP Auto IP is used.)
- Possibility to save and restore 2 parameter sets to the control memory has been added. New parameters can be found in menu M5.5 Parameter Backup.
- Parameter Compare function has been introduced on the graphical keypad. Active parameters can be com-pared to the 2 Sets stored on the control board explained in previous bullet, default values or to the parame-ter backup in the keypad. Available in menu P5.6 Parameter Compare

FW0091V005.vcx

- Analog input calibration problem fixed. The problem caused analog input to show non zero value (~0,66%) although there wasn't anything connected to the input.
- Improvements done for Ethernet communication.
- FBGeneralStatusWord without mask

FW0091V004.vcx

- BACnet vendor information and objects.
- Sine filter parameter added.

Additional Help

In the event additional help is needed:

In the US or Canada: please contact the Technical Resource Center at 1-877-ETN-CARE or 1-877-326-2273.

Location	Contact
United States	Technical Resource Center at 1-877-ETN-CARE or 1-877-326-2273.
Canada	
Europe	

All other supporting documentation is located on the Eaton web site at www.eaton.com

E·T·N
Powering Business Worldwide