

Firmware Release Notes

FIR-v2213-B1030801

Diverse Bugfixing

FIR-v2213-B1029809

Added new representation of PI parameters. The parameters are independent of the user defined units.

FIR-v2139-B1022383

internal changes only

FIR-v2039-B835703

PD4-Ex-EB-65-x controllers are now supported (PD4-E with integrated brake)

FIR-v2039-B829210

internal changes only for CPBx-x-1 and CPBx-x-2

FIR-v2039-B807052

General:

- Reworked reaction to limit-switches
- Enable config of ballast resistor usage
- Added an option to disable the status or error LED
- Added a pre control for better current control
- Enhance PWM limit from 88.5% to 94.25% - more speed
- Updated PDO mapping for Assembly 100 and 101
- Adjustment of ESI file for use with OMRON PLC
- Support for CPB3/6/15
- Support of Interlock

Od:

- Unit of 320Eh:Fh and 320Fh:5 changed from per-mille to Volt
- Unit of 320Eh:Fh and 320Fh:5 shall change from per-mille to Volt
- Over Current Error can be cleared with 6040=128
- Add an option to configure a threshold velocity where the status bit 12 in ox6041 is set

- added possibility to read out the bootloader version with 4042h:1

- Autosetup:
- Change Visibility of Autosetup Parameters to Public
 - Autosetup uses nominal current

- EtherCAT:
- Enable setting of behaviour in case of a change to safe-OP
 - Enable Firmware & Bootloader update via EtherCAT FoE

- EtherNet/IP:
- DHCP host names will be applied

FIR-v1939-B697429

- General:
- Enhanced brake control
 - Increased the CPU capacity for NanoJ programs by decreasing the current control loop frequency to 16 kHz
 - Improvement of commutation at high speed
 - Adaption of brake ramp and limit switch
- Modbus RTU:
- The slave address for ModbusRTU over USB does not matter
- N5:
- Improved stability of storing OD values for some models of the N5
- PD4-E multiturn:
- Improvement of position detection after restart

FIR-v1926-B669333

internal changes only

FIR-v1926-B648637

- General:
- Analogue value scaling now possible
- Od:
- 0x33B0: Configuration of SSI encoder now possible
 - 0x605A: Brake stays open after quick stop active
 - 0x60C2: Interpolation time now settable
- Autosetup
- No change of 0x320E and 0x3210 after autosetup
- PD:
- Stay in closed loop after restore default parameters
- NP5:
- New object: 0x3231:3 (alternate function)

FIR-v1913-B628025

- General:
- Resetting Halt Bit in Relative Position Movement
 - sensorless commutation with a SSI sensor used

- A voltage error is raised before the ballast resistor is activated
- Slow speed mode implemented
- Support of multiple sensors
- Od:
 - Closing the brake by default, if a brake can be connected
 - CL4Ex: Adding 2701h customer storage area
 - Error reset for 6320h possible
 - Adding new objects 320Dh, 320Eh, 320Fh for nomalized PI parameters
- Autosetup:
 - Possibility for a reduced autosetup for range limited linear actuators
- EtherNet/IP:
 - Update of the .stc files
 - Addition of PDI assembly
- PD4-C:
 - Reduced current limit

FIR-v1825-B577172

internal changes only

FIR-v1813-B557134

- General:
 - Wrong default threshold for ballast circuit
 - Velocity and acceleration feed forward did not work in IP mode and were wrongly scaled in CSP and clock-direction mode
 - Correction of the automatic brake control with step direction
- Autosetup:
 - Correction of the alignment values
- Limit Switches:
 - Removed the tolerance band for limit switches
- Od:
 - Removed 2059h for devices without encoder configuration capability
 - 2038h is public for all controllers
 - Correction of the default values of 1011h
 - Correction of the default value of 605Ah to 2
- PDI:
 - Enable it by default and support it by Modbus RTU PDOs
 - Adapt the status bits and shift some command figures
- Quick Stop:
 - Support of quick stop option codes 5 & 6 in 605Ah to stay in quick-stop active state

FIR-v1748-B538662