Jetter automation



JXM-IO-E31

Version Update from V1.0.0.11 to V1.06.0.00

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1 Changes to 1.06.0.0

Overview Version 1.06.0.00

The following table gives an overview of newly added or enhanced features and fixed software bugs:

Function	New	Enhanced	Fixed
EMCY-message in case of total over current and supply voltage out of range			✓
HL5 and HL12 ports: hardware protection – all outputs turned off if at least at on a current >55A or a temperature fault was detected	✓		
Downgrade ability to 1.04.0.00 improved			✓

2 Changes to 1.05.0.0

Overview Version 1.05.0.00

The following table gives an overview of newly added or enhanced features and fixed software bugs:

Function	New	Enhanced	Fixed
HL5 & HL12: parameter OCD(65) = 1(at startup) not configurable anymore it's not supported by hardware			
All ports: status monitoring fixed			✓
CAN monitoring		✓	
Status LEDs control: bug fixes			✓
PT1000 port: temperature measurement linearization of raw values improved			✓
CAN-Busoff recognition: bug fixes			✓
Sensor voltage monitoring: bug fxes			✓
Heartbeat monitoring	✓		
HS3, HL5 and HL12 ports: current clip added if duty cycle is 0	✓		
DI ports: rotary encoder	✓		
PDO: bugfix for case that SDO and PDO handled at same time			✓
PDO mapping: bugfix in bitwise mapping			✓
DI: I_PeriodTime is calculated by I_HPulse and I_LPulse instead of _I_Frequency			✓
HS3: wind-up protection for current control		✓	
Support for new Variant 2 with PT1000 measuring range up to 820°C	✓		

3 Changes to 1.04.0.0

Overview Version 1.04.0.00

The following table gives an overview of newly added or enhanced features and fixed software bugs:

Function	New	Enhanced	Fixed
for PT1000 use linearization for raw values to compensate circuit dependent tolerances and non-linearity		✓	
Correct CRC returned on request at 0x4556 with sub index 1			✓
DI ports: timeout time default value changed to 1000ms			✓
DI ports: reset for input values if a timeout event occurs as in JXM-IO-E30			✓
DI ports: SDO read bug fixes			✓
EMCY messages: only send if port type isn't set to inactive			✓
CAN channel to send EMCY messages: wrong HW channel was used			✓
HS3, HL5 and HL12 ports: dither frequency maximum changed to 800Hz			✓
Port configuration: loading and use at startup fixed			✓
HL5 and HL12 ports: synchronized PWM ports' current monitoring independent: - I_HCURRENT holds current for asked port - Over current is monitored and signaled for each port separate			✓
CAN: thread priorities changed			✓
OS update: bug fixes			✓
HL5 and HL12 ports: PWM frequency handling for synchronized ports fixed			✓
During overcurrent cooldown phase status inactive is set	✓		
Input filter handling added	✓		
AI, HS3, HL5 and HL12 ports: current monitoring bug fixe for implicit type cast			✓
HS3, HL5 and HL12 ports: dithering fixed uses correct maximum value clip			✓
Open circuit detection at startup	✓		

4 Changes to 1.00.0.11

Overview Version 1.00.0.11

The following table gives an overview of newly added or enhanced features and fixed software bugs:

Function	New	Enhanced	Fixed
HS3, HL5 and HL12 ports: duty cycle handling bug fixes			✓
PT1000 port: temperature measurement bug fixes			✓
PT1000 port: set maximum for temperature to 150°C			✓
Diagnostics object: voltage divider implementation for VEXT_SEN adjusted			✓
HS3 ports: current control bug fixes			✓
DI ports: frequency input bug fixes			✓
AI ports: no over current detection in digital input mode			✓
HS3 ports: current measurement improved		✓	
AI ports: digital input hysteresis added	✓		
HS3 ports: added DI_PNP handling	✓		
AI, HS3, HL5 and HL12 ports: measuring tolerance			✓
HS3 ports: digital input handling			✓
HS3 ports: pull-up control			✓
HS3, HL5, HL12, AI and PT1000 ports: negative values handling			✓
Diagnostics object: PCB temperature measurement	✓		
Diagnostics object: total current calculation			✓
Diagnostics object: on-chip temperature calculation			✓
Calibration functionality added	✓		
HL5 and HL12 ports: improve current calculation		✓	
DI ports: interface type selection			✓
Software implementation for voltage divider corresponding to hardware 2.0			✓
Default values for synchronized HL5 and HL12 ports		✓	
Diagnostic object returns voltage VRef_Sen		✓	
Status LEDs control			✓

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