Software Change Note

Application: ASFIF125
Application Name: Heat Exchanger (Flow Ctrl) -application for HX
Manual: UD00840

ASFIF125V606

Replaced Application: ASFIF125V605
System Software requirement: NXSV152, NXPV146
Used in production: January 2025
Author: JaOr

- New parameter added:
  - P2.10.15 Inlet Temperature Fault Response

- New feature: Parameter P2.10.15 Inlet Temperature Fault Response can be used to select how the drive reacts when pump inlet temperature increases above the fault level (adjustable by P2.10.11). In earlier versions, drive generated a warning and continued operation. Now, user can select the response between "warning" and "fault". Option "Fault" will stop the drive.

ASFIF125V605

Replaced Application: ASFIF125V604
System Software requirement: NXSV152, NXPV146
Used in production: March 2019
Author: KiMa
Changes in new application:

- New parameter added:
  - P2.10.14 Inlet Pressure Fault Response

- New feature: Parameter P2.10.14 Inlet Pressure Fault Response can be used to select how the drive reacts when pump inlet pressure drops below the fault level (adjustable by P2.10.5). In earlier versions, drive generated a warning and continued operation. Now, user can select the response between "warning" and "fault". Option "Fault" will stop the drive.

ASFIF125V604

Replaced Application: ASFIF125V603
System Software requirement: NXSV152, NXPV146
Used in production: February 2016
Author: KiMa
Changes in new application:

- Bug fix: At power up situation, there was a certain delay before the temperature sensor was able to send the correct temperature signal to the drive. During that delay, the drive activated F86 – Low Temperature alarm unnecessarily. Fixed by disabling Low temperature supervision for 30 seconds after power up.

ASFIF125V603

Replaced Application: ASFIF125V602
System Software requirement: NXSV152, NXPV146
Used in production: January 2016
Author: KiMa
Changes in new application:

- New parameters added:
  - P2.9.10 Deadband
  - P2.9.11 Deadband Delay

- New feature: PID Deadband:
  - As the actual temperature is measured with resolution of 1 Celsius degree, the PID controller is controlling the 3-way valve unnecessarily back and forth continuously. This will reduce the lifetime of the valve.
  - PID Deadband function is developed to lock the output of the PID controller, when the actual temperature is close to the temperature reference (within a deadband area) for a certain period of time. This will keep the 3-way valve stable for longer time and avoid unnecessary control of the valve.

ASFIF125V602

Replaced Application: ASFIF125V414
System Software requirement: NXSV152, NXPV146
Used in production: March 2015
Author: KiMa
Changes in new application:

- Name of the application changed from "Flow Control" to "Heat Exchanger".
- New monitoring values added:
  - V1.23.5 Fault Word 1
  - V1.23.6 Fault Word 2
  - V1.23.7 Warning Word 1
  - V1.23.8 Fault Word 10
  - V1.23.9 Warning Word 10

- Bug fix (CPAP-413): Drive didn't follow the "Preset Speed" command from DIN6. Fixed.
- Bug fix: "Cooling OK" –signal was kept "OFF" if the start command was active, when the drive was powered up. At power up situation, there was a certain delay before the flow switch was able to send the correct input pressure signal to the drive. During that delay, the drive set the "Cooling OK" signal to "OFF" because of the low level of input pressure signal. Fixed.

ASFIF125V414

Replaced Application: ASFIF125V413
System Software requirement: NXSV152, NXPV146
Used in production: May 2009
Author: UlBa
Changes in new application:

- V1.23 monitored "Flow" value removed from panel tree (Actual_Flow_Value)
- P2.10.14 & P2.10.15 Min flow and Max flow, removed from panel tree
- ***Please NOTE!***
  This version of the application is not backwards compatible to older version regarding hw connections

ASFIF125V413

Replaced Application: ASFIF125V412
System Software requirement: NXSV152, NXPV146
Used in production: May 2009
Author: UlBa
Changes in new application:

- "Alarm Latched" function added as option #18 for RO1 & 2 & 6
- Default value for RO2 is 18=Alarm Latched
- Variables used for P2.10.2 and P2.10.3 corrected to the one used in code.
- The function of the Relay Outputs 4 and 5 where connected in parallel to C.2 and C.3
- The function of the Relay Outputs 6 where connected in parallel to C.1
- Monitoring variable FLOW added to position V1.22
- The Flow is connected to AI3, that is read from C-slot 1st input as default
- RO6 set to come from DO on A1 board as default.
- Parameter for RO6 Signal select added to panel tree, Group 2.3.9
- RO4,RO5,RO6 output added to monitor window on the panel.

ASFIF125V412

Replaced Application: ASFIF125V410
System Software requirement: NXSV152, NXPV146
Used in production: January 2009
Author: UlBa
Changes in new application:

- Parameter for Low Pressure Fault added (Default 0,2bar)
- Parameter for DIN6 function added. Options:
  - Preset Speed (def)
  - Fault Reset
- CoolingOK signal remains OFF if High Temp Fault or LowPress Fault has occurred but the situation has gone back to normal. CoolingOK goes back ON after a FAULT RESET is pressed
- Text message "Cooling Fault PRESS RESET" is shown if the above mentioned situation occurs but no Reset is yet pressed

- StatusWord1 and Status Word2 added in the unofficial version 4.11

ASFIF125V410

Replaced Application: ASFIF125V409
System Software requirement: NXSV152, NXPV146
Used in production: July 2008
Author: UlBa
Changes in new application:

- RO6 added. Programmable content, but fixed to C slot relay 1.
- DIN6 is activating Preset speed. Not programmable.
- Default Value for P2.3.1.1 Analog Output 1 Content, changed from 13 -> 12 (=PID Out Temp).
- Default Value for P2.3.4.2, Relay Output1 Function, changed from 17 -> 2 (= RUN).
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ASFIF125V409

Replaced Application: ASFIF125V408
System Software requirement: NXSV152, NXPV146
Used in production: January 2008
Author: UlBa
Changes in new application:

- There where problems with the pump change is Parameter for Delayed Fault (P2.10.12) was set to 5s. This is now fixed.
- Code for fault triggering after pump change improved.
- Values for Delayed Fault (P2.10.12) is now settable between 1s-30s.
- Parameter text for P2.2.1 DIN2 Input, corrected. If "Normally Open" then the fault is generated when Input is closed. Opposite function is "Normally Open" is selected.
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ASFIF125V408

Replaced Application: ASFIF125V407
System Software requirement: -, -
Used in production: -
Author: UlBa
Changes in new application:

- Parameters for Stall, -Current, -Time and –Frequency added
- "PT11 (AIA1) " added as an option for analog output function #13
- Changed names for analog output functions
  #9: PID Reference -> Temp Reference
  #10: PID Actual Value -> Actual Temp. This temperature is measured on the outlet of the HX pump. (FSA11)
  #11 : PID Error value -> Temp error value
- The names of monitoring values
  V1.17 PID reference -> Temp Reference
  V1.18 PID Actual Value -> Actual Temp
  V1.19 PID Error value -> Temp Error Value
  V1.20 PID Output -> PID Output (Temperature)
- Monitoring values for DIN4, 5, 6 corrected.
- Default values for analog outputs changed:
  AOUT_1 = PT11 (Pressure, pump inlet)
  AOUT_2 = Actual temperature (From FSA11)
  AOUT_3 = Output Current
- Added Advanced Options parameters 1, 2 and 4.
- Added modulator type parameter
- Added Flux Circle Stabilator Gain parameter
- External fault can be selected to make ramp stop by using ramp time 2.