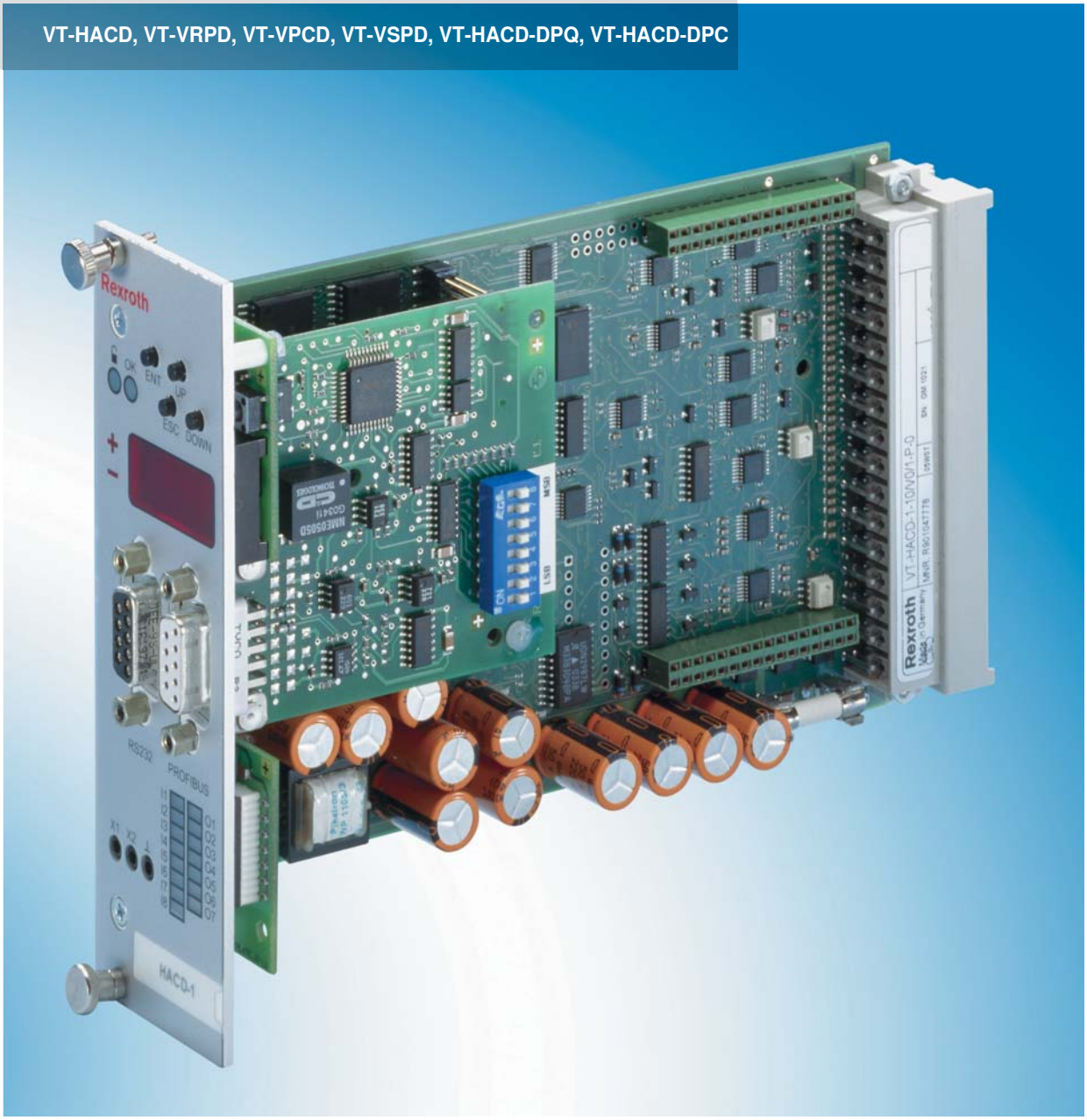
Electric Drives and Controls | Hydraulics | Linear Motion and Assembly Technologies | Pneumatics | Service

Rexroth Bosch Group

History of the VT-HACD-Product family

RE 30143-10-Z/11.13
Replaces: 11.12

VT-HACD, VT-VRPD, VT-VPCD, VT-VSPD, VT-HACD-DPQ, VT-HACD-DPC



Content

1 General

This documentation describes the software versions of products based on HACD technology.

2 Bodac

Overview

Version	Date
Bodac 2.03.01.00	19.10.2012
Bodac 2.01.00.00	21.04.2010
BODAC 1.499	30.08.2008
BODAC 1.497	01.03.2007
BODAC 1.496	01.08.2006
BODAC 1.493	29.08.2005
BODAC 1.491	
BODAC 1.490	24.03.2005
BODAC 1.489	21.01.2005

2.1 Bodac 2.03.01.00

- Improvements for the HACD-DPQ: Add export modus for the control parameter in step “injection” and “pack and hold”.
- Fix an unwanted move of the table end marker while zooming.
- The area of the 31 blocks will now be displayed in a different color to distinguish it from the rest of the screen.

2.2 Bodac 2.01.00.00

- Start with Version 2.01.00.00

2.3 BODAC 1.499

- Improvements in the “Motion Data Multiplot” screen and in the associated pressure function.
- Improvement of the “Preset“ command in Loop 1 of the Structure window.
- When loading a pkg file for a bus card (Profibus, CANOpen, DeviceNet), the bus sector is cleared first (“ClearBus“).
- Warning message, if a new parameter file is uploaded to a bus card having an older configuration, because this could lead to data inconsistency.

- Additional window “Send Email To Support“ under menu item “Help”.
- Improvements in the card information window (for VSPD-… only)
- Extension in the table window: The x-axis can now also be referred to other units, independently of time.
- Firmware updates are allowed also when the application of the card has not yet been started.

2.4 BODAC 1.498

- Additional windows for local bus
- Additional window for “Use Default Parameter Data“
- Additional window for “Search Cards“
- Extensions in window “COM“
- Extensions in window “Options“
- The number of an error occurred can be output in the form of a bit string via a digital output (HACD-1-1x…, VSPD-…, VRPD-…, VPCD-… only)
- Display text shown in title bar
- Extension of SSI resolution from integer to decimal numbers.

2.5 BODAC 1.497

- Additional windows for VT-HACD-1-1x/V0/1-P-1
- Paths for saving and loading files can be adjusted.
- When parameter files are saved, the software versions of the card are also saved automatically. These are shown when the parameter file is being loaded.
- The number of an error occurred can be output in the form of a bit string via a digital output (HACD-1-1X… only)
- The setup routine of Bodac registers Bodac in the registry (also with Win XP)

2.6 BODAC 1.496

- Functional extension of Bodac by WinView (representation of signals)

2.7 BODAC 1.493

- Functional extension of Bodac by table windows
- Direct access to the online help from the main menu, if a bus card is connected.
- The bus card is automatically re-initialized after changes were made within the bus manager.

- New coding for the online help files.

2.8 BODAC 1.491

- Support of VRPD
- Error window supplemented by CanOpen options.
- Profibus buffers 2 and 4 are now permanently displayed in the bus manager.

2.9 BODAC 1.490

- Inclusion of further internal functions in the course of further development of the HACD firmware.
- Supplements and extensions with regard to error signals and error message texts.
- The settings of the Motion Data display are now saved during a session.
- In the Parameters window, the entry “Alternating” is no longer deactivated when the checkbox “Controller off” was activated.
- All functions of the VT-VPCD-1-1x are supported.
- Extension of the SSI encoder by the “Home” mode

2.10 BODAC 1.489

- New format for the card information window
- The note windows were translated into German
- When a software package is sent to the amplifier card, the software versions for Profibus and CanOpen are shown correctly.
- Internal supplements for VPCD products

3 Firmware

Overview

Version Bootstrap	Version Application software	Date
L910		19.10.2012
L9		22.08.2011
	B25	14.10.2013
L4	B23	26.07.2012
L1	B22	22.08.2011
K12	B20	14.10.2010
K11	B19	02.06.2010
K10	B18	22.10.2008
K10	B17	30.08.2008
	B15	01.12.2007
	B14	01.12.2007
	B13	30.09.2007
	B12	30.09.2007
K9	B10	01.03.2007
K8	B07	01.08.2006
K6		05.12.2005
K5		08.09.2005
K4	B05	09.08.2005
	B03	03.06.2005
	B01	12.04.2005

3.1 Bootstrap

L910

- Bootstrap L9 only for DPC and DPQ cards. Bootstrap automatically resets again. Version L9 provided no automatic reset.

Firmware

L9

- Bootstrap L9 only for DPC and DPQ cards. The L9 Bootstrap allows introduction of the new processor.

L4

- Improvement of the manufacturing regarding digital output failure recognition.

L3

- Bootstrap automatically resets again. Version L1 provided no automatic reset.

L1

- The L1 Bootstrap allows introduction of the new processor.

K12

- Intensify the checksum and copy check in a row with new RAM devices
- Extend the local bus address from 24 to 32 bits
- Check the tolerances of the VPCD functiontest

K11

- VT-VRPD and VT-VPCD
  Change the zero point settings of a valve

K10

- Update of the function and calibration test (checksum test)
- Increase of processor clock rate to 25 MHz. Alternatively, 24 MHz is possible as well.

K9

- Update of function and calibration test
- Supplements to function and calibration test for HACD-1-1x/V0/1-P-1

K8

- Update of function and calibration test
- Update of subroutine “Firmware download“

Firmware

K6

- Update of function and calibration test

K5

- Function and calibration test supplemented for the VPCD V100 version.

K4

- Additions for VSPD.

K3

- Configuration files having a size of more than 3 sectors are read in correctly.

K2

- Supplements to the function and calibration test for VRPD.

K1

- Supplements to the function and calibration test for VPCD.

3.2 Application

B25

VT-VPCD
Parameter files < 1.18 are converted correctly (with configuration > 2.97).

B23

- VT-VPCD
  Correction of the digital outputs indicating in respect to active pressure and swivel angle control.
- VT-VPCD
  Provides a rectangle wave signal option with a period of 64ms for digital output DO7.

B22

- B22 Pluto introduced with the new processor.

Firmware

B21

- VT-VPCD
  Bug fix: The first time the I-sum will be set off takes 2ms longer than other times.
  Now if the pressure control and the power limitation is active at the same time, only the digital output DO2 (pressure control active) will be set high.
- VT-HACD
  Correct the Feed Forward signal based on velocity.
  A wrong calculation of the DT1(LFB) signal by changing into block 4 or 10 has been found and fixed.
  The control behavior during a block change has been improved.

B20

- VT-VPCD
  Rectify the error analyzing of "cable break solenoid b"
- VT-HACD
  Adapt the local bus baud rate for cards with a bootstrap >= K10
  Analyze also CMD and LS as possible commands
  Analyze also LO as a possible internal flag or a digital output
  Rectify the integrator value in an inactive block
  Correct offset in the tables

B19

- VT-VPCD
  New parameter for i-correcture (+)
- VT-VPCD and VT-VRPD
  Change the zero point setting for a valve
- VT-HACD
  Increase incremental encoder resolution up to 2 decimals
  Bug fix: Local bus does not always work after power up
  Bug fix: Parameter configuration over the faceplate can change data incorrectly
  Rectify the trigger analysis, if multiple blocks are using pause triggers

B18

- Bug fix in the OK-signal

B17

- Improvement in the magnetic field recognition
- Extension of firmware with checksum test
- Changeover of processor clock rate between 24 MHz und 25 MHz. All timers are re-computed according to this clock rate.

Firmware

- VT-VPCD
  The user can limit the pressure controller output to values between -100 % and 0.
- VT-HACD
  The adjustment of CTS/Unit for the SSI encoder is extended to two decimal places.

B15

- Improvement of data acquisition with SSI encoders with a resolution of less than 15 bits
- Improvement of trigger conditions of the Structure Editor with regard to digital inputs or outputs and internal flags

B14

- VT-VSPD
  Allows access to the data of the daughterboard via local bus
- VT-VPCD
  Correction of a bug in swivel angle acquisition
- Extension by the functionality of an XY table, which can have a unit-based X-axis instead of a time-based X-axis.

B13

- Improvement in the fault display in the Bodac status bar

B12

- Routines extended for local bus.
- When showing faults on display, only display the first out fault, because multiple faults on display are confusing.
- Change decimal point to a comma when German is chosen.
- Add fault number to unknown fault display.
- Parameters, which are changed via the display, are only saved automatically when the basic display text (level 1) appears.
- VT-VPCD
  Codes for monitoring the solenoid currents for cable break detection extended.
- VT-VSPD
  VSPD parameters can now also be edited via the display.
- VT-VSPD
  Distinction between user valves and Rexroth valves.

Firmware

- VT-VSPD
  Product-specific mask for selectable valves in the display now possible.

B10

- HACD-1-1x:
  Binary triggers did not function in the field “Trigger 2”; fixed
- HACD-1-1x, VPCD-1-1x, HACD-DPQ-1-2x and HACD-DPC-1-1x:
  The integrator stopped in the case of slow I-components and high units → 100% values below its 100% limit; fixed.
  When the I-component is changed while a control process is taking place, the output of the I-controller does no longer jump.
- HACD-1-1x:
  Any faults occurred can be output in the form of a bit string to an optional digital output.
- HACD-1-1x:
  Signals can be saved in tables. These tables can now be saved automatically in the non-volatile memory (flash).
- HACD-1-1x:
  When the “Preset” function is used in a block, the parameters, command value, velocity and S-ramp are no longer shown in this block.
- VPCD-1-1x:
  The parameter “Fast i-correction ON” was permanently set to its default value of 100 ms. This parameter can now be freely changed.
- VPCD-1-1x:
  Additional parameter “Pressure controller with one pressure sensor via shuttle valve”

B09

- RAW data of an SSI encoder displayed in the SSI window
- HACD-1-1x
  In B07 the “Pause” mode was incorrect in one block chain; fixed.

B07

- HACD-1-1x…, HACD-DPQ-1-2x and HACD-DPC-1-1x:
  Correction of calculation of the checksum for the EEProm in conjunction with SSI home mode.
- VPCD-1-1x/V0/…, VPCD-1-1x/V100/… :
  Code supplemented by two further parameters for I-correction in conjunction with A4..HS4 and A2..EO4 pumps. Supplement only effective with parameter files > 1.09.
- General:
  Not only errors, but also warnings are now shown on the display.

Firmware

B06

- Fault recognition (roll-over) for rotary encoders (SSI) was modified.

B05

- The “Tables” function was introduced
- A Profibus system error is recognized.
- Parameters are correctly shown on the front display

B03

- Monitoring of the control deviation is switched off when the corresponding closed control loop is inactive.
- S-ramp Start works in both directions

B02

- LVDT for the VRPD are read in.

B01

- Configuration files can have a size of more than 3 sectors
- Supplements for VRPD calibration; LVDT inputs are calibrated.
- Initialization of CanOpen parameters

A99

- Inclusion of home mode for SSI encoders

A98

- Set internal control variables to zero when the enable signal is deactivated
- Controller bouncing time for control deviation is set to zero in the open loop mode.
- Additional trigger condition “Ramp finished”

3.3 Bus

Overview

Version Profibus	Version DeviceNet	Version CanOpen	Date
P022	D.12	C.15	30.07.2010
P021	D.12	C.15	30.08.2008
P020			30.09.2007
P019			30.03.2007
P018		C.13	25.07.2006
P016			08.06.2006
	D.09	C.12	21.03.2006
P013			05.12.2005
	D.07		28.09.2005

C.15

- Adjustment to the increase in the processor clock rate to 25 MHz.

C.14

- Extension of the firmware with checksum test

C.13

- Loop Output parameters available for Loop 2.
- Support of 1000k baud rate.

C.12

- Parameters protected by enable could also be written while the enable is activated.

Firmware

D.12

- Adjustment to the increase in the processor clock rate to 25 MHz.

D.11

- Extension of the firmware with checksum test

D.09

- Parameters protected by enable could also be written while the enable is activated.

D.07

- I/O transmissions were not always handled correctly (in the case of non-fragmented transmission)

Firmware

P022

- Improve the control of valves with a nominal size 6

P021

- Extension of the firmware with checksum test

P020

- If there is an access via DPV1 to a Slot number greater than 19 an error message will be generated (Invalid Slot)

P019

- Improve build up of the internal parameter list

P018

- Loop Output parameters available for Loop 2.

P016

- DPV1 functionality added.

P013

- A Profibus system error is recognized and displayed.

3.4 Firmware to valve controller

Overview

Version Valves	Version Valve Control	Date
Ventile v2.60		
Valves v2.50		21.01.2010
Valves v2.40		30.08.2008
Valves v2.30	Valve Control D014	30.09.2007
	Valve Control D013	22.06.2007
Valves v2.10	Valve Control D012	21.02.2007
	Valve Control D011	20.12.2006
Valves v2.00	Valve Control D010	01.08.2006 Initial Version

Only relevant for cards, which are equipped with daughter-boards TSPD-1-2x or TRPD-2-2x.

Ventile v2.60

- Mit Valves v2.60 wurde der neue Prozessor eingeführt.

Valves v2.50

- Bug fix: Now all Output Edit parameters of 4WRE 6 and 4 WRE 10 valves are editable

Valves v2.40

- Extension of firmware with checksum test

Valves v2.30

- Distinction between user valves and Rexroth valves.
- Menu extended by valves (Z)DRE NG10-2x, 3DRE(M)NG10-7x, 3DRE(M)NG16-7x.

Valves v2.10

- Menu extended by valves 4WRE 6 and 4WRE 10.

Valve Control D015

- Cable break isn't any longer detected with enable transition to high for user defined parameter sets. For active solenoids cable break will continue to detect.

Valve Control D014

- Fault rectified: Improvement of cable break detection: On single-solenoid valves, a cable break was erroneously detected at the time of switching on while the enable was active.

Valve Control D013

- Fault rectified: A cable break was signaled as short-circuit, if it occurred at the moment when the relevant valve side was operated.
- Fault rectified: Some cards signaled a memory fault after the user-defined parameter set "User 1" was selected. The cause was an incorrectly initialized EEPROM. Notes on the defective cards: Updating of the valve controller will not eliminate this fault. Customers affected by this fault will get a parameter file on request (eMail: support.hacd@boschrexroth.de), which will eliminate the fault.
- Function added for re-initializing the custom parameter sets User1 and User 2. Can only be utilized with configuration 1.03.
- Improvement of function test. Not relevant for customers.

Valve Control D012

- Improvement of function test. Not relevant for customers.

Valve Control D011

- Fault rectified: Access conflict when loading and sending a user-defined parameter set (parameter set, in which valve User1 or User2 is selected).

4 Products

4.1 VT-HACD-1-1x/V0/1-0-0, VT-HACD-1-1x/V0/1-P-0, VT-HACD-1-1x/V0/1-C-0, VT-HACD-1-1x/V0/1-D-0 and VT-HACD-1-1x/V0/1-P-1

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 11.46			02.06.2010
Configuration 11.44	Parameters 2.08		30.08.2008
Configuration 11.43			
Configuration 11.42	Parameters 2.06	Menus v1.20, Menus HR110	30.09.2007
Configuration 11.41	Parameters 2.05		01.03.2007
Configuration 11.40	Parameters 2.04		01.08.2006
Configuration 11.30			09.08.2005
Configuration 11.22			03.06.2005
Configuration 11.21			24.05.2005

Configuration 11.46

- Extension of the local bus to 32 cards

Configuration 11.44

- Extension of firmware with checksum test
- Extension in table window. The x-axis can now also be referred to general units, independently of time.

Configuration 11.43

- Bug fix: Testjack X1 is not working with Configuration 11.42

Configuration 11.42

- Function “local bus” added.
  This function is only available with parameter files ≥ Version 2.06 and Application ≥ B11.
- Extension of SSI resolution from integer to decimal numbers.
  This function is only available with Application ≥ B11.
- Parameters extended for the bus manager.
  This function is only available with parameter files ≥ Version 2.06 and Application ≥ B11.

Configuration 11.41

- Low-passes added in the inputs of the structure.
  This function is only available with parameter files ≥ Version 2.05 and Application ≥ B10.
- The last 16 errors are saved.
  This function is only available with parameter files ≥ Version 2.05 and application ≥ B10.
- Any faults that occurred can be output in the form of a bit string to an optional digital output.
  This function is only available with parameter files ≥ Version 2.05 and Application ≥ B10.
- Signals can be saved in tables. These tables can now be saved automatically in the non-volatile memory (flash).
  This function is only available with parameter files ≥ Version 2.05 and Application ≥ B10.

(Required Bodac version: 1.497 or higher)

- New amplifier card VT-HACD-1-1x/V0/1-P-1

Configuration 11.40

(Required Bodac version: 1.496 or higher)

- “Preset” function added.
- “WinView recording“ window was added.
- The condition ABS(LOx)<= Window was added for digital outputs and flags.
- The representation of digital signals in the Motion Data display was corrected.
  The signal state “Off” now has a lower level than the signal state “On”.
- The representation range of test jacks was extended to +/- 50000 Units.
- The range of the SSI encoder was extended to 8~31 bits.
- The RAW data of an SSI encoder are displayed (SSI window).

Products

Configuration 11.30

(Required Bodac version: 1.493 or higher)

- Flags are correctly shown on the Motion Data display.
- The “Tables” window was implemented.
- Bouncing times were supplemented for Mode 1 and Mode 2 in the “Errors” window.
- The indication of “Error 8” was added in the Motion Data display.
- The parameters “Set SSI to zero“ and “Set INC to zero“ were added in the bus manager.
- The parameter “Bus error” was added in the windows “Error” and “Status”.

Configuration 11.22

(BODAC 1.4xx or higher)

- Addition of parameters (control parameters and S-ramps) for the bus manager.

Configuration 11.21

- The “Alternating” function was supplemented with the directions “Left” and “Both”.
- The start ramp now works correctly in rapid/creep speed in Mode 2.
- In Mode 2, the errors for the incremental encoder were supplemented.

Parameters 2.08

- Increase the incremental encoder resolution up to 2 decimals

Parameters 2.06

- Function “local bus” added.
- Parameters extended for the bus manager.

Parameters 2.05

- History function enabled; errors are recorded.
- Low-pass filters enabled in the inputs of the structure.
- Any faults that occurred can be output in the form of a bit string to an optional digital output.
- Signals can be saved in tables. These tables can now be saved automatically in the non-volatile memory (flash).

Parameters 2.04

- Parameters added for the “Winview recording” window.

Menus v1.20

- Local Bus ID now shown additionally on the display
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- Change of DeviceNet and CanOpen ID in Fieldbus ID.
- “Display“ parameter added.
- Correction of unit range of analog inputs and test jack X2.

Valid for VT-HACD-1-1x/V0/1-0-0, VT-HACD-1-1x/V0/1-P-0, VT-HACD-1-1x/V0/1-C-0 and VT-HACD-1-1x/V0/1-D-0

Menus HR110

- Local Bus ID now shown additionally on the display
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- Change of DeviceNet and CanOpen ID in Fieldbus ID.
- “Display“ parameter added.
- Correction of unit range of analog inputs and test jack X2.

Valid for VT-HACD-1-1x/V0/1-P-1

4.2 VT-HACD-DPQ-1-2x/V0/1-0-0, VT-HACD-DPQ-1-2x/V0/1-C-0, VT-HACD-DPQ-1-2x/V0/1-D-0

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 1.42	Parameters 1.03		19.10.2012
Configuration 1.40	Parameters 1.01	Menus v1.10	01.09.2007
Configuration 1.39	Parameters 1.00		22.01.2007
Configuration 1.37	Parameters 0.09		14.06.2006
Configuration 1.35	Parameters 0.07		

Configuration 1.42

- Improvement: Add export modus for the control parameter in step “injection” and “pack and hold”.

Configuration 1.40

- DeviceNet version available
- Correction of display parameters
- CANopen: PDO 4 buffer had incorrect address

Configuration 1.39

- Window “Fault history“ added
- Window “Controller structure“ added

Configuration 1.37

(Required Bodac version: 1.494 or higher)

- Parameters added for the bus manager / field bus.
- CANopen version available now
- “WinView recording“ window was added.

Parameters 1.03

- Improvement: Add export modus for the control parameter in step “injection” and “pack and hold”.

Parameters 1.01

- DeviceNet implemented

Parameters 1.00

- CANopen implemented

Parameters 0.09

- Error rectified in conjunction with the use of the pressure cell in the mould.
- Parameters added for the “Winview recording” window.

Menus v1.10

- Local Bus ID now shown additionally on the display
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- Change of DeviceNet and CanOpen ID in Fieldbus ID.

4.3 VT-HACD-DPC-1-2x/V0/1-0-0, VT-HACD-DPC-1-2x/V0/1-C-0, VT-HACD-DPC-1-2x/V0/1-D-0

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 1.26	Parameters 1.03	Menus v1.10	01.09.2007
Configuration 1.25	Parameters 1.02		18.01.2007
Configuration 1.21	Parameters 0.05		14.06.2006
Configuration 1.16	Parameters 0.04		

Configuration 1.26

- DeviceNet version available
- Correction of display parameters

Configuration 1.25

- Help files could not be uploaded – corrected
- CANopen: PDO 4 buffer had incorrect address
- Fault history window added
- New window for controller structure overview
- Traverse Close Velocity and Traverse Open Velocity Scale corrected

Configuration 1.21

(Required BODAC 1.494 or higher)

- Parameters added for the bus manager.
- “WinView recording“ window was added.

Parameters 1.03

- Bus system DeviceNet now available.

Parameters 1.02

- CANopen now available.
- Traverse Close Velocity and Traverse Open Velocity Scale corrected

Parameters 0.05

- Parameters added for the “Winview recording” window.

Menus v1.10

- Local Bus ID now shown additionally on the display
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- Change of DeviceNet and CANopen ID in Fieldbus ID.

4.4 VT-VPCD-1-1x/V0/1-0-1, VT-VPCD-1-1x/V0/1-D-1, VT-VPCD-1-1x/V0/1-C-1, VT-VPCD-1-1x/V0/1-P-1

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 2.98			14.10.2013
Configuration 2.97			15.5.2013
Configuration 2.96			04.04.2013
Configuration 2.95	Parameters 1.21		26.07.2012
Configuration 2.90			11.01.2011
Configuration 2.86	Parameters 1.19	Menus P0_1.30	30.08.2008
Configuration 2.84	Parameters 1.18	Menus P0_1.20	30.09.2007
Configuration 2.83	Parameters 1.17		28.07.2007
	Parameters 1.15		12.03.2007
Configuration 2.82	Parameters 1.14		01.03.2007
Configuration 2.78	Parameters 1.12		01.08.2006
Configuration 2.75	Parameters 1.10		31.05.2006
Configuration 2.66	Parameters 1.08		05.12.2005

Configuration 2.98

- Parameter files < 1.18 are converted correctly.

Configuration 2.97

- Limiting parameter “I-Correction(-) off for” for 0 to 2000ms.

Configuration 2.96

- The pulldown for the selection of the signals that are displayed on the display has been added.
- The value of the valve feedback for valves size 10 has been corrected for the motion data screen.

Configuration 2.95

- Correction of the DT1 and DT1(LFB) signal designations of in the ”Controller 2” window
- Three additional Bus manager Parameters for the fault configuration of Actual Pressure A, Actual Pressure B and Swivel Angle Value.
- Configuration of digital output DO7 with a rectangle wave (15.625 Hz)
- Addition of the pump A4..VHO NG450 in the „Configure 1” window.
- Extension for Pressure Command and Pressure Feedback range to 0~1000bar
- Extension of the measuring test points range to 0~1000 Units

Configuration 2.90

- Add pumps A4..HS NG 250, 355 and 500 to the “Configure 1” screen
- Swap the DT1 and DT1(LFB) signal in the screen ”Loop 2”
- Correct the “I-correction(-) off for” functionality to work also with a 0ms setting
- Add signal “Enable set OK” to the “Configure 1” screen
- Add valve setting “Output +/- 10V” in the “Configure 1” screen
- Now the ranges “0~100%” and “+/- 100%” can be chosen as a swivel angle cmd
- Add a new parameter to adapt the velocity of an I-correction

Configuration 2.86

- Extension of firmware with checksum test
- Limitation of pressure controller output added.

Configuration 2.85

- Adaptation of LVDT pump gain
- Adjustment of card information and fault window to a pump card without display (VT-VPCD-1-1x/V0/0-P-1)

Configuration 2.84

(Required Bodac 1.498 or higher)

- Correction of valve lists
- Fault history now available

Products

Configuration 2.83

(Required Bodac 1.498 or higher)

- Local bus now available.
- 2 additional pressure control parameters are now available at safety level 2.
- Display menu tree “Parameters“ supplemented

Configuration 2.82

(Required Bodac version 1.496 or higher)

- Parameters added for “pressure controller with one pressure sensor via shuttle valve” This function is only available with parameter files ≥ Version 1.08 and Application > B10.

Configuration 2.78

(Required Bodac version 1.496 or higher)

- Parameters added for influencing the I-sum in the pressure controller.

Configuration 2.75

(Required Bodac version 1.494 or higher)

- Extension of Motion Data representation by the capability of recording a signal in the 2-ms grid. This function is only available with parameter files ≥ Version 1.10.

Configuration 2.66

- Additional switching output with function “Slave mode active”. This function is only available with parameter files ≥ Version 1.08.

Parameters 1.21

- Default value for the “I-Correction(-) off” to 64ms.
- Addition of the parameter „DO7: Squarewave“

Parameters 1.19

- No change.

Parameters 1.18

- Fault history now available.

Parameters 1.17

(Required Bodac 1.498 or higher)

- Local bus now available.
- 2 additional pressure control parameters are now available at safety level 2.
- Display menu tree “Parameters“ supplemented

Parameters 1.15

(Required Bodac version 1.497 or higher)

- VPCD cards with bus control for activating command value call-ups could not be changed over to command value call-ups via binary inputs.

Parameters 1.14

- Additional parameter “pressure controller with one pressure sensor via shuttle valve”

Parameters 1.12

- Parameters added for influencing the I-sum in the pressure controller.

Parameters 1.10

- Parameters added for the “Winview recording” window.

Parameters 1.08

- Additional switching output with function “Slave mode active”.

Menus P0_1.30

- Add the swivel angle fault

Menus P0_1.20

- Local Bus ID now shown additionally on the display
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- Change of DeviceNet and CANopen ID in Fieldbus ID.
- Correction of unit range of test jack X2.

4.5 VT-VPCD-1-1x/V100/1-0-1, VT-VPCD-1-1x/V100/1-P-1

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 2.90			11.01.2011
Configuration 2.86	Parameters 2.08	Menus P0_1.30	28.08.2008
Configuration 2.84	Parameters 2.07	Menus P0_1.20	30.09.2007
Configuration 2.83	Parameters 2.06		28.07.2007
	Parameters 2.05		14.05.2007
	Parameters 2.04		12.03.2007
Configuration 2.82	Parameters 2.03		01.03.2007
Configuration 2.78	Parameters 2.03		01.08.2006
Configuration 2.75	Parameters 1.09		31.05.2006

Configuration 2.90

- Add pumps A4..HS NG 250, 355 and 500 to the “Configure 1” screen
- Swap the DT1 and DT1(LFB) signal in the screen ”Loop 2”
- Correct the “I-correction(-) off for” functionality to work also with a 0ms setting
- Add signal “Enable set OK” to the “Configure 1” screen
- Add valve setting “Output +/- 10V” in the “Configure 1” screen
- Now the ranges “0~100%” and “+/- 100%” can be chosen as a swivel angle cmd
- Add a new parameter to adapt the velocity of an I-correcture

Configuration 2.86

- Extension of firmware with checksum test

Configuration 2.85

- Adjustment of LVDT pump gain
- Adaptation of card information and the fault window to a pump card without display (VT-VPCD-1-1x/V0/0-P-1)

Configuration 2.84

- Correction of valve lists
- Fault history now available

Configuration 2.83

(Required Bodac 1.498 or higher)

- Local bus now available.
- 2 additional pressure control parameters are now available at safety level 2.
- Display menu tree “Parameters“ supplemented

Configuration 2.82

(Required Bodac version 1.496 or higher)

- Parameters added for “Pressure controller with one pressure sensor via shuttle valve”
  This function is only available with parameter files ≥ Version 1.08 and Application ≥ B10.

Configuration 2.78

(Required Bodac version 1.496 or higher)

- Parameters added for influencing the I-sum in the pressure controller.

Configuration 2.75

- Extension of Motion Data representation by the capability of recording a signal in the 2 ms grid. This function is only available with parameter files ≥ Version 1.09.

Parameters 2.08

- No change.

Parameters 2.07

- Fault history now available.

Parameters 2.06

(Required Bodac 1.498 or higher)

- Local bus now available.
- 2 additional pressure control parameters are now available at safety level 2. Display menu tree “Parameters“ supplemented

Parameters 2.05

- Default setting for swivel angle control parameters is P=4 and DT1(LFB)=90.

Parameters 2.04

(Required Bodac version 1.497 or higher)

- VPCD cards with bus control for activating command value call-ups could not be changed over to command value call-ups via binary inputs.

Parameters 2.03

- Parameters added for influencing the I-sum in the pressure controller.

Parameters 1.09

- Parameters added for the “Winview recording” window.

4.6 VT-VRPD-2-2x/V0/0-0-1

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 1.07	Parameters 1.07		28.08.2008
Configuration 1.06	Parameters 1.06		30.09.2007
Configuration 1.05	Parameters 1.05		31.05.2006
Konfiguration 1.04	Parameter 1.02		11.07.2005

Configuration 1.07

- Correction of fault of ramp conflict with regard to solenoid A
- Correction of fault with digital I/O: Control error output to DO3
- Extension of firmware by checksum test

Configuration 1.06

- Functionality “fault status“ added
- Functions “Local bus“ and “Fault history“ added
- Function “Configuration of analog LVDT inputs“ added

Configuration 1.05

- Fault rectified: Call of online help corrected.
- Fault rectified for Digital I/O: DO1/DO2 indication of solenoid A/B active exchanged
- (Required Bodac 1.494 or higher)
  Winview Recording added: Extension of Motion Data representation by the capability of recording a signal in the 2 ms grid. This function is only available with parameter files ≥ Version 1.05.

Parameters 1.07

- Bug fix: ramp conflict in combination with solenoid A

Parameters 1.06

- Functionality “fault status“ enabled
- Functions “Local bus“ and “Fault history“ enabled
- Function “Configuration of analog LVDT inputs“ enabled

Parameters 1.05

- Fault rectified for Digital I/O: Default values of DO1/DO2 window corrected.
- Parameters added for the “Winview recording” window.

4.7 VT-VSPD-1-2x/V0/0-0-1, VT-VSPD-1-2x/V0/1-0-1

Overview

Configuration version	Parameters version	Menus version	Date
Configuration 1.04	Parameters 1.04		28.08.2008
Configuration 1.03	Parameters 1.03	Menus S100	30.09.2007
Configuration 1.02	Parameters 1.02		21.02.2007
Configuration 1.01	Parameters 1.01		04.08.2006
Konfiguration 1.00	Parameter 1.00		01.08.2006

Configuration 1.04

- Extension of firmware with checksum test

Configuration 1.03

- VSPD extended by display functionality.
  To this end, the following functions were extended as follows:
  Card information window
  Motion data
- Functionality “fault status“ added
- Functions “Local bus“ and “Fault history“ added
- Valve ZDRE10-2x added

- From Bodac1.498 on:
  Function “Use Default Parameter Data“ added

Configuration 1.02

- Fault rectified: Clear text display of fault “Configuration/SW“. Checks whether the valve controller version corresponds to that of the valve menu.

Configuration 1.01

- Fault rectified: Indication of undervoltage error “Supply voltage 24V”

Parameters 1.04

- No change

Parameters 1.03

- VSPD extended by display functionality.
  To this end, the following functions were extended as follows:
  Card information window, Motion data
- Functionality “fault status“ enabled
- Functions “Local bus“ and “Fault history“ enabled
- Valve ZDRE10-2x enabled
- From Bodac1.498 on:
  Function “Use Default Parameter Data“ enabled

Parameters 1.02

- Fault rectified: Clear text display of fault “Configuration/S“. Checks whether the valve controller version corresponds to that of the valve menu.

Parameters 1.01

- Fault rectified: Indication of undervoltage error “Supply voltage 24V”

Menus S100

- Local Bus ID now shown additionally on the display.
  This function is only available for parameter files ≥ Version 2.06 and application ≥ B12.
- “Display“ parameter added.
- Windows “Structure“, “Command Adjustment“, “Analog I/O”, “Digital I/O” and “Faults” added on the display

Products

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