

Movement by Perfection



# ZAdyn

## Software versions

Issue 2026/25

Technical Information  
Keep the instruction for future reference.

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## 1.1 Version 4.74.6 | 12.06.2026

### Corrections

|         |                                                                                                                                  |
|---------|----------------------------------------------------------------------------------------------------------------------------------|
| DCP     | When the signal is affected by EMC interference, error 710 no longer occurs. Instead, the XOR error counter is incremented.      |
| SD-Card | LOD_PAR and LOD_CFG no longer report an invalid file format for parameter files created with ZAdyn using a 9-digit serial number |

## 1.2 Version 4.74.5 | 13.03.2026

### Corrections

|                       |                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------|
| EKS                   | ZAdyn4Bplus: Better criteria to leave state EKS active                                |
| Current switching off | No noise at end of travel with asynchronous machines when T5b is used                 |
| ZIEHL-ABEGG internal  | Corrections regarding the storage of the serial number in the internal memory for SAP |

## 1.3 Version 4.74.2 | 22.10.2025

### Corrections

|                   |                                                                                             |
|-------------------|---------------------------------------------------------------------------------------------|
| Set down function | Preset value of <b>Control system/V_SetDw = 00: Spare</b>                                   |
| CAN               | Corrected possible CAN controller freeze when the elevator controller power is switched off |

## 1.4 Version 4.74.1 | 02.09.2025

### Amendments

|           |                                                                          |
|-----------|--------------------------------------------------------------------------|
| SCIM mode | SCIM new standard for ASM open loop control, when <b>ENC_TYP=No enc.</b> |
| SCIM mode | Parameter <b>Controller/V0</b> moved to menu <b>Start</b>                |
| SCIM mode | Parameter <b>Controller/V_STOP</b> moved to menu <b>Stop</b>             |
| SCIM mode | Parameter <b>V*</b> limited to 1,6 m/s in SCIM mode                      |
| INFO menu | All INFO menus available with <b>USR_LEV = BASIC</b>                     |

### Corrections

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| Blackbox Recorder | 9 <sup>th</sup> channel contains data, if it is a digital channel |
| EKS               | Reliable triggering of EKS in Standby1 state                      |

### New

|                                |                                                                                                                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pawl device                    | New parameter <b>Control system/V_SetDw</b> where the pawl velocity can be assigned to. The car will be stopped with torque on the traction sheave, so that it will not lift up while unloading. |
| SCIM mode<br>Error message 507 | Error message 507 <b>Target speed too low</b> : target speed is smaller than allowed. The value depends on the motor data.                                                                       |
| SCIM mode<br>Error message 508 | Error message 508 <b>Creep speed too low</b> : creeping speed is smaller than allowed. The value depends on the motor data.                                                                      |
| DiscControl                    | Machine <b>MX20</b> added to <b>MOT_TYP</b>                                                                                                                                                      |

## 1.5 Version 4.73.9 | 08.07.2025

### Amendments

|         |                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------|
| BRK_DMP | Preset OFF in all configurations without synchronous machine. However, this parameter had no effect when turned on in these configurations. |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------|

|                            |                                                                                                        |
|----------------------------|--------------------------------------------------------------------------------------------------------|
| Note 86 Mode: Enc. Adj. MB | Determined encoder offset value from the additional information field                                  |
| Blackbox recorder          | New combined file for short printerlist and errorlist *.pre is stored instead of the printerlist *.prt |
| ASM_ID                     | <b>P_MOT</b> is calculated after <b>ASM_ID</b>                                                         |
| U_BC                       | Maximum value 750 V                                                                                    |

### Corrections

|                          |                                                                           |
|--------------------------|---------------------------------------------------------------------------|
| Error message 485        | Error not false triggered when Starpower modules 150A are used            |
| Input function 52: RESET | Also working with non-parallel inputs                                     |
| CAN emergency message    | When error is set to zero, first two bytes of the datafield are also zero |

### New

|                                         |                                                                                                                       |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| SCIM mode                               | SCIM mode for ASM open loop control available:<br><b>Controller/C_MOD=SCIM</b> , see technical information R-TIA25_01 |
| Motor shortcircuit                      | Input function <b>53: CO_Short</b> for monitoring a motor shortcircuit braker                                         |
| Motor shortcircuit<br>Error message 344 | Error message 344 <b>CO:Shortcircuit mon.</b> when motor shortcircuit braker does not switch                          |

## 1.6 Version 4.73.3 | 07.02.2025

### Amendments

|                      |                                  |
|----------------------|----------------------------------|
| Motor nameplate menu | Parameter M hidden               |
| Installation menu    | Parameter I_Inst, Effcncy hidden |

### Corrections

|               |                                                                                                                                                              |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor torque  | Motor torque applied to motor at next travel when <b>ENC_TYP</b> is set to <b>No Enc.</b> In 4.73.1 ZAdyn had to be restarted after changing this parameter. |
| Serial number | Display of the serial number in spare part CUs fixed.                                                                                                        |

### New

|        |                                               |
|--------|-----------------------------------------------|
| ZAdisc | Adaptive current control for ZAdisc available |
|--------|-----------------------------------------------|

## 1.7 Version 4.73.1 | 08.11.2024

### Amendments

|                                        |                                                                                                       |
|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| Travel menu                            | Max. value T_1: 60 s and T_2: 5 s.                                                                    |
| Stop menu                              | Max. value T_5: 5 s.                                                                                  |
| PFU                                    | PFU in status EKS_ACTIVE deactivated.                                                                 |
| Older Klinkhammer controllers          | Error mask 1002 enables operation with older Klinkhammer controllers.                                 |
| ZAmon                                  | Sorting of measurement channels in ZAmon software adjusted.                                           |
| Condition Monitoring                   | Channel EKS Cycles shows only gray traffic light and value                                            |
| Leistungsteil menu                     | Parameter <b>M_PWM</b> preselected for all devices 50 - 74 A to <b>Fix f_PWM</b> .                    |
| Error message 505<br>No motor movement | Additional trigger for error 505 to provide better protection against starting with not opened brakes |
| Encoder & BC menu                      | ENC_TYP parameter value CODEFACE removed.                                                             |
| Control menu                           | Parameter LOD_IN always visible                                                                       |

### Corrections

|                              |                                                                                                               |
|------------------------------|---------------------------------------------------------------------------------------------------------------|
| Remote control Display ZAdyn | Display of dynamic values in the info menu via DCP remote control independent of the timing of the controller |
| INFO menu <b>Bus Info 3</b>  | Resolution accuracy of values increased.                                                                      |
| Stuttering brake             | Stuttering brake functional also in status 35 Monitor                                                         |
| Blackbox Recorder            | Measurement on SD-card for Blackbox Recorder stops recording also in status 997 Standby                       |
| SD card                      | SD card usable without device reset after write error                                                         |
| APD                          | APD-message T016 corrected.                                                                                   |

## New

|                 |                                                                                                          |
|-----------------|----------------------------------------------------------------------------------------------------------|
| Load weighing   | Load weighing unit usable via CAN and DCP.                                                               |
| Digital inputs  | Function 52: RESET to force a restart on ZAdyn                                                           |
| Firmware update | Firmware update using ZAMon Desktop possible from running application without pressing manual button S1. |

## 1.8 Version 4.72.1 | 20.12.2023

### Amendments

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZAMon Desktop                   | The recorder channels have been re-sorted and expanded, and some of them have been fitted with filter functions.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Rotary encoder calibration      | During load-free rotary encoder calibration, the <b>Encoder calibration/ENC_OFF</b> parameter is set to <b>0</b> .                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Parameter LCD & Password/PASSWD | After 90 minutes of inactivity, the password must be entered again.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Encoder calibration menu        | The following parameters are only displayed if the password has been entered in the ZA-Intern/PW_S9 parameter: <ul style="list-style-type: none"> <li>• SIG_ADJ</li> <li>• SIN_ERR</li> <li>• COS_ERR</li> <li>• SIN_OFF</li> <li>• COS_OFF</li> </ul>                                                                                                                                                                                                                                                                                 |
| Watchdog                        | The watchdog monitoring time for the background program has been increased from 90 s to 180 s.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ZAMon Desktop                   | <ul style="list-style-type: none"> <li>• The MOP recorder has been expanded to 32 bits.</li> <li>• Measuring channels that previously had no units can now be evaluated with SI units. Corresponding check boxes are available.</li> <li>• With ZAMon Desktop, the baud rate can be increased from the current fixed 19200 baud to up to 250000 baud.</li> </ul> Prerequisite: ZAMon version 1.4.6.135 or higher.                                                                                                                      |
| CAN operation                   | If a control system from the manufacturer Böhnke & Partner was detected and there was an motor over temperature, screen 1001 was previously set to prevent the status <i>Not ready to switch on</i> being output. An error message relating to the motor over temperature was only received during the start-up attempt. The screen is now no longer set and, in the event of over temperature, an error relating to the motor over temperature is output immediately when the situation occurs even without an active travel command. |
| Analog/digital converter        | Previously, the offset was able to fluctuate by up to 3 bits. It now fluctuates by a maximum of 1 bit.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CAN operation                   | The CAN address of the Statistics/TD_SET parameter has been changed to 0x33A9.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Software update                 | Execution of the software update via CANopenLift has been improved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                              |                                                                                                                                                                                                                                                                                 |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engine brakes test                           | The test procedure has been changed. The Testing/SCY_MB parameter is activated during travel, which closes the brake.                                                                                                                                                           |
| Parameter <b>Encoder calibration/ENC_OFF</b> | A change to the parameter value is saved in parameter set 1 and parameter set 2.                                                                                                                                                                                                |
| Parameter <b>S_EKS</b>                       | The <b>S_EKS</b> parameter is now preset to 5 mm instead of 10 mm.                                                                                                                                                                                                              |
| Loading parameters                           | If parameters are loaded from a ZETADYN 3, only system, motor and important control parameters are copied.                                                                                                                                                                      |
| Parameter <b>ZA-Intern/CC_OFF</b>            | If the <b>ZA-Intern/CC_OFF=On</b> parameter is configured, it is possible that travel will begin 100 ms earlier.                                                                                                                                                                |
| Error message 720 <b>Extended in decel.</b>  | The error message is prevented if the travel is extended during deceleration.                                                                                                                                                                                                   |
| Input BC                                     | The filter function has been improved in the event of EMC faults.                                                                                                                                                                                                               |
| Motor temperature measurement                | The filter function has been improved in the event of EMC faults.                                                                                                                                                                                                               |
| Switching frequency                          | When the Autotune function is active, the clock frequency is set to 8 khz.                                                                                                                                                                                                      |
| Recorder function                            | The zr4 file is also saved if the <b>MMC recorder/REC_MOD=On</b> parameter is configured.                                                                                                                                                                                       |
| Alignment absolute encoder type ERN1387      | Offset or amplification error is compensated with the new parameters <b>Encoder calibration/OFFS_C</b> , <b>Encoder calibration/OFFS_D</b> and <b>Encoder calibration/GAIN_C</b> . Parameters are only displayed, if the password was entered in the ZA-Intern/PW_S9 parameter. |

## Corrections

|                                        |                                                                                                                                                                                                              |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asynchronous operation                 | If a synchronous motor has been selected in asynchronous mode, the correct motor type was not selected after the restart. Corrected                                                                          |
| ZAdyn4Bplus 220                        | An error of 2 % previously occurred when specifying the motor current. The motor current is now correctly specified.                                                                                         |
| Reset 99                               | If a Reset99 has been performed on a ZAdyn, it is possible that the lock was active after the reset. Corrected.                                                                                              |
| Travel direction counter               | The random mode for generating the password for the direction change counter is no longer active on newer devices.                                                                                           |
| Error message 365<br>Travel for MB=OFF | If the <b>System data/n=0</b> and <b>System data/v*=0</b> parameters were configured, it was possible for the error message to be triggered without justification. Corrected.                                |
| Error 505<br>No motor movement         | If <b>ZA-Intern/CC_OFF=On</b> parameter was configured and the direction specification AB input signal was applied, it was possible for the error message to be triggered without justification. Corrected.  |
| EVAC.Dir output function               | A hysteresis has been added to the EVAC.Dir output function.                                                                                                                                                 |
| Error 290<br>Para.- set 2 empty        | After loading a parameter set from the SD card or using ZAmom, it was possible for the error message to be triggered without justification. Corrected.                                                       |
| Parameter <b>T_ROT</b>                 | Previously, after running the Autotune function, the correct value of the T_ROT parameter was not displayed. The correct value is now displayed.                                                             |
| Error 988                              | Under certain circumstances, it was possible for the error to be triggered without justification when reading from the rotary encoder. Corrected.                                                            |
| Error 516<br>$v > 150\% v^*$           | Previously, it was possible for the error to be triggered if the speed was higher than 110 % of the nominal speed $V^*$ . It is now triggered if the speed is higher than 150 % of the nominal speed $V^*$ . |
| CAN operation                          | The CAN object 0x608B now contains 3 subindexes instead of 2.                                                                                                                                                |
| CAN operation                          | If an extension is not accepted during travel, it will not be accepted later either.                                                                                                                         |
| CAN operation                          | CAN objects with an address from 0x3192 - 0x31CC now can be read. 0x3192 - 0x31CC are ZAdyn internal display values.                                                                                         |

|             |                                                                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| zr4-file    | If a zr4 file is saved in the event of an error, there is no longer a time offset for the tracks on the zr4 file.                                          |
| Memory card | ZAdynpro: All types of SD cards can now be read and written. If problems occur during the software update, the boot loader must be updated to version 1.12 |

## New

|                                     |                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP operation                       | For remote control of the ZAdyn via the control system: The parts of the display text that have changed are given priority on the display.                                                                                                                                                                                                              |
| INFO menu page 02:State             | The current active parameter set is displayed in line 4.                                                                                                                                                                                                                                                                                                |
| Activating the ZAdyn                | If the following conditions are met, a menu appears after switching on the ZAdyn, in which the operating language can be selected: <ul style="list-style-type: none"> <li>The <b>System data/n*</b> and <b>System data/v*</b> parameters are set to <b>0</b>, default setting.</li> <li>An EnDAT, Hiperface or BiSS-C encoder is being used.</li> </ul> |
| ZApad                               | If a parameter is set, the factory setting of the parameter (if available) is displayed on the ZApad in line 4.                                                                                                                                                                                                                                         |
| TD_CNText. monoflop output function | The TD_CNText. monoflop output function is also available when the direction change counter is not active.                                                                                                                                                                                                                                              |
| Testing/SCY_MB parameter            | Values MB1 and MB2 have been added.                                                                                                                                                                                                                                                                                                                     |
| Parameter F_WEAK                    | The parameter can also be used with synchronous motors.                                                                                                                                                                                                                                                                                                 |
| CAN operation                       | The <b>Warning</b> CAN status bit is now used when the power unit or the motor reaches the temperature warning limit.                                                                                                                                                                                                                                   |
| Noise filter                        | The noise filter is also available for asynchronous motors.                                                                                                                                                                                                                                                                                             |
| INFO menu                           | INFO menu page 49 <i>Resonance finder</i> .                                                                                                                                                                                                                                                                                                             |
| Error 539<br>Error while STO        | Error message 539 is output if an error occurs within the time T_STO.                                                                                                                                                                                                                                                                                   |

## 1.9 Version 4.71.7 | 08.08.2023

### Amendments

|                          |                                                                                                                                                                      |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronic short-circuit | If the Motor name plate/MOT_TYP=SMxxx parameter is configured and the System data/v*>=2.5 m/s parameter is configured, the electronic short circuit is switched off. |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Corrections

|                                              |                                                                                                                                              |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Error 485<br>IC overcurrent                  | The error message is no longer triggered without justification.                                                                              |
| Control of the ZAdyn                         | Previously, when the ZAdyn control reached the voltage limit, noises could occur in the motor. This has now been corrected.                  |
| Operation with absolute encoder type ERN1387 | Previously, it was possible for incorrect position values to occur during start-up under certain circumstances. This has now been corrected. |

## 1.10 Version 4.71.2 | 10.11.2022

### New

|                   |                                                                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recorder function | Rrecorder function, which records important measuring channels during travel. The file created can be saved on the SD card using the SAV_ALL parameter. If an error occurs during travel, the file is automatically saved if there is an SD card in the X-MMC card slot. |
| Parameter MOD_ERR | The motor type SM315 has been added.                                                                                                                                                                                                                                     |
| CAN operation     | The object 0x608C has been added for condition monitoring.                                                                                                                                                                                                               |



|                                       |                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Password for direction change counter | The password can be set by a random generator:<br>1. Assign 10000 as the password in the TD_PWN parameter.<br>2. Enter the password in the TD_PW parameter.<br>3. Set the initial value of the down counter in the TD_SET parameter.<br>The password can only be reset by ZIEHL-ABEGG SE using the TD_PWC parameter. |
| Firmware update                       | A firmware update via CANopenLift is possible if an SD card is plugged into the X- MMC card slot.                                                                                                                                                                                                                    |

## Amendments

|                                              |                                                                                                                                                                                                                                  |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZAdyn4B and ZAdyn4Bplus                      | The on time of the fan after starting up the ZAdyn has been changed from 70 s to 25 s.                                                                                                                                           |
| Error 537<br>STO: Hardware start             | The error message has been renamed to 963 STO: Hardware start.                                                                                                                                                                   |
| Error 538<br>STO: Hardware stop              | The error message has been renamed to 964 STO: Hardware stop.                                                                                                                                                                    |
| STO function                                 | The debounce time T_STO is only effective during travel, no longer when starting up and stopping. Starting and stopping is accelerated by 200 ms.                                                                                |
| Parameters NF and NF_F1                      | The parameters are now also available in the basic level. The NF parameter activates a filter to reduce noises caused by synchronous drives. The number of slots in a synchronous motor is entered in the NF_F1 parameter.       |
| Parameter BC_TYP                             | New selection value 4*BR100.                                                                                                                                                                                                     |
| Non-configured ZAdyn                         | If the ZAdyn is not configured ("0" entered for n* and V*), a query appears asking whether the ZAdyn parameter from the rotary encoder should be loaded. The "No" and "Yes" buttons are displayed.                               |
| Rotary encoder calibration with closed brake | At the end of the rotary encoder calibration with the brake closed, a query appears asking whether the calculated offset value is to be saved. The calculated value is also displayed. The "No" and "Yes" buttons are displayed. |
| SD card                                      | If files that already exist on the SD card are saved to the SD card, a query appears asking whether the existing files are to be overwritten. The "No" and "Yes" buttons are displayed.                                          |
| Parameters F_PWM, F_PWM_H                    | ZAdyn4B/ZAdyn4Bplus: When loading a parameter set, the values of the F_PWM and F_PWM_H parameters are limited to a maximum of 8 kHz.                                                                                             |
| Monitoring/CO parameter                      | The parameter is now also visible on ZAdynpro.                                                                                                                                                                                   |

## Corrections

|                                              |                                                                                                                                                                                                       |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Generated work                               | Calculation of the generated work has been corrected.                                                                                                                                                 |
| Negative speed values                        | Rounding of negative speed values when travelling downwards has been corrected.                                                                                                                       |
| Rotary encoder calibration with closed brake | If an error occurs during rotary encoder calibration with the brake closed, the <i>Incorrect direction</i> error message was always previously displayed. The correct error message is now displayed. |
| Temperature monitoring sensors               | The temperature monitoring sensors for the control electronics now remain functional after parameters have been changed with the ZApad or ZAmon.                                                      |
| Statistics/ST_LST parameter, error list      | The motor current value is now displayed with the correct sign.                                                                                                                                       |
| Stand-by 2 mode                              | Previously, a speed not equal to 0 could be displayed in Stand-by 2 mode. 0 is now always displayed.                                                                                                  |
| Stand-by mode                                | If an error occurs in stand-by mode, standby mode is no longer deactivated.                                                                                                                           |
| Error 599<br>Fan defective                   | The error message is now only triggered once.                                                                                                                                                         |
| SD card                                      | Read-only files on the SD card are now no longer overwritten and an error message is displayed.                                                                                                       |

|                                        |                                                                                                                                                                                                                                                    |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Absolute encoder with BiSS-C interface | It is now possible to read out parameters from the absolute encoder and write them to the absolute encoder.                                                                                                                                        |
| Motor contactor monitoring             | ZAdynpro: Quick monitoring of the motor contactors is now possible. To do this, the digital input f_XBR3 must be configured to 47:CO. This automatically configures the Monitoring/CO parameter to CO1 and the Monitoring/T_CO parameter to 0.2ms. |

## 1.11 Version 4.71.1 | 08.06.2022

### New

|                            |                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------|
| Parameter Controller/NF    | Filter to reduce noise caused by synchronous motors.                                                                 |
| Monitoring functions       | I <sup>2</sup> t monitoring: Protection of the power section against overload, especially when the drive is blocked. |
| Error 452<br>MP:O- verload | The error message is output when the I <sup>2</sup> t monitoring triggers.                                           |

### Amendments

|                                   |                                                                                                                           |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| DCP operation                     | The DCP manufacturer identification of Schneider controls has been changed from SS to LI.                                 |
| Error 528<br>Quick- start? (UPS!) | If parameter ZA-Intern/CC_OFF=On is parameterised, the error is no longer triggered.                                      |
| Parameter DCP_WDT                 | If the configurations 14:SS_DCP3 or 33:SS_DCP4 are selected in Controller/CONFIG, the DCP_WDT parameter is preset to Off. |

### Corrections

|                                                                         |                                                                                            |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Operation with synchronous motor                                        | The calculation of the load angle has been revised. Now the signs are displayed correctly. |
| Parameters<br>Encoder adjustment/SAV_P_E,<br>Encoder adjustment/LOD_P_E | Storing data in and reading data from the absolute value encoder now works reliably.       |

## 1.12 Version 4.70.3 | 05.05.2022

### Amendments

|               |                                         |
|---------------|-----------------------------------------|
| DCP operation | Internal optimisation of DCP operations |
|---------------|-----------------------------------------|

## 1.13 Version 4.70.2 | 16.03.2022

### New

|                            |                                                                                                                                                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error 451<br>MP:O- verload | The error message is output if there is an overcurrent of >=130% of the nominal current for 1 second and the motor is mechanically blocked at the same time. The output of the error message protects the power section. |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Corrections

|                                       |                                                                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error 505<br>No motor movement        | Previously, the error message could be output at the end of travel. Now it is only output at the start of travel.                                     |
| Precharging relay frame sizes 011-032 | Previously, it could happen that the pre-charging relay for the DC link did not drop out in Standby 2 mode in certain cases. Now it always drops out. |
| App ZAmon Mobile                      | Until now it was not possible to change parameter values via the ZAmon Mobile app for ZAdynpro 011-032 with DCP interface. Now it is possible.        |
| DCP operation                         | In conjunction with a control system with a baud rate of 38800 bit/s, DCP operation is now also possible.                                             |

**1.14 Version 4.70 | 25.02.2022****New**

|                                 |                                                                                                                                                               |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                   | The <b>overall traffic light</b> channel was introduced for condition monitoring. It represents a summary of the states of the individual measuring channels. |
| Parameter Control system/CONFIG | <b>NL_DCP4</b> New Lift DCP4 configuration                                                                                                                    |
| ZApad                           | If several pieces of information are active in the top right corner of the ZApad display, they are shown sequentially.                                        |

**Amendments**

|                                 |                                                                                                                                                                                                                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                   | For condition monitoring: If the traffic light is yellow or red, the status "Maintenance needed" is only set if the channel is set to "Preventive" or "Predictive" in the maintenance strategy.                                                                                                  |
| Error 505<br>No motor movement  | The error can now also be triggered with velocity specifications of less than 10 cm/s                                                                                                                                                                                                            |
| Parameter Statistic/CRC_- SAF   | Parameter renamed <b>CHK_SUM</b> . It shows a checksum of the set values of the safety-relevant parameters BR, STO, TD_RES and LOCK_X.                                                                                                                                                           |
| Parameter Power section/M_PWM   | ZAdyn4B:<br><ul style="list-style-type: none"> <li>Parameter can be set to the selection value Auto.</li> <li>The parameter is now preset with Auto.</li> </ul>                                                                                                                                  |
| Parameter Power section/F_PWM   | ZAdyn4B:<br><ul style="list-style-type: none"> <li>The parameter preset with 3,7 kHz.</li> <li>The maximum value of the parameter: 8 kHz.</li> </ul>                                                                                                                                             |
| Parameter Power section/F_PWM_H | ZAdyn4B:<br><ul style="list-style-type: none"> <li>The parameter preset with 7,4 kHz.</li> <li>The maximum value of the parameter: 8 kHz.</li> </ul>                                                                                                                                             |
| Switching frequency             | The emergency clock frequency used to prevent the ZAdyn from overheating has been changed from 5 kHz to 3.7 kHz.                                                                                                                                                                                 |
| Rotary encoder calibration      | If the 2nd parameter set is activated, it is no longer possible to perform an encoder calibration.                                                                                                                                                                                               |
| Software update                 | In order to perform a software update, a code created depending on the serial number of the ZAdyn and the firmware version must be entered in parameter <b>Memory Card/Update</b> . The code is generated via a web application, the ZAMon Mobile app or by the customer service of ZIEHL-ABEGG. |

**Corrections**

|                                      |                                                                                                                                                                                                                                                          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Loading parameters                   | If in parameter <b>Parameter set 2/f_PARA2</b> another function than "Locked" was selected, parameter <b>Parameter set 2/Copy=PARA1-&gt;2</b> had to be parameterised before parameters could be loaded into the ZAdyn. This is now no longer necessary. |
| Digital inputs                       | ZAdynpro: Until now, the function <b>MOT_TEMP</b> had no function, now it can be used to evaluate the digital signal of an external motor temperature monitor.                                                                                           |
| Printer list, error list             | If a third operating language was programmed, it was not displayed in the printer list and the error list up to now. Now it is displayed.                                                                                                                |
| INFO menu page 21<br>TravelDirection | Counter TD_RES counts correctly.                                                                                                                                                                                                                         |
| Parameter Monitoring/STO             | ZAdyn4B: Up to now, the parameter <b>Monitoring/STO</b> was preset with ON. Now it is preset with OFF.                                                                                                                                                   |
| Digital outputs                      | Up to now, the relay of the digital output programmed to "Fault" could drop out if notes were stored in the error list. Now it no longer drops out.                                                                                                      |

|                                    |                                                                                                                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error 832<br>CAN: Timeout Shutdown | Up to now, the error was triggered if the time programmed in parameter <b>Control system/T_CMD</b> was shorter than the time the brake needed to close. Now the error is no longer triggered.    |
| Operation with ZAmom software      | Up to now, the signals of the tracks In2 and In3 were displayed in the measuring channel occupied with the measuring function "IO ports" on the tracks BR2 and BR3. This has now been corrected. |

## 1.15 Version 4.65.1 | 03.12.2021

### New

|                                  |                                                                                                                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference run                    | A reference run is now possible (only with CAN control in conjunction with condition monitoring). More information on request                                                                               |
| CAN operation                    | A new object 0x6049 (Evacuation direction) for reading out the recommended evacuation direction has been introduced.                                                                                        |
| Error 528<br>Quick-start? (UPS!) | The error message is output when a run is started with a quick start in UPS mode. Due to the reduced power, it cannot be guaranteed that the speed 0 will be maintained, so a quick start is not permitted. |
| Parameter<br>Statistic/CRC_SAF   | The parameter Statistic/CRC_SAF was introduced. It shows a checksum of the set values of the safety-relevant parameters BR, STO and TD_RES.                                                                 |

### Amendments

|                                    |                                                                                                                                              |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                      | New addresses of CAN objects in the manufacturer-specific area. More information on request.                                                 |
| Check the function of the unit fan | The running behaviour of the unit fans has been optimised.                                                                                   |
| Autoscan                           | The autoscan of the interfaces X-DCP and X-CAN (communication via DCP or CANopen Lift) is only active in the 1.st parameter set.             |
| CAN operation                      | Hidden parameters of the ZAdyn are now treated like read-only parameters                                                                     |
| Switching frequency                | The clock frequency can only be set to a value between 8 kHz and 16 kHz if the password was previously entered in parameter ZA-Intern/PW_S9. |

### Corrections

|                                       |                                                                                                                                                               |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                         | After an NMT communication reset, the error field is not deleted if an error is still present.                                                                |
| Parameter set change                  | A parameter set change is now also possible when the ZAdyn is in the operating states "98:ZR_NOT_READY" and "99:WAIT_FOR_ENCODER".                            |
| Tests to support with acceptance test | The testing of the protective device according to EN81 "Powerless drifting of the cabin from the floor" is now also possible in CAN operation.                |
| Information texts about errors        | The information texts about error messages, which are displayed by pressing the i key, are now available again (only in connection with an inserted SD card). |
| INFO menu page 03:Dist                | The displays s_21 and s_31 have been corrected.                                                                                                               |

## 1.16 Version 4.64.2 | 22.09.2021

### Corrections

|               |                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP operation | If, when using DCP4 one of the parameters S_DI1, S_DI2 and S_DI3 deviates from the factory setting 0.00, for the first inspection travel an acceleration to a higher speed (max. nominal speed of the elevator) occurs during a switchover to the operating mode inspection travel after the interruption of a normal travel. Now, it will be travelled with the parameterized inspection speed. |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**1.17 Version 4.64.1 | 22.09.2021****New**

|                         |                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation           | Operation with LIFT_NO = 2, LIFT_NO = 3 and LIFT_NO = 4 possible.                                                                                                                                |
| INFO menü page 03:Dist  | The display value s30 calculated deceleration distance V_2 → standstill is now also displayed in CAN operation.                                                                                  |
| CAN operation           | New CAN object 0x2811 has been introduced for reading out the internal status of the ZAdyn.                                                                                                      |
| Parameter BR            | Selection text 1*NC+1*NO: When this selection text is selected, the NC contact must be connected to the terminal with the BR1 function and the NO contact to the terminal with the BR2 function. |
| Parameter P1P2          | Selection texts PT100 and PT1000 to select the PT100 and PT1000 temperature sensors for monitoring the motor temperature.                                                                        |
| Monitoring menu         | T_P1P2 parameter to set a limit value for motor temperature monitoring if PT100, PT1000 or KTY has been selected in parameter Monitoring/P1P2.                                                   |
| INFO menu page 25: CUMT | When using the temperature sensors KTY, PT100 and PT1000 the temperature is displayed at the bottom right.                                                                                       |

**Amendments**

|                               |                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter I_MAX               | Up to now the parameter I_MAX was preset with 180%, now 130%.                                                                                                                                                                                                                                                                      |
| DCP operation, CAN operation  | Until now, the travel speed in Position Mode (DCP_04 protocol or CAN Position Mode) could not be increased after a reduction. Now it can be increased.                                                                                                                                                                             |
| CAN operation                 | Mapping of PDO 263 from 0x1508 / 0x1708 corrected to 0x1506 / 0x1706.                                                                                                                                                                                                                                                              |
| Travel curve computer         | If the travel is extended during deceleration: When changing to state 430 the travel curve is recalculated again. This may prevent a long creep drive. Travel is at most at the specified target speed.                                                                                                                            |
| Recorder function             | In case of travel interruptions due to an interruption of the "Controller enable" input signal, the travel curve is saved when the recorder is active.                                                                                                                                                                             |
| Operation with ZAmom software | Read-only parameters are displayed read-only in ZAmom, not hidden.                                                                                                                                                                                                                                                                 |
| Function safety brake         | The number of possible successive attempts to free the car from the arrester has been limited to 2. If the freeing could not be carried out after the second attempt, the ZAdyn must first be switched off and on again so that the output stage can cool down. If a normal run could be performed, the counter is set to 0 again. |
| Condition Monitoring          | When requesting the complete table, the object 0x608B is no longer output.                                                                                                                                                                                                                                                         |
| Parameter LANG                | Renamed text:<br>Dutch → Nederlands<br>Czech → Cesky<br>France → Francais<br>Po Russki → Russki                                                                                                                                                                                                                                    |
| Parameter F_WEAK              | Renamed text:<br>Const. → Constant                                                                                                                                                                                                                                                                                                 |
| Parameter UVW_CHK             | Renamed text:<br>Cont. → Continuous                                                                                                                                                                                                                                                                                                |
| Parameter ENC_AW              | Renamed text:<br>Sin → Sine wave<br>Rec → Square wave                                                                                                                                                                                                                                                                              |
| Parameter TRIG_BY             | Renamed text:<br>Cont. → Continuous                                                                                                                                                                                                                                                                                                |
| Parameter TYP                 | Renamed text:<br>star → Star<br>triangel → Delta                                                                                                                                                                                                                                                                                   |
| Parameter ENC_TYP             | Renamed text:                                                                                                                                                                                                                                                                                                                      |

|                                                |                                                                                                                                                                                                   |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                | TTL_Imp. → TTL-Square                                                                                                                                                                             |
| Parameter CTRL                                 | Renamed text:<br>DCP_01 → DCP1<br>DCP_02 → DCP2<br>DCP_03 → DCP3<br>DCP_04 → DCP4                                                                                                                 |
| Parameter MOD_ST                               | Renamed text:<br>Fix 2 Sek. → Fix 2s<br>Lock 1 → Lock by 1<br>Lock 2 → Lock by 2<br>Lock 3 → Lock by 3                                                                                            |
| Operating language<br>Englisch                 | Renamed menus:<br>Motor name plate → Motor nameplate<br>Encoder-adj. → Encoder adjustment<br>HW-Ident. → HW-Ident<br>Motor-Model → Motor model                                                    |
| Parameter TD_SET                               | The maximum value of the parameter TD_SET has been changed from 10 million to 16.77 million.                                                                                                      |
| Parameter cos phi                              | Up to now the parameter cos phi was locked in open loop operation. Now it is no longer locked.                                                                                                    |
| Parameter R_P1P2                               | Up to now, the parameter was displayed if the parameter <b>Monitoring/P1P2=KTY</b> was parameterized. Now it is displayed if the parameter <b>Monitoring/P1P2=TC</b> is parameterized.            |
| Condition Monitoring                           | The motor temperature is transmitted as a measured value when using the KTY, PT100 and PT1000 temperature sensors.                                                                                |
| Parameter F_PARA2                              | Operating language German: Selection text UPS changed to USV.                                                                                                                                     |
| Rotary encoder calibration                     | When using motor type BD132 error message <b>587 BR: Delta t too small</b> was output incorrectly. This meant that the encoder-offset determined could not be saved. This has now been corrected. |
| Rotary encoder calibration<br>and safety brake | Function is also possible when configuration <b>35:Lester</b> is selected in parameter <b>Control system/CONFIG</b> .                                                                             |

## 1.18 Version 4.63.1 | 05.01.2021

### New

|                                              |                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation condition 94<br>Motor temperature! | Operation condition 94 <b>Motor temperature!</b> : ZAdyn changes to the operating state if the motor temperature is too high at standstill. The controlle system is informed that the ZAdyn is not ready. In CANopenLift mode the message <b>Not ready</b> is output, in DCP mode the status byte S0 is omitted. |
| Digital outputs                              | Output function <b>Fan Ctrl</b> : ZIEHL-ABEGG internal function for controlling the fan.                                                                                                                                                                                                                         |
| Free binary allocation<br>CONFIG=25:X_BIN    | In addition to the 3 input signals XBIN0, XBIN1 and XBIN2, another input can be parameterised to function V1. If the binary input pattern is 000, the state of the input with the function V1 applies.                                                                                                           |

### Amendments

|                                 |                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Software version number         | A revision number has been added to the software version number. This is the third position of the software version number. It is increased when a new bug fix is published. |
| Error 365<br>Travel with MB=OFF | The error is less sensitive.                                                                                                                                                 |
| Error due to an overcurrent     | The behaviour of the ZAdyn4B in case of errors due to an overcurrent has been improved.                                                                                      |
| ZApad                           | If the parameter <b>LOCK_X=On</b> and a brake fault occurred, the text <b>ZAdyn-Locked! To unlock, set parameter UNLOCK to ON</b> was previously                             |

|                                 |                                                                                                                                                    |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | displayed every 30 s. Now the text is displayed 30 s after the last keystroke.                                                                     |
| DCP operation,<br>CAN operation | If there is an overtemperature of the motor, path extension is no longer possible.                                                                 |
| DCP operation                   | There is a special error handling when the manufacturer identification OSMA is sent.                                                               |
| Memory card menu                | The timing for the parameters SAV_ALL, SAV_PAR, SAC_CFG, LOD_PAR and LOD_CFG has been improved. This prevents a possible timeout on the APP ZAmom. |

### Corrections

|               |                                                                                   |
|---------------|-----------------------------------------------------------------------------------|
| DCP operation | A soft quick-start termination is now also possible when using the DCP3 protocol. |
|---------------|-----------------------------------------------------------------------------------|

## 1.19 Version 4.62 | Bugfix from 06.10.2020

### New

|               |                                                                                                                                                                                                                                          |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation | Virtual terminal: The command ESC-Y is used, if the manufacturer of the control system is listed at ZIEHL-ABEGG SE as a manufacturer supporting the command. Therefore the transmission of the manufacturer identification is necessary. |
| CAN operation | Energy measurement: The meter <b>Measured supplied real energy sum</b> was introduced.                                                                                                                                                   |
| CAN operation | When switching to operational mode, an emergency is sent with code 0.                                                                                                                                                                    |
| DCP operation | DCP_FIL = Opt.1 activates a DCP filter that can improve a bad residual path signal (helpful e.g. for a DCP control system with 15 ms cycle that has a CAN shaft encoder with 20 ms cycle). DCP_FIL is visible with DCP actuation.        |
| DCP operation | If the use of DCP_FIL = Opt. 1 is recommended, a corresponding message is displayed at the end of travel.                                                                                                                                |
| Printer list  | All parameters changed in the printer list *.prt by the user are marked with a *.                                                                                                                                                        |

### Amendments

|                                     |                                                                                                                                            |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                       | Now, in position mode, it is possible to set the speed to 0 while driving in order to test the runtime control of the control system.      |
| CAN operation                       | Now, object 0x6022 can be read while driving.                                                                                              |
| CAN operation                       | Virtual terminal: Only the characters on the display that have changed are transmitted to the controller.                                  |
| CAN operation                       | Virtual terminal: The interval at which MPDOs are sent has been changed from 5 ms to 20 ms.                                                |
| CAN operation                       | Energy measurement: Up to now, the negative power generated during generator travel was not output. Now it is output with a negative sign. |
| CAN operation                       | Energy measurement: The interval at which MPDOs are transmitted has been changed from 60 s to 2 s.                                         |
| DCP operation                       | The values of the I7 telegram total travel distance and braking distance are more accurate.                                                |
| Parameter I                         | Maximum value introduced, depending on the nominal current of the ZAdyn.                                                                   |
| Configuration<br>35:Lester Controls | The digital inputs and outputs are no longer preassigned.                                                                                  |
| DCP operation,<br>CAN operation     | The accuracy of the residual travel-dependent positioning was increased by optimising the travel curve computer.                           |
| Parameter T_1                       | When operating synchronous motors, parameter T_1 is not visible.                                                                           |



|                   |                                                                                                                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter UDC_MIN | If parameter f_PARA2=EVAC 3 is parameterised, parameter UDC_MIN in the second parameter set was previously preset with 3/4 of the value of parameter U_ACCU. Now it is preset with 2/3 of the value of U_ACCU, but at least 90 V. |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Corrections

|                                             |                                                                                                                                                                                                                     |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                               | Previously, the limitation of the target speed to $V^*$ was only applied to upward travel. Now it also applies to downward movements.                                                                               |
| DCP operation                               | Previously, when using the DCP_02 and DCP_04 protocols, the breaking distance was sent with a sign. Now it is sent without sign.                                                                                    |
| DCP operation                               | Previously, the speed default byte G5 actuated the interim speed V2. Now it actuates the additional speed V6.                                                                                                       |
| DCP operation                               | Until now, the I9 telegram did not have the correct format. Now it has the correct format.                                                                                                                          |
| DCP operation                               | Remote control: If an rotary encoder adjustment was performed, the dialogue with the user was previously cancelled. Now the dialogue is no longer cancelled.                                                        |
| Electronic short-circuit                    | Up to now, the electronic short circuit was not active in operation condition 988 wait reset. Now it is active.                                                                                                     |
| Parameter CC_OFF                            | With configuration <b>35: Lester</b> : If the parameter CC_OFF = ON was parameterised and the target speed was set to 0 during a quick stop, the travel was interrupted until now. Now it is no longer interrupted. |
| Stand-by mode                               | If Standby 1 mode was disabled, a temperature warning was previously issued. Now no temperature warning is issued.                                                                                                  |
| Changing the operating mode of the ZAdynpro | If the operating mode of the ZAdynpro was changed, the operating language was previously set to German. Now the parameterised language is retained.                                                                 |
| Function SIM_V1                             | The SIM_V1 function did not work properly until now. Now it works properly.                                                                                                                                         |
| Error 721:<br>DCP:Remaining distance error  | Up to now, the error was only evaluated during upward movements. Now it is also evaluated during downward movements.                                                                                                |

## 1.20 Version 4.62 | 04.08.2020

### Amendments

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter S_ABH                           | <ul style="list-style-type: none"> <li>The selection text <b>On</b> renamed to <b>On (2...3)</b>. Setting is effective at the travel speeds <math>V_2</math> and <math>V_3</math>.</li> <li>New selection text <b>On (2...7)</b>. Setting is effective at all travel speeds.</li> </ul>                                                                                                                                                                                                  |
| Motor temperature monitoring              | The filter time until a motor overtemperature message is triggered was reduced from 5 s to 1 s.                                                                                                                                                                                                                                                                                                                                                                                          |
| Parameters $V_{G1}$ , $V_{G2}$ , $V_{G3}$ | The hysteresis was changed from +0 cm/s and -2 cm/s to +0.5 cm/s and -0.5 cm/s.                                                                                                                                                                                                                                                                                                                                                                                                          |
| Error 821<br>CAN: Position Error          | If the error occurs 5 times in a row, the ZAdyn is locked. The lock can be released by parameter <b>Monitoring/UNLOCK=ON</b> .                                                                                                                                                                                                                                                                                                                                                           |
| CAN operation                             | If the inverter is not ready to run, the statusword <b>Not ready to switch on</b> is output via CANopen Lift. If the value 1001 is entered in one of the parameters <b>MASK1-MASK5</b> , <b>Switch on disabled</b> is output instead of <b>Not ready to switch on</b> . This procedure can be used for compatibility reasons if the controller cannot process the statusword <b>Not ready to switch on</b> , e.g. if the standby function or the parameter set switchover does not work. |

### Corrections

|                  |                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fan of the ZAdyn | In the event of a defect in the temperature measurement of the power unit, the fan did not run while driving. Now it runs at a speed of 100% while driving. |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                                   |                                                                                                                                                                                                                           |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Break in the travel               | If a journey was interrupted and then the electronic short-circuit circuit was activated, it has not yet been checked whether errors 350, 531, 584 and 525 are present. Now it is checked whether the errors are present. |
| CAN operation                     | Until now, error 820 was triggered when an electrical quick stop was triggered via the Quickstop bit. Now the error is no longer triggered.                                                                               |
| Parameters<br>S_DI1, S_DI2, S_DI3 | Previously, parameters S_DI1, S_DI2 and S_DI3 were only effective with standard control. Now they are also effective for DCP control.                                                                                     |
| DCP operation                     | If the speed bit G2 was set while driving, a normal stop was previously initiated. Now an electrical quick stop is initiated.                                                                                             |
| DCP operation                     | Until now the special travel "Inspection drive with V_0" was not carried out correctly. Now it is carried out correctly.                                                                                                  |
| Parameter S_DI3                   | After switching off the driving speed V_3, the intermediate speed V_2 was previously activated during the distance S_DI3. Now the driving speed V_3 remains activated during the distance S_DI3.                          |
| Error 821<br>CAN: Position Error  | The error monitoring is also active during a movement in downward direction.                                                                                                                                              |
| Parameter V_3                     | Under certain constellations, the value of parameter V_3 in the 1st parameter set could be reduced by the ZAdyn if the 2nd parameter set was activated in the mean- time. Now the value is retained.                      |
| Switching the parameter set       | Switching the parameter set is now also possible in operating state 40 (activation of the DC link voltage).                                                                                                               |

## 1.21 Version 4.61 | 25.06.2020

### New

|                   |                                                                                                                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation     | The CAN object 0x6560 Lift Controller Identity Object is now supported.                                                                                                                              |
| ZAmon app         | The display of the INFO menu for the ZAmon app has been revised.                                                                                                                                     |
| Parameter ENC_ADJ | The new selection value Mag.Exist. in the parameter ENC_ADJ: Drives of the type Kone EcoDisc can therefore be operated even without renewed adhesion of the magnets, e.g. when replacing a ZAdyn4CS. |

### Amendments

|                                         |                                                                                                                                                      |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Loading parameters                      | When loading parameters from the SD card to the ZAdyn, the data is now read block- by-block from the SD card → loading process faster.               |
| Operation with type Kone EcoDisc drives | If parameters are loaded to the ZAdyn using the ZAmon software, the parameter ENC_OFF is not loaded.                                                 |
| Electronic short-circuit                | With an active electronic short-circuit, a temperature of TEMP_MX minus 1 Kelvin was previously assumed. A temperature of T(Warning) is now assumed. |
| Operation with type Kone EcoDisc drives | The control behaviour has been changed by changing the preassignment of parameters.                                                                  |
| Parallel control                        | If the parameter S_ABH=OFF is parametrised, it can be accelerated to a higher speed again after a delay.                                             |
| Operation with asyn-<br>chronous motor  | New factory setting of parameters:<br>_I1 1<br>_I2 32<br>_D 450 mm<br>n* 1358.1 1 rpm                                                                |

### Corrections

|                                    |                                                                                                                                                   |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| INFO menu Page 08:<br>Cu-Functions | Previously, the current travelling speed was not displayed in DCP operation. It is now displayed.                                                 |
| CAN operation                      | Configuration <b>35: Lester: Lester Controls</b> : If a message that does not conform to CANopen was transmitted via the CAN bus after an initial |

|                                              |                                                                                                                                                                                                                                                                              |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | message, the message was not previously filtered out by the CAN message filter. Problem of the NMT reset solved.                                                                                                                                                             |
| Parameter S_ABH                              | When loading parameter sets from software versions < 4.60 or when updating the firmware to software versions >=4.60, the previously selected functions of the parameter "S_ABH" are replaced with New:<br>DCP_slow → Slow<br>DCP_fast → On<br>DCP_comf → Slow<br>V2toV3 → On |
| Parameter MOD_n*                             | If the parameter MOD is changed from <b>direct</b> to <b>calculate</b> , no automatic calculation of motor speed n* was performed. Corrected.                                                                                                                                |
| Operation with type Kone EcoDisc drives      | If a run was to be carried out after the magnet adhesion process, previously the error message <b>341: Disc: No Enc Adj.</b> was output. Corrected.                                                                                                                          |
| Operation with ZAmom software                | If, with the MOP recorder active, the connection cable between the ZApad and the PC was disconnected without first switching back to the app recorder, undefined states such as restarts of the ZAdyn occurred in the past.                                                  |
| Deleting error history list                  | If the error history list was deleted, the parameters <b>ST_RES</b> , <b>ST_SXO</b> and <b>ST_SRF</b> were not previously set to <b>0</b> . Corrected..                                                                                                                      |
| Electronic short-circuit                     | If the ZAdyn was switched off in operating state 998 (wait till ZAdyn4C is switched off), the electronic short-circuit was not previously active when the shaft of the drive was moving. Now it becomes active.                                                              |
| Rotary encoder calibration with closed brake | In the case of rotary encoder calibration with the brake closed, the information text <b>Too low a measuring current</b> was previously displayed on the ZApad display. It is now no longer displayed.                                                                       |
| Parameter LOD_P_E                            | The function to read out data from the absolute encoder via the parameter <b>LOD_P_E</b> now works.                                                                                                                                                                          |
| Operation of Schindler Smart system type     | Parameter S_10 is now functional.                                                                                                                                                                                                                                            |
| Operation of Schindler Smart system type     | Previously, the output with the SD function switched off too early, this interrupted the "Controller enable" input signal. The output is now no longer switched off too early.                                                                                               |
| Operator levels                              | It is now possible to switch from the basic level to the advanced level by long pressing of the ecs-key.                                                                                                                                                                     |
| Motor contactor monitoring                   | If the ZAdyn4C 040-074 was operated with motor contactors and the monitoring of the motor contactors was activated, the monitoring of the motor contactors was previously deactivated when the ZAdyn4C 040-074 was restarted. It now remains activated.                      |
| Parameter f_PARA2                            | Previously, the second parameter set could be activated under certain conditions if the parameter f_PARA2=Disabled was configured. Now the second parameter set can only be activated if the parameter <b>f_PARA2</b> is <i>not configured</i> to <b>Disabled</b> .          |

## 1.22 Version 4.60 | Bugfix from 18.05.2020

### New

|                                    |                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Loading parameters                 | If the parameters of the ZETADYN 3 were saved on an SD card and were to be loaded to the ZAdyn, the file path previously had to be renamed from "3BF" to "4CX" on the SD card. The file path now no longer needs to be renamed.<br>When uploading the parameters, the monitoring of the motor contactors is deactivated and the monitoring of the STO function is activated. |
| Error 587<br>BR: Delta t too small | The error message is issued if, in an emergency stop for BD132 motors, the offset over time between closing the two brakes is less than 50 ms. If the parameter LOCK_X is activated and the error message is triggered                                                                                                                                                       |

|                |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | three times in succession, the ZAdyn is locked. The parameter LOCK_X is activated automatically when using BD132 motors.                                                                                                                                                                                                                                                                                                      |
| Digital inputs | The <b>RF+V1</b> input function has been added. A digital input configured for this function is assigned the functions RF and V_1. When selecting the configuration <b>35: Lester: Lester Controls</b> automatically assigns the digital input previously assigned to the "RF" input function with the input function RF+V1, also when a software update has been performed or a parameter list has been loaded to the ZAdyn. |

### Amendments

|                       |                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Duty cycle            | The duty cycle is now calculated correctly.                                                                                                    |
| SD card               | The saving process when data is saved on the SD card has been improved. This applies if the SD card is plugged into the card slot of the ZApad |
| .BOX file             | The value V_PROG, which specifies the currently programmed speed, has been corrected in the .BOX file.                                         |
| Parameter MSK_NEG     | The parameter MSK_NEG is now always visible.                                                                                                   |
| ZApad                 | If an error occurred, the text <b>Switch off</b> was previously displayed every 30 s. Now the text is displayed 30 s after the last keystroke. |
| Travel curve computer | Changes for travel curve computer. effective if the configuration <b>35:Lester Controls</b> has been selected and the parameter CC_OFF=On.     |

### Corrections

|                   |                                                                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP operation     | Inspection runs with speed changes are now possible if the command byte B3 is set by the elevator control system.                                                                                                 |
| Recorder function | A .pol file was saved on the memory card for recording recorders that were triggered by an error. A .BOX file is now saved.                                                                                       |
| Parameter P1P2    | If the motor type to be operated was changed in the parameter MOT_TYP, parameter P1P2 was previously set automatically to <b>PTC</b> for ZAdyn without motor temperature card. It now remains set to <b>OFF</b> . |

## 1.23 Version 4.60 | Bugfix from 20.04.2020

### New

|                 |                                                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Digital outputs | Output function P<0: The digital output assigned with this output function switches when the ZAdyn does not absorb any power from the mains power. |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

### Amendments

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter SIM_V1                        | The parameter SIM_V1 is also active if the direction specification RV2 is available.                                                                                                                                                                                                                                                                                                            |
| Operation with type Kone EcoDisc drives | If the middle of a pair of poles has been reached during the magnet adhesion process, the following text is displayed: <b>Magnet adhesion (1 = magnet detected). When done, start inspection run.</b> 0/1 is displayed instead of the number of the current pole. After adhesion of the magnet and after an inspection run has been started, the number of the current pole is displayed again. |
| ZApad                                   | If the ZAdyn is operated remotely by the elevator control, the keys of the ZApad are deactivated. The keys can now be activated by pressing the esc-key for 3 seconds.                                                                                                                                                                                                                          |
| ZApad                                   | The scroll speed of texts on the ZApad display has been reduced.                                                                                                                                                                                                                                                                                                                                |
| CAN operation                           | Until now, the energy-saving mode was shown as <b>1</b> in the CAN object <b>Saving mode display</b> if the ZAdyn was not in stand-by mode. Now <b>0</b> .                                                                                                                                                                                                                                      |

|                      |                                                                                                                                                                                                                                                    |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter n*         | If the configuration <b>08:KN_IO: Kollmorgen standard control</b> is selected, until now the parameter n* has been assigned "0". The motor speed is now recalculated in parameter n*.                                                              |
| Emergency evacuation | Until now, the direction in which the evacuation run should be carried out was determined during constant travel. The evacuation direction is now determined at the start of the travel and, if necessary, corrected again during constant travel. |
| CAN operation        | Parameter changes in the 0x4000 range are now also possible with blocked parameters.                                                                                                                                                               |
| CAN operation        | If 0xFF is written in the CAN object <b>Set power saving mode</b> , this does not lead to changes in the power saving mode.                                                                                                                        |

### Corrections

|                                |                                                                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation                  | In the CAN objects 0x6441 and 0x6461, the system speed and motor speed were previously specified too high by a factor of 10. Corrected.      |
| Emergency evacuation           | Previously, the evacuation direction was not correctly determined with standard actuation and DCP operation. Now it is determined correctly. |
| Binary traveling speed default | An emergency stop was previously performed if travel was stopped with the direction specification RV2. Regular stopping is now possible.     |

## 1.24 Version 4.60 | Bugfix from 26.03.2020

### New

|               |                                                                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation | For configuration <b>35:Lester Controls</b> : In the CAN object <b>CAN manufacturer device mains string</b> , the special string <b>ZETADYN4 frequency inverter</b> is available. |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Amendments

|                       |                                                                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP operation         | When using the DCP4 protocol, it is now possible to catch up with no residual distance during special journeys.                                                                                                     |
| DCP operation         | The first character was corrected during DCP error text transmission. Previously, the first character was an <b>I</b> , e.g. I505:..., now an <b>E</b> , e.g. E:505:....                                            |
| Standard actuation    | If the input signal for the controller enable RF remains active after switching off the input signals for the travelling speed Vx and the direction specification RVx, it is now possible to start another journey. |
| Parameter IQ_TI1      | The parameter IQ_TI1 is only displayed if the password has been entered in the parameter <b>PW_S9</b> .                                                                                                             |
| ZAdyn4C sizes 050-074 | In ZAdyn4C devices of sizes 050-074, hardware conflicts no longer occur.                                                                                                                                            |
| Recorder function     | After a reset 99 has been performed, the measuring channels with configuration 1 are pre-allocated in parameter <b>REC_CFG</b> .                                                                                    |

### Corrections

|                          |                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronic short-circuit | Previously, the electronic short-circuit was already deactivated during slow movement of the elevator cabin. It is now only deactivated at a standstill of at least 1 s. |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 1.25 Version 4.60 | 30.09.2019

### New

|                                 |                                                                                                                                                                                                                                                                                              |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Free binary assignment function | <ul style="list-style-type: none"> <li><b>Free binary assignment</b> function: The function enables binary codes to be freely assigned to travelling speeds.</li> <li>In parameter <b>Control/CONFIG</b> the configuration <b>25:X-BIN:Free binary assignment</b> has been added.</li> </ul> |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                |                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | <ul style="list-style-type: none"> <li>The parameters x_BIN_1...x_BIN_7 in the <b>Control menu</b>: The binary codes are assigned to the travelling speeds using the parameters.</li> <li>For the digital inputs and the brake monitoring inputs, the selection values SBIN0...SBIN2 have been replaced by the selection values XBIN0...XBIN2.</li> </ul> |
| Motor name plate/<br>MOT_- TYP | The selection value <b>BD132.xx-14</b> has been added.                                                                                                                                                                                                                                                                                                    |

## Amendments

|                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LCD & password menu<br>Control system menu<br>Monitoring menu<br>Memory card menu<br>Menu parameter set 2 | Renamed parameters:<br>LCD → LANG<br>LIFT_NR → LIFT_NO<br>LOCK_BR → LOCK_X<br>REC_NUM → DIR_NUM<br>RS_UPS → R_U20                                                                                                                                                                                                                                                                                                                  |
| Control system menu                                                                                       | Renamed digital input:<br>/DELAY → /FastStp                                                                                                                                                                                                                                                                                                                                                                                        |
| Control system menu                                                                                       | Renamed digital outputs:<br>RB-Schütz → RB<br>RB-Invers → /RB<br>EVAC.Dir → EVAC.Dir.<br>INV V<V_G1 → /V<V_G1<br>INV V<V_G2 → /V<V_G2                                                                                                                                                                                                                                                                                              |
| INFO menu                                                                                                 | Renamed INFO menus:<br>Page 14: DCP-Ident → Page 14: Bus Info 1<br>Page 15: DCP-Bits → Page 15: Bus Info 2<br>Page 16: DCP-Dist. → Page 16: Bus Info 3<br>Page 17: DCP-Err → Page 17: Bus Info 4<br>Page 14: CAN → Page 14: Bus Info 1<br>Page 15: CAN Velocity → Page 15: Bus Info 2<br>Page 15: CAN Position → Page 15: Bus Info 2<br>Page 16: CAN Error Info → Page 16: Bus Info 3<br>Page 17: CAN Calib. → Page 17: Bus Info 4 |
| CAN menu<br>Control system menu                                                                           | The parameters from the menu CAN are now in the Control menu.                                                                                                                                                                                                                                                                                                                                                                      |
| Starting,<br>distance-dependent<br>deceleration,<br>direct engagement                                     | It is now possible to activate intermediate speeds during start-up, distance-dependent deceleration and direct engagement, e.g. for fold-away aprons.                                                                                                                                                                                                                                                                              |
| LCD & password menu<br>Monitoring menu                                                                    | Removed parameters:<br><ul style="list-style-type: none"> <li>PW_CLR</li> <li>CAN/MODE</li> <li>APC</li> </ul>                                                                                                                                                                                                                                                                                                                     |
| Deceleration/S_ABH                                                                                        | Renamed values:<br>DCP_slow → Slow<br>Removed values:<br>DCP_comf<br>DCP_fast<br>V2toV3                                                                                                                                                                                                                                                                                                                                            |
| Parameter MOT_TYP                                                                                         | Designations of motors have been changed: e.g. SM132 → SM132.xx-14                                                                                                                                                                                                                                                                                                                                                                 |
| Encoder calibration<br>Parameter<br>Encoder calibration/<br>ENC_ADJ                                       | The procedure for calibrating absolute encoders has been revised<br>In the parameter Encoder calibration/ENC_ADJ, previous selection values have been changed: Previous <b>OFF</b> and <b>ON</b> . Now: <b>OFF</b> , <b>Check</b> , <b>No load</b> and <b>Braked</b> .                                                                                                                                                             |
| Function<br>automatic parameter<br>check APC                                                              | Funktion <b>Automatic Parameter Check APC</b> has been removed.                                                                                                                                                                                                                                                                                                                                                                    |
| Motor nameplate menu                                                                                      | Changed ranges:                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                      |                                                                                                                                                                                                                                                                                                                                                                                           |                  |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Installation menu    | Motor name plate/n                                                                                                                                                                                                                                                                                                                                                                        | 0.1 ... 6000 rpm |
| Menu parameter set 2 | Motor name plate/f                                                                                                                                                                                                                                                                                                                                                                        | 0.1 ... 200Hz    |
| Encoder & BC menu    | Motor name plate/I                                                                                                                                                                                                                                                                                                                                                                        | 0.1 ... 200A     |
| Acceleration menu    | Motor name plate/U                                                                                                                                                                                                                                                                                                                                                                        | 0.1 ... 460V     |
| Travelling menu      | Motor name plate/P                                                                                                                                                                                                                                                                                                                                                                        | 0.1 ... 90kW     |
| Memory card menu     | Parameter set 2/U_ACCU                                                                                                                                                                                                                                                                                                                                                                    | 100 ... 565V     |
|                      | Encoder & BC/ENC_INC                                                                                                                                                                                                                                                                                                                                                                      | 64 ... 11000     |
|                      | System data/n*                                                                                                                                                                                                                                                                                                                                                                            | 0.1...6000rpm    |
|                      | System data/_D                                                                                                                                                                                                                                                                                                                                                                            | 0.06 ... 1.50m   |
|                      | System data/Q                                                                                                                                                                                                                                                                                                                                                                             | 100...32000kg    |
|                      | System data/F                                                                                                                                                                                                                                                                                                                                                                             | 00...32000kg     |
|                      | System data/G                                                                                                                                                                                                                                                                                                                                                                             | 0...32000kg      |
|                      | Acceleration/R_POS1                                                                                                                                                                                                                                                                                                                                                                       | 5 .. 90%         |
|                      | Travel/V_2                                                                                                                                                                                                                                                                                                                                                                                | 0.03 ... 6.50m/s |
|                      | Travel/V_4...V_7                                                                                                                                                                                                                                                                                                                                                                          | 0.03 ... 3,50m/s |
|                      | Memory Card/SAV_CFG                                                                                                                                                                                                                                                                                                                                                                       | 0 ... 65535      |
|                      | Memory Card/LOD_CFG                                                                                                                                                                                                                                                                                                                                                                       | 0 ... 65535      |
| Error list           | <ul style="list-style-type: none"> <li>• Error list revised.</li> <li>• If an SD card with firmware <math>\geq 4.60</math> is in the card slot on the ZApad or the ZAdyn, an info text for the corresponding error is displayed if an error message appears when the i key is pressed</li> <li>• The error messages show the status in which the error occurred in plain text.</li> </ul> |                  |

### Corrections

|               |                                                                                                                                                                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stand-by mode | Previously, the ZAdyn for operation of synchronous motors remained in operating state 23 (wait for signal processor, power unit detection) under certain conditions after stand-by mode was completed. Now it changes correctly to normal operation. |
| Printer list  | Up to now, the choice texts in the printelists were not shown correctly. Now, they are shown correctly.                                                                                                                                              |

## 1.26 Version 4.58 | 30.09.2019

### New

|                                           |                                                                                                                                                   |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameters f_I01...f_I08, f_XBR1...f_XBR3 | The MOT_TEMP input function has been added. For ZAdynpro, it is used to monitor the motor temperature by means of the trigger unit type U-EK230E. |
| INFO menu page 22                         | The INFO menu page 22: ASM-ID has been added.                                                                                                     |

### Amendments

|                   |                                                                                                                                                                                      |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Autotune function | The autotune function for asynchronous motors has been revised.                                                                                                                      |
| Parameter ASM_ID  | Up to now, in the parameter ASM_ID, the values <b>OFF</b> and <b>ON</b> could be selected. Now: <b>OFF</b> , <b>save</b> , <b>continous</b> , <b>One-step</b> und <b>Only meas</b> . |

## 1.27 Version 4.56 | Bugfix from 05.04.2019

### Corrections

|               |                                                                                                                                                                     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stand-by mode | Up to now, the ZAdyn4C for synchronous motors remained in operating state 23 after the standby mode was finished. Now, it switches orderly to the normal operation. |
| Printer list  | Choice texts in the printerlists are shown correctly.                                                                                                               |

## 1.28 Version 4.56 | 21.01.2019

### New



|                       |                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Parameter f_O1...f_O5 | The output function <b>MotShortcir</b> is used for ZAdynpro to actuate a contactor, by which the motor windings can be short-circuited. |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|

## Amendments

|                 |                                                                                                                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP operation   | In DCP mode and with standard control it is possible to carry out travel direction changes until the ZAdyn is in the operation mode 340.                                                                                       |
| Parameter M_MAX | For asynchronous motors when operating with and without rotary encoder: After carrying out a Reset77 with a standard ZAdyn or a Reset90 or a Reset99, the parameter M_MAX was preset up to now with <b>2</b> . Now: <b>3</b> . |

## Corrections

|                                    |                                                                                                                                                                                                                      |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INFO menu page 09:<br>Start / Stop | For ZAdynpro a ! was constantly displayed beneath CO. Now, a big point is displayed beneath CO in order to indicate the status of the input. If no digital input is parametrised to CO, a ! is displayed beneath CO. |
| INFO menu page 09:<br>Start / Stop | For ZAdyn for asynchronous motors: No sign was displayed beneath BR, if the brake release monitoring was deactivated. Now, three !!! are displayed beneath BR.                                                       |

## 1.29 Version 4.55 | Bugfix from 07.11.2018

### Amendments

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pulse width modulation | In the following cases, the clock frequency of the pulse width modulation is reduced from 16 kHz to 8 kHz: <ul style="list-style-type: none"> <li>at a motor output frequency of less than 5 Hz, the motor current is once-only higher than 80 % of the nominal current of the ZAdyn (for error-free travel and at least 0.5 s constant travel)</li> <li>at a motor output frequency between 5 Hz and 7 Hz, the motor current is once-only higher than 90 % of the nominal current of the ZAdyn (for error-free travel and at least 0.5 s constant travel)</li> <li>at a motor output frequency of less than 3 Hz</li> </ul> |
| DCP operation          | The error message <b>721 DCP: Residual distance failure</b> is no longer output in the event of residual paths with a length of 32.767 m and higher (hexadecimal value 0x7FFF).                                                                                                                                                                                                                                                                                                                                                                                                                                              |

### Corrections

|                  |                                                                                                                                                                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Start-up process | If the signals RV (driving direction), V (travelling speed) and STO disappear in operating state 320, and the signal RF (controller enable) is present, the error message "582:BR:T2 too low" previously appeared. Now the error message "531:STO: Interruption" is output. |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 1.30 Version 4.55 | Bugfix from 18.04.2018

### Corrections

|                                            |                                                                                                                                                                                                                                                                                  |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation with type<br>Kone EcoDisc drives | Optimisation of the switch-off of the output stage                                                                                                                                                                                                                               |
| Parameter MOT_TYP                          | ZAdynpro: If it was switched from asynchronous motor to synchronous motor an vice versa, the following parameters were not correctly preset: <ul style="list-style-type: none"> <li>M_START</li> <li>T_2</li> <li>V_3</li> <li>various password protected parameters.</li> </ul> |
| CAN operation,<br>parameter TYP            | Up to now, the object 6447 was represented in the wrong format. This was corrected now.                                                                                                                                                                                          |
| Autotune function                          | During the Autotune function, a notice appears on the display of the ZAdyn saying that the traveling speed has to be set to 100% via the control in CAN                                                                                                                          |



|                                |                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|                                | operation. Up to now, also the signs "[+]" und "[-]" have been displayed in this notice. Now, they are not displayed any more.                |
| Preconfiguration on motor type | Up to now, the ZAdynpro was preconfigured on the motor type asynchronous motor. Now, it is preconfigured on the motor type synchronous motor. |

### 1.31 Version 4.55 | Bugfix from 27.03.2018

#### Amendments

|                               |                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Autotune function             | The Autotune function was supplemented by additional steps. Via the additional steps, the acquired motor data are optimised. |
| Error<br>350:MP: Temp.- Sens? | Designation changed: <b>350:Tmp:Out of range.</b>                                                                            |
| Error<br>350:MP: Temp.- Sens? | At ambient temperatures of less than 0 °C the error is no longer output.                                                     |
| T_5a                          | Up to now, the parameter was not considered with asynchronous motors. Now, it is considered.                                 |

### 1.32 Version 4.55 | 03.11.2017

#### Amendments

|                                          |                                                                                                                                                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter Control system/f_XBR1...f_XBR4 | Parameter function CO was introduced. The parameter function is used for ZAdynpro to activate the contactor monitoring.                                                           |
| Error list                               | Error <b>317:BISSC HW-Error</b> : The error message is issued, if there is an internal error in the absolute value encoder with BiSS C interface.                                 |
| Error list                               | Error <b>333:ENC:Ill. Counter</b> : The error message is issued, if the absolute value that has been transmitted by the absolute value encoder with BiSS C interface is invalid.  |
| Error list                               | Error <b>334:BISSC:Com-Error</b> : The error message is issued, if there is an error in the communication between the absolute value encoder with BiSS C interface and the ZAdyn. |
| Parameter Control system/- f_O1...f_O5   | The parameter function <b>Stutter br.</b> was introduced. The parameter function is used for ZAdynpro to activate the function "stutter brake".                                   |

### 1.33 Version 4.54 | 27.06.2017

#### Amendments

|                                                        |                                                                                                                        |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Operation with synchronous motor or asynchronous motor | At a ZAdyn4C output frequency of less than 7 Hz the clock frequency of the pulse width modulation is reduced to 8 kHz. |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|

### 1.34 Version 4.53 | Bugfix 02.02.2017, 16.03.2017, 27.03.2017, 12.05.2017

#### New

|                                                                   |                                                                                                                                                                                       |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HY operation                                                      | An item has been added to the third line of the Info menu on Page 03. If the item is displayed in large type, this indicates that the tuning function on the ZAdyn4CA HY is complete. |
| Startup/MOT-TYP parameter<br>Motor rating plate/MOT-TYP parameter | The motor types SL506, SL510, SM210 and SM180 have been added.                                                                                                                        |
| MMC recorder/REC_CFG parameter                                    | Configuration 20 for HY operation has been added.                                                                                                                                     |

|                 |                                                                                                                                                                              |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitoring menu | Parameter FIL_STO has been added: This parameter is used to set the filter time for a software filter. The software filter is used to suppress EMC faults at the STO inputs. |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Amendments

|                        |                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HY operation           | HY operation has been optimised.                                                                                                                                                                                                                                                                                                                                 |
| Temperature recording  | If the internal temperature recording on the ZAdyn4C fails, an emergency mode is now available. Contact the ZIEHL-ABEGG customer service.                                                                                                                                                                                                                        |
| Operation with ZAreC4C | Communication between ZAreC4C and ZAdyn/ZETADYN has been optimised.                                                                                                                                                                                                                                                                                              |
| Operation Kone EcoDisc | The error threshold for the error <b>340: ENC:magnet miss.</b> has been raised.                                                                                                                                                                                                                                                                                  |
| Operation with Revcon  | In Status 90 EKS Active, stand-by mode is activated on the Revcon, provided the ZAdyn is programmed accordingly. This prevents current flowing through the intermediate circuit into the power supply system in this status. If current flows through the intermediate circuit into the power supply system, the electronic short-circuit cannot be deactivated. |
| Operation Kone EcoDisc | The default for the parameter T_2 has been changed from 1.8 s to 0.3 s.                                                                                                                                                                                                                                                                                          |

## Corrections

|                               |                                                                                                                                                                                                                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation Kone EcoDisc        | When switching from stand-by to normal mode, the encoder offset was previously lost. The encoder offset now remains saved.                                                                                                                                                                                           |
| Operation with rotary encoder | The SSI rotary encoder from Wachendorff is now supported.                                                                                                                                                                                                                                                            |
| CAN operation                 | If the parameter LOCKBR was activated, the brake error was not permanently retained on the CAN bus. This is because the control was able to reset the error. However, no travel was possible as the ZAdyn was still in Status 910. Now, the control can no longer reset the error and it is retained on the CAN bus. |
| Operation modus Standby 2     | After the operating status Standby 2 was finished, the encoder offset was changed. Now, the encoder offset is retained.                                                                                                                                                                                              |

## 1.35 Version 4.53 | 10.02.2016

### New

|                              |                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter CONFIG             | Configuration <b>36:HY-Mod.</b> for modernisation of hydraulic systems.                                                                                                                                                                                                                                                                          |
| Control system menu          | New parameters:<br><ul style="list-style-type: none"> <li>• HY_Auto</li> <li>• HY_O_A</li> <li>• HY_t_A</li> <li>• HY_OFFS</li> <li>• HY_LA_I</li> <li>• HY_LA_V</li> <li>• HY_NACH</li> <li>• FIL_V_D</li> </ul> The parameters are used for the modernisation of hydraulic systems. Parameters are only displayed, if the CONFIG = 36:HY-Mod.. |
| Error list                   | Error <b>595:HY:No movement</b> issued, if the ZAdyn4C-HY does not detect any movement of the cabin. The error message is only issued, if CONFIG = 36:HY-Mod..                                                                                                                                                                                   |
| Parameter DCP_FIL            | New parameter functions:<br><ul style="list-style-type: none"> <li>• Opt.3</li> <li>• Opt.4</li> </ul> The parameter functions can only be selected, if CONFIG = 36:HY-Mod.                                                                                                                                                                      |
| INFO menu page 14: DCP Ident | If parameter CONFIG = 36:HY-Mod., in the 4th. line the current speed is displayed.                                                                                                                                                                                                                                                               |

## Amendments

|                                   |                                                                                                                                                                                                                                                                                                              |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZAdyn4                            | For ZAdyn4 with a digitally adjustable resistor in the current measuring, the resistance value is reprogrammed after the error 485 occurred. This ensures that the ZAdyn4 will not be blocked after the error 485 occurred.                                                                                  |
| ZAdyn4, ZAreC                     | The communication between ZAdyn4 and ZAreC has been optimised.                                                                                                                                                                                                                                               |
| Parameter control system /-SIM_V1 | If parameter CONFIG = 32:S_Smart, the parameter <b>control system/SIM_V1</b> will be preset with <b>On</b> and will be able to change.                                                                                                                                                                       |
| Electronic short-circuit          | The PWM-HW-enabling P60 will not be given from status 100 on, but not until from status 115 on. The PWM-HW-enabling will be deactivated as soon as the electronic short-circuit was activated. Thereby, a save and fast deactivation of the PWM in the event of an electronic short-circuit will be ensured. |

## Corrections

|                                     |                                                                                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZAdyn4C 062                         | HW-Ident. PU=53 is not necessary any more on ZAdyn4C 062 with 220A-modules.                                                                                                 |
| Printer list                        | Up to now, incorrect information concerning the sensor module have been listed in the printer list.                                                                         |
| CAN operation                       | It is now possible to buffer up to 11 messages MPDOs from the control. The problems when switching from standby mode to normal operation at high bus load are resolved now. |
| DCP operation                       | The status-byte S0 will not be activated, if the ZAdyn4 is accessing the SD card.                                                                                           |
| Parameter CONFIG=32:S_Smart         | If the parameter CONFIG=32:S_Smart is set, the SD signal will not be activated at the end of travel also with active MMC recorder.                                          |
| Autotune function                   | The Autotune function now also works during CAN operation in Velocity Mode.                                                                                                 |
| Autotune function                   | The Autotune function will issue a message, if the voltage limit is reached during the measuring process.                                                                   |
| Standby_1 and power feed- back unit | If the ZAdyn4 switches from standby mode to normal operation before the time T_PFU has elapsed, the error message <b>570:PFU:Fault</b> will not be displayed any more.      |
| Remote control via control system   | If the control system needs more time to start up than the ZAdyn4 and no encoder is connected to the ZAdyn4, the remote control via DCP will now be possible.               |
| DCP mode and ZAreC                  | If the ZAreC does not activate the ready signal, the status byte S0 will not be activated now.                                                                              |
| INFO menu Page 07: Brake-Chopper    | If ZAreC is used, <b>ZAreC</b> will now be displayed in line 2 instead of BC/BR???                                                                                          |

## 1.36 Version 4.52 | 28.08.2015

### New

|                         |                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter f_I01...f_I08 | The SBM_RDY input function monitors the ZAsbm4.                                                                                                                               |
| Error list              | <b>536:SBM:RDY abort</b> error appears if the digital input with the SBM_RDY function decreases during travel. This occurs if there is an error at the ZAsbm4.                |
| Parameter f_O1...f_O5   | The BR Info output function is used to send a signal regarding statuses of the inputs BR1...BR4 to the control. The relay is picked up when the brakes are open during travel |

## Amendments

|                               |                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter CONFIG              | The configurations 14:SS_DCP3 and 33: SS_DCP4 have been changed. They are identical to the configurations 09:KN_DCP3 and 10:KN_DCP4; however, digital output O1 is preset with Fault.                                                                                                                                                                 |
| Software update               | The bootloader now contains a CRC sum. If the CRC sum is not correct, the LED of the ZAdyn4C displays flashing code 25. After a restart, the ZAdyn4C is not ready for operation and the LED displays flashing code 7. The ZAdyn4C is ready for operation again when another software update is subsequently performed without control terminal ZApad. |
| Operation with rotary encoder | If the ZAdyn4C has the status zm_NO_ENCODER_DETECT, e.g. following an error in the rotary encoder, the electronic short-circuit of the motor windings is activated.                                                                                                                                                                                   |

## Corrections

|                               |                                                                                                                                                                                                                        |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation with rotary encoder | Until now a restart of ZAdyn has been required if in parameter ENC_TYP a change has been made from <b>NO Enc.</b> to <b>TTL-Sine</b> or <b>TTL-Imp.</b> for asynchronous motors. A restart is no longer necessary now. |
| Operation with rotary encoder | Previously a CRC error would appear if type EnDat rotary encoders were used with resolutions other than 2048 impulses. Corrected.                                                                                      |
| Memory card                   | The reloading of operating languages via memory cards did not work with certain types of memory card. Fixed.                                                                                                           |

## 1.37 Version 4.51 | 04.05.2015

### New

|                        |                                                                                                                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation Kone EcoDisc | The error <b>253:Disc:Wrong position!</b> has been introduced. It occurs, if the hall sensor detects a magnet earlier than it has been expected, e.g. if the motor shaft has been turned after the ZAdyn had been switched off. |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Amendments

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| Operation Kone EcoDisc   | The magnet adhesion process has been optimized. |
| Error 960:STO:Diagnostic | The error is not maskable any more.             |

### Corrections

|                             |                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|
| Error 531: STO:interruption | Until now, the error could be possibly caused at the end of an inspection run. This has been corrected now. |
| T_1, T_5                    | When using motors of the type SM250, the value set by the factory setting could not be changed. Corrected.  |

## 1.38 Version 4.50 | 23.01.2015

### New

|                      |                                                                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter CONFIG     | The <b>35:Lester Controls</b> configuration has been introduced. The configuration sets the CC_OFF parameter=On, presets the parameter CTRL to CAN" and presets the parameter I01 to RF. |
| ZAdyn4CA HY          | New series ZAdyn4CA HY.                                                                                                                                                                  |
| Parameter CONFIG     | The <b>34:OS_DCP3</b> configuration has been introduced: The digital inputs and outputs are freely configurable, the digital output O31-O34 is preset to controller mode contactor.      |
| Motor nameplate menu | Motor types MX05, MX06, MX10 and MX18 are available for the EcoDisc special software.                                                                                                    |
| Motor nameplate menu | ZAdyn4CS with special software for operating Kone motors cannot be re-parameter- ized for the operation of standard synchronous or asynchronous motors.                                  |

|                          |                                                                                                                                                                                                                                                                                    |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Encoder calibration menu | If Kone motors are operated with the ZAdyn4C, magnets must be attached to the motor as reference marks. The magnets serve to control the values of the absolute value encoder. When the magnets are attached, a mechanism is used that is based on a modified encoder calibration. |
| Error 260:V_EXT active!  | Error occurs if travel is started in normal operation and a voltage of above approx. 23 V is present at the connection terminal X-EXT.                                                                                                                                             |

## Amendments

|                                                        |                                                                                                                                                                          |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error 421<br>STO:Temp.- Alarm                          | The error no longer results in an automatic interruption of the travel. The temperature is now only checked in status 100 (system off) and in status 110 (system ready). |
| Error 583:BR:travel fault<br>Error 584:BR:travel fault | If brake bleeding monitoring is activated, parameter LOCKBR=ON, the errors no longer result in the frequency inverter being blocked.                                     |
| Error 531:STO:interruption                             | Interruptions to the STO input signals during the debounce time T_STO at the end of travel no longer result in the error.                                                |
| V*, V_3, CAN operation                                 | A maximum speed of 10 m/s is now possible.                                                                                                                               |
| Braking distance                                       | The maximum braking distance has been increased from 16 m to 64 m.                                                                                                       |
| Error 710:DCP:Timeout                                  | After the error occurs the DCP interface is initialised again.                                                                                                           |
| CAN operation                                          | It is now possible to switch off the ZAdyn directly using CAN (command 0).                                                                                               |
| CAN operation                                          | The error <b>288:V_3 &gt; V*</b> is deactivated in CAN operation. If speed values are entered that are higher than V*, the ZAdyn automatically limits the speeds to V*.  |
| Error 710:DCP:Timeout                                  | After the <b>710:DCP:Timeout</b> error has occurred, the DCP interface and DMA are initialised again.                                                                    |
| Autoscan DCP operation<br>and CAN operation            | Once the signal Controller enable RF is present at a digital input, the autoscan function for DCP and CANopen Lift interface is switched off.                            |
| CAN operation                                          | Controlled stopping is now possible via Quickstop.                                                                                                                       |
| Parameter CC_OFF                                       | If the parameter CC_OFF=On, the parameters V_1 and V_3 are freely configurable. The function of the brake monitor inputs f_XBR1 to f_XBR4 is also freely configurable.   |
| Parameter T_1                                          | Previously the rotor time constant was the smallest value that could be input for asynchronous motors. Now values up to 0.1 can be input.                                |

## Corrections

|                                         |                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BC-type, parameter set 2                | If the parameter in parameter set 2 is set to PFU+BRxx, the power feedback unit will not be activated.                                                                                                                                                                                                                                                                       |
| Power feedback unit,<br>parameter set 2 | There was one case where the ZAdyn was started in parameter set 2 when using a power feedback unit, and the power supply of the ZAdyn failed before switching back to the first parameter set. When starting up in the first parameter set, ZAdyn then remained in error <b>908:PFU:malfuction</b> . Now, the ZAdyn boots up again when starting in the first parameter set. |
| Standby function                        | If a parameter was changed during activation or deactivation of the standby mode, the ZAdyn remained in status 21 when exiting standby mode. This has been corrected.                                                                                                                                                                                                        |
| CAN operation                           | In open loop operation the error <b>820:CAN:Illegal Status</b> was previously issued when stopping. This has been corrected.                                                                                                                                                                                                                                                 |
| Status LED                              | In normal operation with control via the digital inputs and outputs, the red LED previously no longer switched off after the ZAdyn had booted up. This has been corrected.                                                                                                                                                                                                   |
| MMC recorder                            | If the parameter TRIG_BY was set to Err/Stop and normal travel was saved, the voltage of the memory card was previously not switched off again. The blue LED therefore remained permanently illuminated. Corrected.                                                                                                                                                          |
| CAN operation                           | At speed V_T3, travel was not started in the direction specified by the CAN, but in the direction of the last travel. This has been corrected.                                                                                                                                                                                                                               |

|                          |                                                                                                                                                                                     |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronic short-circuit | A check for an electronic short-circuit is now also carried out for the ZAdyn for operation of asynchronous motors.                                                                 |
| CAN operation            | If the shutdown command was slightly delayed, it may have been the case that the condition 515 <b>Start abort 1s</b> was run through if the brake monitor was activated. Corrected. |
| Temperature display      | Negative electrolytic capacitor temperatures were displayed incorrectly.                                                                                                            |
| CAN operation            | Changes in CAN handling concerning RDY-Bit, which could not be deleted; cause for APP WDT!.                                                                                         |
| Printer list             | SM Index 4 is also now displayed in Infbus section.                                                                                                                                 |

### 1.39 Version 4.49 | 23.01.2015

#### Corrections

|          |                                                                                |
|----------|--------------------------------------------------------------------------------|
| Watchdog | The ZAdyn is not reset by the watchdog of the internal APP processor any more. |
|----------|--------------------------------------------------------------------------------|

### 1.40 Version 4.48 | 23.07.2014

#### New

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Menu Startup and motor name plate | Motor type SM190 and SM132 included for parameter MOT_TYP.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Statistic menu                    | Switching from ZAdyn 4CS to ZAdyn 4CA by entering a code at parameter <b>Reset</b> .<br>Enter code -1: switching from ZAdyn4CA to ZAdyn4CS                                                                                                                                                                                                                                                                                                                                                     |
| DCP operation                     | Command I2 enhanced by the function "turn off short circuit" and "reset".                                                                                                                                                                                                                                                                                                                                                                                                                      |
| INFO menu page 12                 | When the enter key is kept pressed, the temperature of the module print is displayed in line 3 on the right <b>MP: xxxC</b> . In the event of overtemperature, all fans are activated from 70° C. From 75 °C, the maskable error message <b>421 STO:Temp.-Alarm</b> is issued and the ZAdyn is locked.                                                                                                                                                                                         |
| Digital inputs                    | Configuration <b>33:SS_DCP4</b> : Schneider Steuerungen DCP4                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Electronic name plate             | The motor's automatic rating plate is automatically transferred from the encoder to the ZAdyn when the ZETADYN is started, as long as n* and V* in the ZETADYN are allocated to 0 In the as-delivered state, n* and V* are allocated to 0 if the ZETADYN has not been pre-parametrised by ZIEHL-ABEGG. The ZETADYN will restart automatically after the rating plate has been loaded, approx. 5 seconds. If there is no rating plate in the encoder, the ZETADYN can be parametrised manually. |

#### Amendments

|                          |                                                                                                                                                                                                                                 |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error list               | At STO-Interruption and not expired STO debounce time, standard 200 ms, an Encoder-Error will no longer be displayed as a consequential error, but error <b>531: STO: Interruption</b> .                                        |
| Controls                 | If an error occurs while the ZAdyn4C is being started up, e.g. a encoder error, the ZAdyn4C can only be operated via DCP.                                                                                                       |
| DCP operation            | Now it is possible to finish rides with positioning speed V1 via soft emergency stop.                                                                                                                                           |
| Control system menu      | SIM_V1 is no longer depending on S-ABH.                                                                                                                                                                                         |
| Printer list             | E-Mail adress updated, fax deleted, telephone inserted.                                                                                                                                                                         |
| Electronic name plate    | Expanded by further parameters, e. g. speeds.<br>Name plates, which were written with older firmware, cannot be loaded anymore.                                                                                                 |
| Electronic short-circuit | Activation of the electronic short-circuit EKS is no longer linked to output MB = off (mechanical brake), but to output RB = off (controller ready). This means that an electronic short-circuit (EKS) cannot be triggered when |



|                           |                                                                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | speed = 0 and the brake is in the closing procedure (MB off, but brake still open).                                                                                                            |
| Monitoring brake resistor | Response of the temperature monitoring at stop: --> immediate reaction<br>Response of the temperature monitoring at stop: --> reaction after 30 s<br>In CAN mode: Denial of the path extension |
| ZAdyn4CS                  | If a ZAdyn4CS with an integrated electronic short-circuit is switched to an asynchronous motor, the electronic short-circuit can no longer be triggered.                                       |
| Travelling menu           | The travelling speed V_3 can now be adjusted to up to 6.00 m/s.                                                                                                                                |
| Start menu                | When selecting the parameter "MOT_TYP=SM250", T_2 is pre-allocated with 2.5 s. T_2 is pre-allocated with 1.8 s in all other motor types.                                                       |
| Stop menu                 | When selecting the parameter "MOT_TYP=SM250", T_5 is pre-allocated with 2.0 s. T_2 is pre-allocated with 0.6 s in all other motor types.                                                       |

### Corrections

|                 |                                                                                                                                                                                                            |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation   | While writing the encoder typer HTL-encoder hiaperface has been programmed.                                                                                                                                |
| Controller menu | V_STOP also works with CAN-operation.                                                                                                                                                                      |
| Error list      | Only the consequential errors were partially displayed in case of STO-Interruptions. Now the output of the error <b>531: STO: Interruption</b> occurs with consequential errors as additional information. |
| CAN operation   | Previously if the ZAdyn received two directly successive PDOs for standby (0x501), the first PDO was overwritten. Bug removed.                                                                             |
| Standby 1 mode  | Encoder error linked to standby 1 resolved                                                                                                                                                                 |

## 1.41 Version 4.47 | 18.03.2024

### Amendments

|        |                                                                                                                                                                                                                                                                                                                           |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DCP    | By presetting of G2, a controlled stop during an inspection travel is now possible.                                                                                                                                                                                                                                       |
| CONFIG | All configurations for the controllers of Böhnke & Partner have been modified, that the output O4 is preset with the function V<VG2, as well as the speed threshold V_G2 is preset with 0,5 m/s.                                                                                                                          |
| CAN    | Adaption of the fast-start-process for the Intec-controller                                                                                                                                                                                                                                                               |
| DCP    | By telegram I1 it can be activated now, that the ZAdyn sends the extended inverter status. In the advanced inverter status, the ZAdyn calculates in the telegram I9 the distance of the last travel by using the motor encoder information and sends it back in mm → calculation of the rope slip on the traction sheave. |

### Corrections

|                                    |                                                                                                                                                                                                                      |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Error E532<br><b>STO: missing!</b> | If it comes to a slight roll back after entering the flush in the case of actuating the ZAdyn with DCP, an internal speed flag will not be reset. E532 error message comes on the next startup attempt. Bug removed. |
| CAN                                | If the lift number is higher than 1, the address of the object for the target position is now specified correctly.                                                                                                   |
| CAN                                | Error messages in third language loaded from SD card are now transferred properly.                                                                                                                                   |

## 1.42 Version 4.46 | 15.10.2013

### New

|                |                                                                                                                  |
|----------------|------------------------------------------------------------------------------------------------------------------|
| ZA-Intern menu | Parameter <b>CC_OFF</b> : deactevates the curve calculator for controls of Lester Control. Passwort must be set. |
|----------------|------------------------------------------------------------------------------------------------------------------|



|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INFO menu                                          | A new INFO menu page was added. Page 19: Energy<br>The page shows the current power of the ZAdyn in Watts as well as the work performed by the ZAdyn in Watt hours.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Parameter BC-type                                  | The new ZArec parameter function was added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Travel direction counter                           | The reading of the travel direction counter is automatically saved in the absolute value encoder.<br>This happens <ul style="list-style-type: none"> <li>every 100 changes in direction up to 1,000 changes in direction</li> <li>every 1,000 changes in direction up to 10,000 changes in direction</li> <li>every 3,000 changes in direction from 10,000 changes in direction</li> </ul> The function is possible in absolute value encoders with EnDat, Codeface and Hiperface interface.<br>The current counter reading can be loaded from the absolute value encoder into the ZAdyn. To do this, the password for the travel direction counter must be entered in the Statistic/TD_PW parameter and the Statistic/TD_RST = ON. |
| CAN and DCP operation                              | In CANopen lift and DCP operation the time at which the error occurred is saved and displayed in the error list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating language                                 | <b>PO Russki</b> for Russian as an operating language was added as a new selection function.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Input functions                                    | The new <b>/ESC</b> input function deactivates the electronic short-circuit as long as the ZAdyn is switched on.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Input functions                                    | The <b>ZR_RDY</b> input function was added to monitor the ZArec.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Error list                                         | The error messages 240 <b>ZR:Not RDY</b> , 535 <b>ZR:RDY abort</b> , 906 <b>ZR:ERR by start</b> , 919 <b>ZR:ERR by opera.</b> and 213 <b>ZR_EN / ZR_RDY missing</b> were added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Error list                                         | New error message 571: <b>PFU:Stdby remains</b> . The error message occurs when the PFU is still active 1 second after the travel command. The error message can be masked.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Hardware detection<br>Motor temperature monitoring | The board with the part number B1014AA Index 06 motor temperature module with safe turn off is now detected by the ZAdyn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Amendments

|                      |                                                                                                                                                                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter V_Z        | The parameter V_Z is defaulted to 0.01 m/s.                                                                                                                                                                                                                                   |
| Parameter CONFIG     | In configuration <b>02:ZA_CAN</b> the output O41 - O44 is defaulted with V<V_G1.                                                                                                                                                                                              |
| Parameter Reset      | Resets 900, 910, 920, 930 were removed                                                                                                                                                                                                                                        |
| Autotune function    | The new rated speed calculated by the Autotune function is now displayed in parameter <b>n</b> in the motor rating plate menu.                                                                                                                                                |
| Error 570: PFU Alarm | In error <b>570: PFU Alarm</b> the ZAdyn remains in state 909 until the ZAdyn is switched off or the monitoring contact of the PFU is reconnected.<br>It was not previously possible to switch to the 2nd parameter set at error <b>570:PFU Alarm</b> . This is now possible. |

## Corrections

|                  |                                                                                                                                                              |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter APD    | The message, <b>innovation</b> which incorrectly indicated that the <b>Control</b> extension card was miss- ing no longer appears.                           |
| INFO menu/page19 | The <b>Work</b> energy counter is no longer rejected when switching off.                                                                                     |
| CAN operation    | If several ZAdyn are connected to one bus, the ZAdyn can now be used in a maximum 4 shafts. Various program errors concerning this function have been fixed. |
| CAN operation    | The CAN object 0x640A was previously listed under address 0x640C. That has now been corrected.                                                               |

|                  |                                                                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAN operation    | When the floor display FD4 was used in connection with the ZAdyn, the ZAdyn would not start back up again from standby. That has now been corrected.           |
| Monitor function | The monitor function previously only worked with main voltage supply. It now also works with external 24V voltage supply.                                      |
| Monitor function | The monitor function previously did not work with HTL encoders in asynchronous motors. That has now been corrected.                                            |
| STO function     | STO interruptions during a fast stop are now recognized.                                                                                                       |
| Recorder         | The digital track in measurements with the application processor was previously one cycle behind in recordings with the recorder. That has now been corrected. |
| Error list       | The error <b>503:No Enc.-Signal</b> is no longer output when travel is interrupted before the motor shaft has moved.                                           |

### 1.43 Version 4.44 | 07.03.2013 | 26.04.2013 | 08.07.2013

#### New function

|                |                                                                                         |
|----------------|-----------------------------------------------------------------------------------------|
| Statistic menu | Parameter ST_HDRV was added. It indicates the number of travelling hours.               |
| Statistic menu | Parameter ST_UC was added. It indicates the utilisation category according to VDI 4707. |

#### Amendments

|                                |                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Statistic menu                 | The number of travel aborts by interruption of the input signal STO during travel is no longer displayed in parameter ST_SCO but in parameter ST_SXO. However, this only happens when the monitoring of the motor contactors was deactivated. When the monitoring of the motor contactors is activated, the number of interruptions of the input signal CO is displayed. |
| Binary traveling speed default | In the binary travelling speed default menu Control/CONFIG parameter functions ZA_BIN and CSILVA the travelling speed V7 was replaced by VZ.                                                                                                                                                                                                                             |
| Error 505:MB/ENC fault         | The error is no longer evaluated by ZAdyn after reaching constant travelling speed V3 or V4. It is no longer triggered by interruptions of the STO signal.                                                                                                                                                                                                               |

#### Corrections

|                                                                                           |                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Encoder & BC menu                                                                         | The parameter ENC_CNG for changing the direction of the rotary encoder now works.                                                                                                      |
| Statistic menu<br>INFO menu page 21:<br>Travel direction                                  | The values of the counters were not previously saved in case of power failure on the ZAdyn. That has now been corrected.                                                               |
| CAN operation                                                                             | Transmission of texts, e.g. error texts to the controller, has now been corrected.                                                                                                     |
| DCP operation                                                                             | It is now possible to switch over to the 2nd parameter set in DCP operation.                                                                                                           |
| DCP04 operation                                                                           | Travel at normal speed was no longer possible in inspection or recovery operation previously. That has now been corrected.                                                             |
| Capture release                                                                           | When activating capture release, the error message <b>301:MOP: Timeout</b> is no longer output automatically.                                                                          |
| Test protective device according to EN81-A3 – currentless drift of the car from the floor | An electronic short-circuit is prevented in the test function to prevent deceleration of the car.                                                                                      |
| Error 410<br>ADC:overcurrent!                                                             | When the error message <b>410:ADC:overcurrent!</b> occurs, the follow-up error <b>920:MOP:ERRNMI active</b> is no longer output. The follow-up error would cause a reset of the ZAdyn. |

|                            |                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Internal fan               | The internal fan of the ZAdyn4 previously received an undefined PWM signal at exactly 40 °C. That has now been corrected.      |
| Motor-Management-Processor | It is now possible to program the MOP Motor-Management-Processor by the ZETAMON software.                                      |
| Control Unit               | Previously, the error <b>316:EnDat:resolution</b> occurred incorrectly when using some control units. That has now been fixed. |
| Absolute encoder ERN1387   | Travel aborted in operating state <b>222: SM WAIT UNTIL ABS END</b> is now prevented.                                          |

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