

Die Königsklasse in Lufttechnik, Regeltechnik und Antriebstechnik | The Royal League in ventilation, control and drive technology



# **Technical Information**

Software versions ZAdyn





# 1.1 Version 4.72.1

Date of issue: 20.12.2023

Parameter / Menu / Function	New
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 "0".
Parameter LCD & Pass- word/PASSWD	After 90 minutes of inactivity, the password enable is cancelled.
Menü Encoder-Abgleich	The following parameters are only displayed if the password has been entered in the ZA-Intern/PW_S9 parameter:  SIG_ADJ  SIN_ERR  COS_ERR  SIN_OFF  COS_OFF
Watchdog	The watchdog monitoring time for the background program has been increased from 90 s to 180 s.
ZAmon Desktop	<ul> <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> <li>Prerequisite: ZAmon version 1.4.6.135 or higher.</li> </ul>
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 "Not ready to switch on" 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 <b>Statistics/TD_SET</b> 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 <b>Testing/SCY_MB</b> parameter is activated during travel, which closes the brake.
Parameter Encoder cali- bration/ENC_OFF	A change to the parameter value is saved in parameter set 1 and parameter set 2.
Parameter S_EKS	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-Inter-</b> n/CC_OFF	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 "Ex- tended in decel."	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 meas- urement	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	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 <b>ZA-Intern/PW_S9</b> parameter).
----------------------------	--

Parameter / Menu / Function	New
Asynchronous operation	If a synchronous motor has been selected in asynchronous mode, the correct motor type was not selected after the restart. The correct motor type is now selected.
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. This has now been 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 "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. This has now been corrected.
Error message 505 "No motor movement"	If the <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. This has now been corrected.
EVAC.Dir output function	A hysteresis has been added to the EVAC.Dir output function.
Error message 290 "Paraset 2 empty"	After loading a parameter set from the SD card or using ZAmon, it was possible for the error message to be triggered without justification. This has now been corrected.
Parameter T_ROT	Previously, after running the Autotune function, the correct value of the <b>T_ROT</b> parameter was not displayed. The correct value is now displayed.
Error message 988	Under certain circumstances, it was possible for the error to be triggered without justification when reading from the rotary encoder. This has now been corrected.
Error message 516 "v > 150% v*"	Previously, it was possible for the error to be triggered if the speed was greater than 110 % of the nominal speed V*. It is now triggered if the speed is greater 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 (ZAdyn internal display values) can now be read.
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	On 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 functions**

Parameter / Menu / Function	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:  The <b>System data/n*</b> and <b>System data/v*</b> parameters are set to "0" (default setting)  An EnDAT, Hiperface or BiSS-C encoder is being used.
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	The selection values "MB1" and "MB2" have been added.
Parameter "F_WEAK"	The parameter can also be used with synchronous motors.



CAN operation	The "Warning" 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	The info menu page 49 "Resonance finder" has been added.
L man list	Error message 539 "Error while STO on" has been added. It is output if an error occurs within the time T_STO.

# 1.2 Version 4.71.7

Date of issue: 08.08.2023

**Amendments** 

Parameter / Menu / Function	New
Electronic chart 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 software bugs**

Parameter / Menu / Function	New
Error message 485 "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.

# 1.3 Version 4.71.2

Date of issue: 10/11/2022

# **New functions**

Parameter / Menu / Function	New
Recorder function	A recorder function has been introduced, 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. To do this:  ▷ Assign "10000" as the password in the TD_PWN parameter.  ▷ Enter the password in the TD_PW parameter.  ▷ Set the initial value of the down counter in the TD_SET parameter.  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**

Parameter / Menu / Function	New
ZAdyn4B and ZAdyn4Bplus	The on time of the fan after starting up the ZAdyn has been changed from 70 s to 25 s.
Error message 537 "STO: Hardware start"	The error message has been renamed to 963 "STO: Hardware start".
Error message 538 "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	The selection value "4*BR100" has been introduced.
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	On 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.

Parameter / Menu / Function	New
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 "Incorrect direction" 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	Until now, the motor current value was always displayed with a positive sign. It 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 message 599 "Fan defective"	The error message is now only triggered once.
SD card	Previously, read-only files on the SD card were overwritten. They 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	On 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".



# 1.4 Version 4.71.1

Date of issue: 08.06.2022

## **New functions**

Parameter / Menu / Function	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 message 452 "MP:O-verload"	The error message is output when the I <sup>2</sup> t monitoring triggers.

### **Amendments**

Parameter / Menu / Function	New
DCP operation	The DCP manufacturer identification of Schneider controls has been changed from "SS" to "LI".
autor	If the parameter ZA-Intern/CC_OFF=On is parameterised, the error is no longer triggered.
	If the configurations "14:SS_DCP3" or "33:SS_DCP4" are selected in the Controller/-CONFIG parameter, the DCP_WDT parameter is preset to "Off".

# **Corrections software bugs**

Parameter / Menu / Function	New
	The calculation of the load angle has been revised. Now the signs are displayed correctly.
Parameters Encoder adjust- ment/SAV_P_E, Encoder adjustment/LOD_P_E	Storing data in and reading data from the absolute value encoder now works reliably.

## 1.5 Version 4.70.3

Date of issue: 05.05.2022

#### **Amendments**

Parameter / Menu / Function	New
DCP operation	Internal optimisation of DCP operations

### 1.6 Version 4.70.2

Date of issue: 16.03.2022

### **New functions**

Parameter / Menu / Function	New
	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.



Parameter / Menu / Function	New
Error message 505 "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.

# 1.7 Version 4.70.1

Date of issue: 25.02.2022

# **New functions**

Parameter / Menu / Function	New
CAN operation	The "overall traffic light" channel was introduced for condition monitoring. It represents a summary of the states of the individual measuring channels.
Parameter Control system/- CONFIG	The "NL_DCP4" (New Lift DCP4) configuration has been introduced.
7 AI	If several pieces of information are active in the top right corner of the ZApad display, they are shown sequentially.

Parameter / Menu / Function	New
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 message 505 "No motor movement"	The error can now also be triggered with velocity specifications of less than 10 cm/s
Parameter Statistic/CRC SAF	The parameter has been renamed CHK_SUM. It now shows a checksum of the set values of the safety-relevant parameters BR, STO, TD_RES and LOCK_X.
	For ZAdyn4B:
Parameter Power section/M PWM	Previously, the parameter could not be set to the selection value "Auto". Now it can be set to the selection value "Auto".
_	The parameter is now preset with "Auto".
	For ZAdyn4B:
Parameter	The parameter is now preset with "3,7 kHz".
Power section/F_PWM	The maximum value of the parameter was changed to "8 kHz".
	For ZAdyn4B:
Parameter	The parameter is now preset with "7,4 kHz".
Power section/F_PWM_H	The maximum value of the parameter was changed to "8 kHz".
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 SE.



Parameter / Menu / Function	New
Loading parameters	If in parameter Parameter set 2/f_PARA2 another function than "Locked" was selected, parameter Parameter set 2/Copy=PARA1->2 had to be parameterised before parameters could be loaded into the ZAdyn. This is now no longer necessary.
digital inputs	For ZAdynpro: Until now, the function "MOT_TEMP" had no function. Now "MOT_TEMP" 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: Travel direction	Until now, the counter "TD_RES" did not count correctly. Now it counts correctly.
	For ZAdyn4B:
Parameter Monitoring/STO	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 message 832 "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 ZAmon 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.

# 1.8 Version 4.65.1

Date of issue: 03.12.2021

## **New functions**

Parameter / Menu / Function	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 message 528 "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 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.

Parameter / Menu / Function	New
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 <b>ZA-Intern/PW_S9</b> .



Parameter / Menu / Function	New
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 error messages	The information texts about error messages, which are displayed by pressing the leave, are now available again (only in connection with an inserted SD card).
Info-Menü page 03:Dist	The displays s_21 and s_31 have been corrected.

# 1.9 Version 4.64.2

Date of issue: 22.09.2021

# **Corrections software bugs**

Parameter / Menu / Function	New
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.

# 1.10 Version 4.64.1

Date of issue: 11.05.2021

### **New functions**

Parameter / Menu / Function	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 $V_2 \to standstill$ ) 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	The selection text "1*NC+1*NO" has been introduced. 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	The selection texts "PT100" and "PT1000" have been introduced. They are used to select the PT100 and PT1000 temperature sensors for monitoring the motor temperature.
Monitoring menu	The "T_P1P2" parameter has been introduced. The parameter is used to set a limit value for motor temperature monitoring if "PT100", "PT1000" or "KTY" has been selected in parameter <b>Monitoring/P1P2</b> .
Info-Menü page 25: CUMT	When using the temperature sensors KTY, PT100 and PT1000 the temperature is displayed at the bottom right.



Parameter / Menu / Function		New	
Parameter I_MAX	Up to now the parameter I_MAX was preset with 180%. Now it is preset with 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		s due to an interruption of the ved when the recorder is activ	
Operation with ZAmon soft- ware		isplayed read-only in ZAmon,	
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 comple	ete table, the object 0x608B is	no longer output.
	The following selection texts	have been renamed:	
	Previous designation:	New designation:	
	Dutch	Nederlands	
Parameter "LANG"	Czech	Cesky	
	France	Francais	
	Po Russki	Russki	
	The following selection texts	have been renamed:	
Parameter "F_WEAK"	Previous designation:	New designation:	
	Const.	Constant	
	The following selection texts	have been renamed:	
Parameter "UVW CHK"	Previous designation:	New designation:	
	Cont.	Continuous	
	The following selection texts	have been renamed:	
	Previous designation:	New designation:	
Parameter "ENC_AW"	Sin	Sine wave	
	Rec	Square wave	
	The following selection texts	have been renamed:	
Parameter "TRIG_BY"	Previous designation:	New designation:	
	Cont.	Continuous	
	The following selection texts	have been renamed:	
	Previous designation:	New designation:	
Parameter "TYP"	star	Star	
	triangel	Triangle	
	The following selection texts	have been renamed:	
Parameter "ENC_TYP"	Previous designation:	New designation:	
r dramotor Erro_TTT	TTL_Imp.	TTL-Square	
	The following selection texts	-	
	Previous designation:	New designation:	
Parameter "CTRL"	DCP_01	DCP1	
	DCP_02	DCP2	
	DCP_03	DCP3	
	DCP_04	DCP4	
The following selection texts have been renamed:		1	
Parameter "MOD_ST"	Previous designation:	New designation:	
	Fix 2 Sek.	Fix 2s	
	Lock 1	Lock by 1	



	Lock 2	Lock by 2	
	Lock 3	Lock by 3	
	When using the English operating language: The following menu names have been changed: The following selection texts have been renamed:		
	Previous designation:	New designation:	
	Motor name plate	Motor nameplate	
	Encoder-adj.	Encoder adjustment	
	HW-Ident.	HW-Ident	
	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	When using the operating language "German": The selection text "UPS" has been changed to "USV".		
Rotary encoder calibration	When using motor type BD132 error message 587 "BR: Delta t too small" was output incorrectly. This meant that the encoder-offset determined could not be saved. This has now been corrected.		
Rotary encoder calibration and safety brake	Function is also possible when configuration "35:Lester" is selected in parameter Control system/CONFIG.		

# 1.11 Version 4.63.1

Date of issue: 05/01/2021

# **New functions**

Parameter / Menu / Function	New
Operation condition 94 "Motor temperature!"	The operation condition 94 "Motor temperature!" was introduced. The 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 "Not ready" is output, in DCP mode the status byte S0 is omitted.
Digital outputs	The output function "Fan Ctrl" was introduced. This is a ZIEHL-ABEGG internal function for controlling the fan.
Free binary allocation (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.

Parameter / Menu / Function	New
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 "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 LOCK_X=On was parameterised and a brake fault occurred, the text "ZAdyn-Locked! To unlock, set parameter UNLOCK to ON" was previously displayed every 30 s. Now the text is displayed 30 s after the last keystroke.
DCP operation, CAN opera-	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 ZAmon.

Parameter / Menu / Function	New
DCP operation	A soft quick-start termination is now also possible when using the DCP3 protocol.

# 1.12 Version 4.62, Bugfix of 06/10/2020 Date of issue: 06/10/2020

### **New functions**

Parameter / Menu / Function	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 "Measured supplied real energy sum" 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	In the printer list (*.prt) all parameters changed by the user are marked with an "*".

Parameter / Menu / Function	New	
CAN operation	Up to now, in position mode, it was not possible to set the speed to 0 while driving in order to test the runtime control of the control system. Now it can be set to 0.	
CAN operation	Up to now, object 0x6022 could not be read while driving. Now it can be read.	
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 now more accurate.	
Parameter I	A maximum value was introduced, which depends on the nominal current of the ZAdyn.	
Configuration "35:Lester Controls"	The digital inputs and outputs are no longer preassigned.	
DCP operation, 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.	



Parameter / Menu / Function	New
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 "35: Lester": 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: DCP:Remaining distance error"	Up to now, the error was only evaluated during upward movements. Now it is also evaluated during downward movements.

# 1.13 Version 4.62

Date of issue: 04/08/2020

Parameter / Menu / Function	New
Parameter S_ABH	<ul> <li>The selection text "On" has been renamed to "On (23)". This setting is effective at the travel speeds V_2 and V_3.</li> <li>The selection text "On" was introduced. This 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 "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 "Not ready to switch on" is output via CANopen Lift. If the value 1001 is entered in one of the parameters <b>MASK1-MASK5</b> , "Switch on disabled" is output instead of "Not ready to switch on". This procedure can be used for compatibility reasons if the controller cannot process the statusword "Not ready to switch on", e.g. if the standby function or the parameter set switchover does not work.



Parameter / Menu / Function	New
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 erros 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 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 "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).

# 1.14 Version 4.61

Date of issue: 25.06.2020

# **New functions**

Parameter / Menu / Function	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." was introduced 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.

Parameter / Menu / Function	New
Loading parameters	When loading parameters from the SD card to the ZAdyn, the data is now read block-by-block from the SD card. This accelerates the loading process.
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.



	New factory setting of parameters for system data:		
Operation with asynchro- nous motor	Parameter	Factory setting	
	I1	1	
	12	32	
	_D	450 mm	
	n*	1358.1 rpm	

Parameter / Menu / Function	New		
Info menu page 08: Cu functions	Previously, the current travelling speed was not displayed in DCP operation. It is now displayed.		
CAN operation	For configuration "35: Lester: Lester Controls": 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. It is now filtered out. This eliminates the problem of the NMT reset.		
	0 1	ts from software versions < 4 us >=4.60, the previously selewith new functions	. 0
	Previous function	New function	
Parameter S_ABH	DCP_slow	Slow	
	DCP_fast	On	
	DCP_comf	Slow	
	V2toV3	On	
Parameter MOD_n*	If the parameter MOD is changed from "direct" to "calculate", no automatic calculation of motor speed n* was performed. n* is now calculated when the selection value is changed		
Operation with type Kone EcoDisc drives	If a run was to be carried out after the magnet adhesion process, previously the error message "341: Disc: No Enc Adj." was output. The error message is now no longer output.		
Operation with ZAmon 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 fault memory	If the fault memory was deleted, the parameters "ST_RES", "ST_SXO" and "ST_SRF" were not previously set to "0". They are now set to "0".		
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 "Too low a measuring current" 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 "LOD_P_E" now works.		
Operation of "Schindler Smart" system type	Previously, the parameter S_10 was not functional. It 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 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 "f_PARA2" is not configured to "Disabled".		



# Version 4.60, Bugfix of 18/05/2020 Date of issue: 18/05/2020 1.15

## **New functions**

Parameter / Menu / Function	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.  When uploading the parameters, the monitoring of the motor contactors is deactivated and the monitoring of the STO function is activated.
Error message 587 "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 "RF+V1" input function has been added. A digital input configured for this function is assigned the functions RF and V_1. When selecting the configuration "35: Lester: Lester Controls" automatically assigns the digital input previously assigned to the "RF" input function with the input function "RF+V1". This is also the case when a software update has been performed or a parameter list has been loaded to the ZAdyn.

## **Amendments**

Parameter / Menu / Function	New
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 "Switch off" was previously displayed every 30 s. Now the text is displayed 30 s after the last keystroke.
Travel curve computer	Changes have been made to the travel curve computer. They are effective if the configuration "35:Lester Controls" has been selected and the parameter "CC_OFF" is set to "On".

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



# Version 4.60, Bugfix of 20/04/2020 Date of issue: 20/04/2020 1.16

## **New functions**

Parameter / Menu / Function	New
Digital autouta	The output function "P<0" has been added. The digital output assigned with this output function switches when the ZAdyn does not absorb any power from the mains power.

### **Amendments**

Parameter / Menu / Function	New
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: "Magnet adhesion (1 = magnet detected). When done, start inspection run". "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 each 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 "1" in the CAN object "Saving mode display" if the ZAdyn was not in stand-by mode. Energy-saving mode is now displayed as "0".
Parameter n*	If the configuration "08:KN_IO: Kollmorgen standard control" 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 "Set power saving mode", this does not lead to changes in the power saving mode.

# **Corrections software bugs**

Parameter / Menu / Function	New
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. They are now correctly specified.
	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.

#### 1.17 Version 4.60, Bugfix of 26/03/2020

Date of issue: 26/03/2020

### **New functions**

Parameter / Menu / Function	New
C A A I = = = == +: = =	For configuration "35:Lester Controls": In the CAN object "CAN manufacturer device mains string", the special string "ZETADYN4 frequency inverter" is available.



## **Amendments**

Parameter / Menu / Function	New
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 "I" (e.g. "I505:"), now it is an "E" (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 "PW_S9".
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 software bugs**

Parameter / Menu / Function	New
Flootropio obort oirouit	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.

# 1.18 Version 4.60

Date of issue: 30.09.2019

# **New functions**

Parameter / Menu / Function	New
"Free binary assignment" function	<ul> <li>The "Free binary assignment" function has been added. The function enables binary codes to be freely assigned to travelling speeds.</li> <li>In parameter Control/CONFIG the configuration "25:X-BIN:Free binary assignment" has been added.</li> <li>The parameters x_BIN_1x_BIN_7 have been introduced in the Control menu. 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</li> </ul>
Motor name plate/MOT TYP	SBIN0SBIN2 have been replaced by the selection values XBIN0XBIN2.  The selection value "BD132.xx-14" has been added.

Parameter / Menu / Function	New		
	The following parameters ha	ive been renamed:	
LCD & password menu	Previous designation:	New designation:	
Control system menu	LCD	LANG	
Monitoring menu Memory card menu Menu parameter set 2	LIFT_NR	LIFT_NO	
	LOCK_BR	LOCK_X	
	REC_NUM	DIR_NUM	
	RS_UPS	R_U20	
Control system menu	The following functions of di	gital inputs have been rename	ed:
	Previous designation:	New designation:	
	/DELAY	/FastStp	



	The following functions of d	igital outputs have been renar	med:
Control system menu	Previous designation:	New designation:	
	RB-Contactor	RB	
	RB-Invers	/RB	
	Evac.Dir.	Evac.Dir.	_
	INV V <v g1<="" td=""><td>/V<v g1<="" td=""><td>_</td></v></td></v>	/V <v g1<="" td=""><td>_</td></v>	_
	INV V <v g2<="" td=""><td>/V<v g2<="" td=""><td></td></v></td></v>	/V <v g2<="" td=""><td></td></v>	
	The following pages of the i	nfo menu have been renamed	d:
	Previous designation:	New designation:	
	Page 14: DCP-Ident	Page 14: Bus Info 1	_
	Page 15: DCP-Bits	Page 15: Bus Info 2	
	Page 16: DCP-Dist.	Page 16: Bus Info 3	
	Page 17: DCP-Err	Page 17: Bus Info 4	
Info menu	Page 14: CAN	Page 14: Bus Info 1	
	Page 15: CAN Velocity	Page 15: Bus Info 2	
1	Page 15: CAN Position		
	page 16: CAN Error information	Page 16: Bus Info 3	
	Page 17: CAN Calib.	Page 17: Bus Info 4	
CAN menu Control system menu	The CAN menu has been rethe Control menu.	emoved. The parameters from	the menu CAN are now in
Starting, distance-dependent deceleration, 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 Monitoring menu	The following parameters have PW_CLR  CAN/MODE  APC		
	The previous selection valu	es have been renamed or ren	noved.
	Previous selection values	New selection values	
	Off	Off	
Deceleration/S_ABH pa-	On	On	
rameter	DCP_slow	Slow	
	DCP_comf	Removed	
	DCP_fast	Removed	
	V2toV3	Removed	
Parameter MOD_ERR	The designations of motors have been changed (previously "SM132", now "SM132.xx-14").		
	The procedure for calibratin	g absolute encoders has bee	n revised.
	In the parameter Encoder calibration/ENC_ADJ, previous selection values have been removed and new selection values introduced.		
Potany angodor calibration	Previous selection values	New selection values	
Rotary encoder calibration Parameter Encoder calibra-	OFF	OFF	
tion/ENC_ADJ	ON	Removed	
_		Check	
		No load	
		Braked	
"Automatic parameter check (APC)" function	The "Automatic parameter of	check (APC)" function has bee	en removed.



	The range of values for the	following parameters has been changed.	
	Parameter	Value range	
	Motor name plate(s)	0.1 6000 rpm	
	Motor name plate/f	0.1 200Hz	
	Motor name plate/I	0.1 200A	
	Motor name plate/U	0.1 460V	
"Motor nomonloto" monu	Motor name plate/P	0.1 90kW	
"Motor nameplate" menu Installation menu	Parameter set 2/U_ACCU	100 565V	
Menu parameter set 2	Encoder & BC/ENC_INC	64 11000	
Encoder & BC menu	System data/n*	0.16000rpm	
Acceleration menu	System data/_D	0.06 1.50m	
Travelling menu	System data/Q	10032000kg	
Memory card menu	System data/F	10032000kg	
	System data/G	032000kg	
	Acceleration/R_POS1	5 90%	
	Travel/V_2	0.03 6.50m/s	
	Travel/V_4V_7	0.03 3.50m/s	
	Memory card/SAV_CFG	0 65535	
	Memory card/LOD_CFG	0 65535	
Error list	ZAdyn, an info text for the appears when the i key is	re>= 4.60 is located in the card slot on the Z e corresponding error is displayed if an error pressed.	message
	<ul> <li>The error messages show</li> </ul>	w the status in which the error occurred in pla	ain text.

Parameter / Menu / Function	New
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.
Drinter liet	Up to now, the choice texts in the printelists were not shown correctly. Now, they are shown correctly.

# 1.19 Version 4.58

Date of issue: 30.09.2019

## **New functions**

Parameter / Menu / Function	New
i didifiotoro i_lo ii_loo,	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**

Parameter / Menu / Function	New
Autotune function	The autotune function for asynchronous motors has been revised.
Parameter ASM_ID	Up to now, in the parameter ASM-ID, the values "OFF" and "ON" could be selected. Now, the values "OFF", "Save", "Continous", "One-step" and "Only meas." can be selected.

# 1.20 .Version 4.56, Bugfix of 05.04.2019

Date of issue: 05.04.2019

## **Corrections software bugs**

Parameter / Menu / Function	New
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	Up to now, the choice texts in the printelists were not shown correctly. Now, they are shown correctly.

# 1.21 Version 4.56

Date of issue: 21.01.2019

## **New functions**

Parameter / Menu / Function	New
Parameter f_O1f_O5	The output function "MotShortcir" was introduced. It is used for ZAdynpro to actuate a contactor, by which the motor windings can be short-circuited.

## **Amendments**

Parameter / Menu / Function	New
	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 "2". Now, it is preset with "3".

Parameter / Menu / Function	New
	For ZAdynpro: Up to now, 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.
INITO	For ZAdyn for asynchronous motors: Up to now, no sign was displayed beneath BR, if the brake release monitoring was deactivated. Now, three "!!!" are displayed beneath BR.



# .Version 4.55, Bugfix of 07.11.2018 Date of issue: 07.11.2018 1.22

## **Amendments**

Parameter / Menu / Function	New
	In the following cases, the clock frequency of the pulse width modulation is reduced from 16 kHz to 8 kHz:
	<ul> <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 fault-free travel and at least 0.5 s constant travel)</li> </ul>
	<ul> <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 fault-free travel and at least 0.5 s constant travel)</li> </ul>
	at a motor output frequency of less than 3 Hz
DCP operation	The error message "721 DCP: Residual distance failure." is no longer output in the event of residual paths with a length of 32.767 m and greater (hexadecimal value 0x7FFF).

# **Corrections software bugs**

Parameter / Menu / Function	New
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.

#### .Version 4.55, Bugfix of 18.04.2018 1.23

Date of issue: 18.04.2018

Parameter / Menu / Function	New
Operation with type Kone EcoDisc drives	Optimisation of the switch-off of the output stage
Parameter MOD_ERR	If it was switched from asynchronous motor to synchronous motor an vice versa on ZAdynpro, the following parameters were not correctly preset up to now:  • M_START  • T_2  • V_3  • various password protected parameters  This was corrected now.
CAN operation, 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.



# Version 4.55, Bugfix of 27.03.2018 Date of issue: 27.03.2018 1.24

## **Amendments**

Parameter / Menu / Function	New
Autotune function	The Autotune function was supplemented by additional steps. Via the additional steps, the acquired motor data are optimised.
Fault "350:MP: Temp Sens?"	The designation of the fault was changed to "350:Tmp:Out of range".
Fault "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.

#### 1.25 Version 4.55

Date of issue: 03.11.2017

## **Amendments**

Parameter / Menu / Function	New
Parameter Control system/f_XBR1f_XBR4	The parameter function "CO" was introduced. The parameter function is used for ZAdynpro to activate the contactor monitoring.
	Error message "317:BISSC HW-Error"
Error list	The error message is issued, if there is an internal error in the absolute value encoder with BiSS C interface.
	Error message "333:ENC:III. Counter"
Error list	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 message "334:BISSC:Com-Error"
Error list	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_O1f_O5	The parameter function "Stutter br." was introduced. The parameter function is used for ZAdynpro to activate the function "stutter brake".

#### 1.26 Version 4.54

Date of issue: 27.06.2017

Parameter / Menu / Function	New
	At a ZAdyn4C output frequency of less than 7 Hz the clock frequency of the pulse width modulation is reduced to 8 kHz.



# 1.27 Version 4.53, Bug fix

Date of issue: 02.02.2017, 16.03.2017, 27.03.2017, 12.05.2017

## **New functions**

Parameter / Menu / Function	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 Motor rating plate/MOT-	The motor types SL506, SL510, SM210 and SM180 have been added.
TYP parameter  MMC recorder/REC CFG	Configuration 20 for HY operation has been added.
parameter	
Monitoring menu	The 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**

Parameter / Menu / Function	New
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 SE customer service for details.
Operation with ZArec4C	Communication between ZArec4C and ZAdyn/ZETADYN has been optimised.
Operation Kone EcoDisc	The fault threshold for the fault "340: ENC:magnet miss." 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.

Parameter / Menu / Function	New
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 fault was not permanently retained on the CAN bus. This is because the control was able to reset the fault. However, no travel was possible as the ZAdyn was still in Status 910. Now, the control can no longer reset the fault 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.



# 1.28 Version 4.53

Date of issue: 10.02.2016

## **New functions**

Parameter / Menu / Function	New
Parameter CONFIG	Configuration "36:HY-Mod." for modernisation of hydraulic systems.
Control system menu	The following parameters have been introduced:  HY_Auto HY_O_A  HY_I_A  HY_OFFS  HY_LA_I  HY_LA_V  HY_NACH  FIL_V_D  The parameters are used for the modernisation of hydraulic systems.  The parameter are only displayed, if the configuration "36:HY-Mod." was selected in the parameter CONFIG.
Error list	Error message "595:HY:No movement"  Error message is issued, if the ZAdyn4C-HY does not detect any movement of the cabin.  The error message is only issued, if the configuration "36:HY-Mod." was selected in the parameter CONFIG.
Parameter DCP_FIL	New parameter functions:  Opt.3  Opt.4  The parameter functions can only be selected, if the configuration "36:HY-Mod." was selected in the parameter CONFIG.
INFO menu page 14: DCP- Ident	If the configuration "36:HY-Mod." was selected in the parameter CONFIG, the current speed is displayed in the 4th line.

# **Amendments**

Parameter / Menu / Function	New
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 the configuration "32:S_Smart" is selected in the parameter CONFIG, the parameter "control system/SIM_V1" will be preset with "On" and will be able to be changed.
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.

Parameter / Menu / Function	New
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 "570:PFU:Fault" will not be displayed amy 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 a ZArec is used, "ZArec" will now be displayed in line 2 instead of "BC/BR???".

# 1.29 Version 4.52

Date of issue: 28.08.2015

### **New functions**

Parameter / Menu / Function	New
Parameter f_I01f_I08	The "SBM_RDY" input function has been added. It monitors the ZAsbm4.
Error list	The "536:SBM:RDY abort" error message has been added. It 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_O1f_O5	The "BR Info" output function has been added. It is used to send a signal regarding statuses of the inputs BR1BR4 to the control. The relay is picked up when the brakes are open during travel

# **Amendments**

Parameter / Menu / Function	New
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 (CRC sum error). 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.

Parameter / Menu / Function	New
	Until now a restart of ZAdyn has been required if in parameter "ENC_TYP" a change has been made from "NO Enc." to "TTL-Sine" or "TTL-Imp." 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. That has now been corrected.
Memory card	The reloading of operating languages via memory cards did not work with certain types of memory card. That has now been fixed.



# 1.30 Version 4.51

Date of issue: 04.05.2015

## **New functions**

Parameter / Menu / Function	New
Operation Kone EcoDisc	The fault "253:Disc:Wrong position!" has been introduced. It occurs, if the hall sensor detects a magnet earlier than it has been expected. This can be the case for example if the motor shaft has been turned after the ZAdyn had been switched off.

## **Amendments**

Parameter / Menu / Function	New
Operation Kone EcoDisc	The magnet adhesion process has been optimized.
Error "960:STO:Diagnostic"	The error is not maskable any more.

# **Corrections software bugs**

Parameter / Menu / Function	New
Fault "531:STO:interrup-tion"	Until now, the error could be possibly caused at the end of an inspection run. This has been corrected now.
T 1 T E	When using motors of the type SM250, the value set by the factory setting could not be changed. This has been corrected now.

# 1.31 Version 4.50

Date of issue: 23.01.2015

## **New functions**

Parameter / Menu / Function	New
Parameter CONFIG	The "35:Lester Controls" configuration has been introduced. The configuration sets the "CC_OFF" parameter to "On", presets the parameter "CTRL" to "CAN" and presets the parameter "I01" to "RF".
ZAdyn4CA HY	New series ZAdyn4CA HY.
Parameter CONFIG	The "34:OS_DCP3" 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-ised for the operation of standard synchronous or asynchronous motors.
Menü Encoder-Abgleich	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.
Fault "260:V_EXT active!"	Fault occurs if travel is started in normal operation and a voltage of above approx. 23 V is present at the connection terminal X-EXT.

Parameter / Menu / Function	New
Fault "421 STO:Temp Alarm"	The fault 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).
I duit 000.Div.tiavci iduit	If brake bleeding monitoring is activated (parameter LOCKBR="ON"), the faults no longer result in the frequency inverter being blocked.



Fault "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 fault.
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.
Fault "710:DCP:Timeout"	After the fault 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 fault "288:V_3 > V*" is deactivated in CAN operation. If speed values are entered that are greater than $V^*$ , the ZAdyn automatically limits the speeds to $V^*$ .
Fault "710:DCP:Timeout"	After the "710:DCP:Timeout" fault has occurred, the DCP interface and DMA are initialised again.
Autoscan DCP operation and CAN operation	Once the signal "Controller enable (RF)" is present at a digital input, the autoscan function for the DCP and the CANopen Lift interface is switched off.
CAN operation	Controlled stopping is now possible via Quickstop.
Parameter CC_OFF	If the parameter "CC_OFF" is set to "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.

Parameter / Menu / Function	New
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, 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, the ZAdyn then remained in fault "908:PFU:malfunction". 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 fault "820:CAN:Illegal Status" was previously issued when stopping. This has been corrected.
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. This has been 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 "Start abort 1s" was run through if the brake monitor was activated. This has been corrected.
Temperature display	Negative electrolytic capacitor temperatures were displayed incorrectly. This has been corrected.
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.



# 1.32 Version 4.49

Date of issue: 23.01.2015

# **Corrections software bugs**

Parameter / Menu / Func-	New
tion	
	The ZAdyn is not reset by the watchdog of the internal APP processor any more.

# 1.33 Version 4.48

Date of issue: 23.07.2014

## **New functions**

Parameter / Menu / Function	New
Menu Startup & 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 "Reset". (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 ("MP: xxxC").  In the event of overtemperature, all fans are activated from 70° C. From 75 °C, the maskable error message "421 STO:TempAlarm" is issued and the ZAdyn is locked.
digital inputs	Configuration "33:SS_DCP4": 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 SE. 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.

Parameter / Menu / Function	New
Error list	At STO-Interruption and not expired STO debounce time (standard 200ms) an Encoder-Error will not longer be displayed as a consequential error, but fault report "531: STO: Interruption".
Controls	If a fault occurs while the ZAdyn4C is being started up (e.g. a encoder fault), 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, telefone inserted.
Electronic name plate	Expanded by further parameters, e. g. speeds.  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 Response of the temperature monitoring at stop:> reaction after 30s 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.

Parameter / Menu / Function	New
CAN operation	While writing the encoder typer HTL-encoder hiperface 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 fault report "53: STO: Interruption" occures 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. This bug has now been removed.
Standby 1 mode	Encoder error linked to standby 1 resolved

# 1.34 Version 4.47

Date of issue: 18.03.2014

## **Amendments**

Parameter / Menu / Function	New
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", 0,5="" as="" is="" m="" preset="" s.<="" speed="" td="" the="" threshold="" v_g2="" well="" with=""></vg2",>
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).

Parameter / Menu / Function	New
Error E532 "STO: missing!"	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. This bug has been 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 (language loaded from SD card) are now transferred properly.



# 1.35 Version 4.46

Date of issue: 15.10.2013

## **New functions**

New parameter "CC\_OFF" for deactivating the travel curve computer (for Lester Control). The function is only accessible after entering the password.

Parameter / Menu / Function	New
ZA-Intern menu	
Info menu	A new info menu page was added. Page 19: Energy 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.  This happens  every 100 changes in direction up to 1,000 changes in direction  every 1,000 changes in direction up to 10,000 changes in direction  every 3,000 changes in direction from 10,000 changes in direction  The function is possible in absolute value encoders with EnDat, Codeface and Hiperface interface.  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
CAN and DCP operation	Statistic/TD_PW parameter and the Statistic/TD_RST parameter must be set to "ON". In CANopen lift and DCP operation the time at which the error occurred is saved and displayed in the error list.
Operating language	"PO Russki" for Russian as an operating language was added as a new selection function.
Input functions	The new "/ESC" input function was added. The function deactivates the electronic short-circuit as long as the ZAdyn is switched on.
Input functions	The "ZR_RDY" input function was added to monitor the ZArec.
Error list	The error messages 240 "ZR:Not RDY", 535 "ZR:RDY abort", 906 "ZR:ERR by start", 919 "ZR:ERR by opera." and 213 "ZR_EN / ZR_RDY missing" were added.
Error list	New error message "571: PFU:Stdby remains". The error message occurs when the PFU is still active 1 second after the travel command. The error message can be masked.
Hardware detection Motor temperature monitor- ing	The board with the part number B1014AA Index 06 (motor temperature module with safe turn off) is now detected by the ZAdyn.

Parameter / Menu / Function	New
Parameter V_Z	The parameter V_Z is defaulted to 0.01 m/s.
Parameter CONFIG	In configuration "02:ZA_CAN" the output O41 - O44 is defaulted with V <v_g1.< td=""></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 "n" in the motor rating plate menu.
Error "570:PFU Alarm"	In error "570:PFU Alarm" the ZAdyn remains in state 909 until the ZAdyn is switched off or the monitoring contact of the PFU is reconnected.
	It was not previously possible to switch to the 2nd parameter set at error "570:PFU Alarm". This is now possible.



Parameter / Menu / Function	
	The message, innovation
Parameter APD	The message which incorrectly indicated that the "Control" extension card was missing no longer appears.
Info menu/page19	The "Work" 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 message "503:No EncSignal" is no longer output when travel is interrupted before the motor shaft has moved.

# 1.36 Version 4.44

Date of issue: Bugfix of 07.03.2013, Bugfix of 26.04.2013, Bugfix of 08.07.2013

## **New functions**

Parameter / Menu / Function	New
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**

Parameter / Menu / Function	New
	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.
Statistic menu	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 message "505:MB/ENC fault"	The error message 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.

Parameter / Menu / Function	New
Encoder & BC menu	The parameter ENC_CNG for changing the direction of the rotary encoder now works.
Statistic menu Info menu page 21: 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) did not previously work. That 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 "301:MOP: Timeout" 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 message "410:ADC:overcurrent!"	When the error message "410:ADC:overcurrent!" occurs, the follow-up error "920:MO-P:ERRNMI active" 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 ZETA-MON software.
Control Unit	Previously, the error "316:EnDat:resolution" occurred incorrectly when using some control units. That has now been fixed.
Absolute encoder ERN1387	Travel aborted in operating state "222: SM WAIT UNTIL ABS END" is now prevented.



### **Customer Service**

phone +49 7940 16-308 fax +49 7940 16-249 drives-service@ziehl-abegg.com

# Headquarters

ZIEHL-ABEGG SE Heinz-Ziehl-Strasse · 74653 Künzelsau Germany phone +49 (0) 7940 16-0 · fax +49 (0) 7940 16-249 drives@ziehl-abegg.de www.ziehl-abegg.com