



Overview software releases KE-E10

Version: 2020/11

Part no.:

Translation of the "Original Dokumentation"

AMK

Imprint

Name: PDK_Freigaben_KE-E10

Version:	Version	Change	Initials
	2020/11	Release: V4.05 2020/06 (207689)	LeS

Previous version: 2020/05

Product version:	Product	Firmware version (AMK part no.)	Hardware version (AMK part no.)
	KExx-xEx KESxx-xEx	-	-

Purpose: Overview of released software versions of the entered products

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For fast and reliable troubleshooting, you can help us by informing our Customer Service about the following:

- Type plate data for each unit
- Software version
- Device configuration and application
- Type of fault/problem and suspected cause
- Diagnostic messages (error messages)

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Display conventions

Display	Meaning
0x	0x followed by a hexadecimal number, e.g. 0x500A
'Name' 'Parameter' 'Diagnostic messages'	e.g.: Calling up the 'Delete PLC programme' function. ID1234 'Parameter text' 1234 'Diagnostic message'
→	Task procedure / operating sequence, e.g. 'Start' → 'All programs' → 'Accessories' → 'Editor'

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Software release: KE with Real-time Ethernet

Release version	Note	Release date	Part number	Overview of changes
V4.05 2020/06		2020/06	207689	Based on firmware V4.04 2018/29 (207248) New: • Filtering of the binary inputs via parameter ID33175 'List glitch filter time' / object 0x22DB 'List glitch filter time' Corrections: • EtherCAT: 16 bit address range with parameter setting and switch = 0 • EtherCAT: Correction of the behavior of a high-frequency UE change at SoE • VARAN: After parameter download of the network IDs, they can be read now via SPI-flash with the next power OFF / ON Notes: Device files: • adb2092.xml

Release version	Note	Release date	Part number	Overview of changes
V4.04 2018/29		2018/29	207248	Based on firmware V4.03 2017/22 (206816) New: - ID34088 'Event trace' with date and time. Prerequisite is an NTP (Network Time Protocol) server. Parameter ID32917 'Time zone' and ID34173 'NTP server address'. - EtherCAT: The controller card supports the EtherCAT CoE (CoE, CAN over EtherCAT) protocol with the CAN profiles CiA DS301 and CiA402 with the described extensions and restrictions. See document: Interface description EtherCAT (CoE) (AMK part no. 206016) - VARAN: New LWIP stack V2.0.3 - VARAN: load / read file via TFTP for firmware update (*.bin), parameter update (*.par) or event memory (*.trc) - Other new parameters: ID33308 'Output mask' - Other new CAN objects: 0x1010 'Store parameters' 0x1011 'Restore parameters' 0x10F1 'Error settings' 0x60FD 'Digital inputs' 0x60FE 'Digital outputs' Corrections: - Control of brake transistor: Signal RBR is now logic 1 corresponding to the part SPT. For the reset of the optocoupler the signal RBR is set to 0 for 500 µs. - VARAN: Start the LWIP stack only after the port initialization of the VARAN Manager - VARAN: DHCP reorganization after Ethernet link up / down detection - VARAN: Mailbox accesses corrected at cycle times ≤ 500 µs Notes: Device files: - adb2070.xml

Release version	Note	Release date	Part number	Overview of changes
V4.03 2017/22		2017/22	206816	Based on firmware V4.02 2014/49 (205533) New: - Automatic 'initial load' after firmware update and following device restart (if necessary!). The data of the current parameter set are retained. Newly added parameters are set to the default value. - EtherCAT / VARAN: After a firmware update or parameter download, a software reset is performed when switching from BOOT to INIT. For delay using ID32988 'Delay software reset'. - DHCP (Dynamic Host Configuration Protocol) is supported. ID34025 'BUS mode' bit 2 - EtherCAT EoE (Ethernet over EtherCAT) protocol is supported - Other new parameters: - ID265 'Language' - ID1019 'MAC address' - ID1020 'IP address' - ID1021 'Subnet mask' - ID1022 'Gateway address' - ID32945 'List parameter set' - ID32988 'Delay software reset' - ID34025 'BUS mode' - ID34071 'System name' - ID34088 'Event trace' - ID34171 'Event filter' - ID34117 'OSC configuration list 2' - ID34261 'Customer variable 2' Corrections: - Correction of the 'I²t device monitoring' function with an overload factor not equal to 2 (e.g. KES 180-0EU) - In the event of a power failure, error 1042 was not displayed sporadically Notes: Device files: - adb2048.xml - Mappable20xxx_402.ini - AMK_ECsoe_111_204834.xml - AmkDD1421.xml

Release version	Note	Release date	Part number	Overview of changes
V4.02 2014/49		2014/49	205533	Based on firmware V4.01 2013/39 New: • EtherCAT and VARAN bus cycle times supported between 0.5 - 20 ms • Behavior at telegram failures and tolerable telegram failures can be parameterized in ID34026 • Diagnosis message warning 1024 at bus failure and ID34027 = 1 • Diagnosis message failure 512 at bus failure and ID34027 = 2 Corrections: • ID32795 'Source UE' = 8 and 28 is supported now • Effects after power supply OFF / ON Notes: Device files: • adb1504.xml • Mappable20xxx_402.ini • AMK_ECsoe_111_204834.xml • AmkDD1421.xml

Release version	Note	Release date	Part number	Overview of changes
V4.01 2013/39		2013/39	204768	Based on firmware V4.00 2012/17 New: - EtherCAT (SoE) slave supports cycle times between 0.5 ms to 10 ms - VARAN (SoV) slave supports cycle times between 1 ms to 10 ms - New parameters: ID26 'Configuration status bits' ID144 'Status word' ID33123 'VBNX' - New codes to configure real-time bits 33075 'Fan control' 33076 'Second period' 33123 'VBNX' 33919 'Warning: overload of external mains components' 33920 'Warning: BRN readiness of the mains regeneration' - A EtherCAT master or VARAN master has access to the configurable status list with ID26 und ID144. The following bits are possible to configure: 33022 'External overtemperature warning' 33029 'SBM' 33030 'QUE' 33074 'Warning active' 33075 'Fan control' 33076 'Second period' 33123 'VBNX' 33919 'Warning: overload of external mains components' 33920 'Warning: BRN readiness of the mains regeneration' - Special feature solar inverters ID34227 'Motion control bits' bit 10 = 1 (Requirements: bit 8 = 1!) The solar inverter together with the controller solar meets the requirements according to "Technical Guideline TR3 for generator units" (e.g. Chapter 4.7, Fail safe behavior in the mains). Corrections: - The following binary output codes are supported: 33075, 33123, 33919, 33920 - Error 2573 info 1 = 10, ID access failed, reading segmented parameter lists corrected - VARAN: Error when switching into the operational state

Release version	Note	Release date	Part number	Overview of changes
V4.00 2012/17		2012/17	204105	New: • EtherCAT slave (SoE) • EtherCAT and VARAN master have access to cyclic setpoint and actual values inside the KES / KE during operation ID32836 'DC bus voltage' ID33101 'Display overload inverter' ID33116 'Temperature internal' ID34058 'Line output' ID34144 'Nominal voltage effective' ID34145 'Line current effective' ID34197 'Display external component' ID34198 'mains frequency' ID34295 'Line frequency' ID34170 'Setpoint DC bus voltage'→ only for KES • New parameters compared to the previous KE (a list of all supported device parameters you can find in the document PDK_203704_Parameter.pdf)