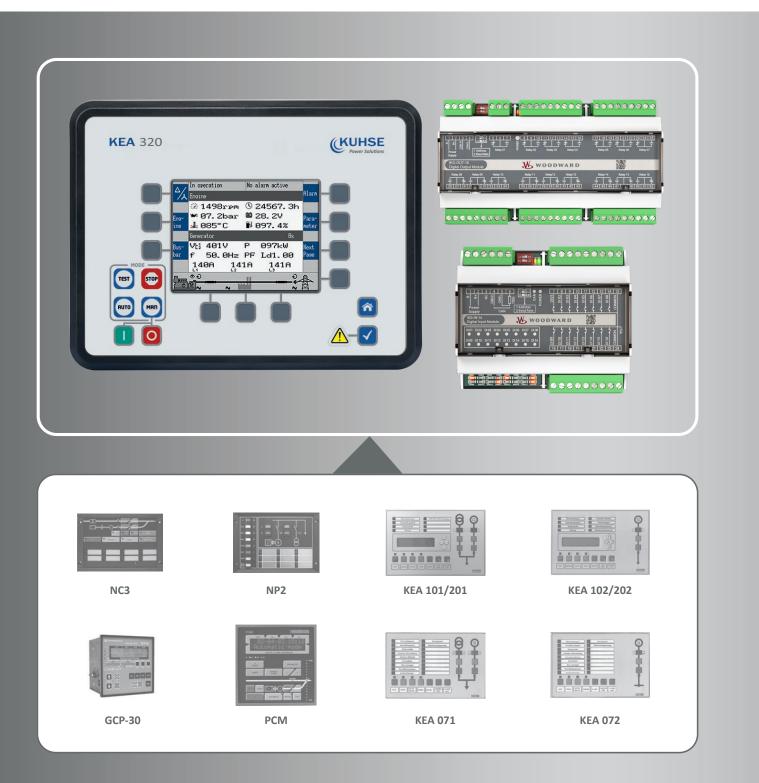


# KEA 3X0 RETROFIT PACKAGES FOR VARIOUS GENSETS



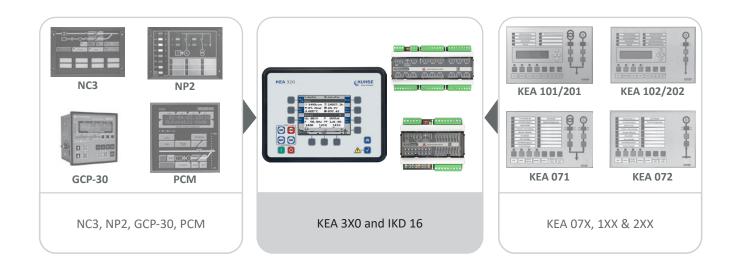
### INTERCHANGEABLE CONTROL MODELS

With the new genset control KEA 320 Lite and the matching IKD 16 expansion boards Kuhse offers optimal retrofit packages for many legacy controls from Kuhse, SEG, Woodward and other manufacturers.

The basis of the retrofit packages is the KEA 320 Lite, which is perfectly designed for applications with single gensets. For complex applications, such as genset parallel operation or multiple mains feeds, the KEA 320 or KEA 350 is used. For interchangeable control models, please refer to the adjacent table.

| Kuhse   | Woodward | SEG         |
|---------|----------|-------------|
| KEA 04X | MFR-2    | NX          |
| KEA 07X | MFR-3    | NP 1 / NP2  |
| KEA 1XX | GCP-30   | NB 2 / NC 3 |
| KEA 2XX |          | NDC 1       |
|         |          | PCM / PCL   |

Further manufacturers: AEG, Hörmann, MES, Bosch, Strüwer, Deif, Stucke, Comap, Elcos, Kirsch, IEP





#### ADVANTAGES KEA 320 LITE:

- Familiar functions of the KEA 320, such as synchronization, changeover with overlap or interruption, mains parallel operation and island operation
- Control of mains and generator breakers
- Measurement of the busbar voltage is not used, instead the busbar voltage is defined and displayed via the breaker position
- Identical parameterization to the devices of the KEA 3X0 series via toolkit software
- Flexible parameterization of the KEA 320 Lite allows the exchange of various legacy controllers of different manufacturers

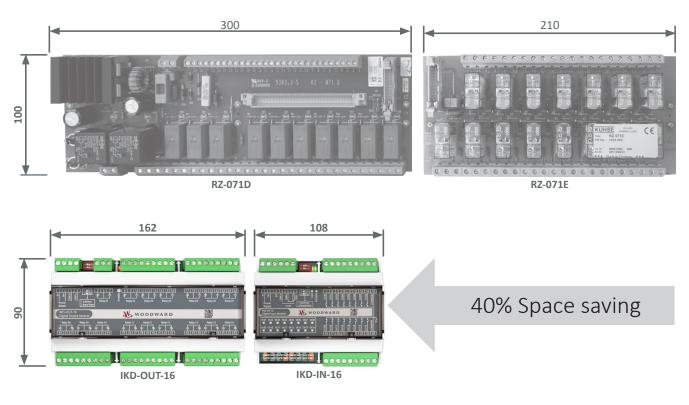
### **EXPANSION BOARDS**

### ADVANTAGES OF THE IKD16 EXPAN-SION BOARDS:

- Easy integration into control panels due to compact dimensions: one IKD-IN-16 and one IKD-OUT-16 correspond to one Kuhse RZ-071D without RZ-71E extension
- Very high packing density of inputs and outputs
- Current carrying capacity of the relay contacts of the IKD-OUT-16 is 7A
- During conversion ALL control components incl. relay add-on RZ-071D are completely renewed
- Reduced wiring effort due to CAN bus connection with KEA 320 (Lite)



#### **DIMENSIONS AT A GLANCE:**

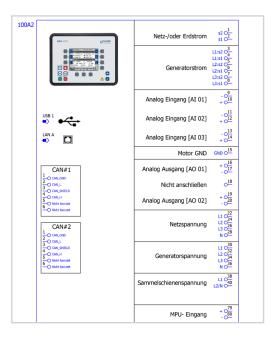


## **CONVERSION KITS & SERVICE**

#### WIRING DIAGRAM CREATION

We adapt the wiring diagrams for your emergency power system to the new KEA 3X0 control system. Optionally, the wiring diagrams are completely redrawn on the basis of EPLAN P8.

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|------------------|---|--------------------------------|--|-------------------------------|---------------------------------------|---|------------------------|---------------------------------|-----------------------|
| Settings         | Teels   | Company                        | KUHSE  | START SEITE                   |                                       | ·   | . <u>Y</u> . A         | ~                               |                       |
|                  | KEA 350                                       | co.                            |  | P1/KEA 350 R                  | P-P1                                  | <b>(KUHS</b><br>Power Solu                    | SE<br>tions            |                                 |                       |
| 4137 M           | eti eksmedus<br>Indus<br>Betriekusustände     | GLS-NLS<br>STOP<br>GLS offices |  | 0 s 10204 Letzter Alarm       | Wathende Alaster                      | Absteilende Alaune                            | er<br>I                |                                 |                       |
| 533 Ferre        | feverungsfunktion -<br>Aus ×                  | @ Materia                      |  |                               |                                       |   |                        |                                 |                       |
| IN)              |   |                                | Main View S<br>Create from Egr<br>Defaults<br>File |                               | Associate w<br>Application<br>Compare | KUHSE PARAM                                   | ITER                   |                                 |                       |
|                  | Motordwh;<br>Winkiesh                         |                                | Ger28  |                               |                                       |   |                        |                                 |                       |
|                  | Covinus<br>Spannung Phase-Pt<br>Spannung Phas | use                            | STAND SETTE  | Moter konfigurieren           | Centralise                            | Inputs/Dutputs free aliants<br>and monitoring | Breakers               | Mains                           | Mocellaneous          |
| 1085             |   | ran 🛛                          | ALARM STOPUS                                       | Stati Sopp konligationen      | Attestatereiche                       | Cigitaleingänge<br>konfiguteren               | MainLiGenerator switch | Advetablereiche                 | Sellery monitor       |
|                  |   | Mebr                           | PARAMETER  | Speed signals and controllers | Generator voltage monitor             | Dipitalsusplinge<br>kanfiguteren              | Synchronization        | Mains voltage monitor           | Sprinklier options    |
|                  |   |                                | STATUS MEND  |                               | Generator current monitor             | Analogeingänge<br>kärföguteren                |                        | VDE-AR-IN 4105                  | Remote acknowledgment |
|                  |   |                                |  |                               | Frequenzegler<br>konfigurieren        | Analogauspänge<br>kantiguseren                |                        | Netzentkopplung                 | Schnittstellen        |
|                  |   |                                |  |                               | Leistungsregler<br>bonfligurieren     | Free alarms and fiesible<br>limits            |                        | Power supply load<br>regulation |                       |
|                  |   |                                |  |                               | Spannungszegier<br>konfliguzieren     | Analog-, togics manager                       |                        |                                 |                       |
|                  |   |                                | ALL PRAAMETERS                                     |                               | Power factor controller               |   |                        |                                 |                       |



# PARAMETERIZATION & ACCESSORIES

We parameterize your new KEA 3X0 control system to match the existing plant. Accessories such as connection cables, relays and adapter plate are included in the scope of delivery.

#### **CONVERSION & COMMISSIONING SUPPORT**

Our service team will be pleased to offer you the optimal conversion kit for your emergency power system and will support you with the conversion, commissioning and instruction on site.

In the future, the available conversion kits will also be available for you in the Kuhse online shop.





### CONTACT US!

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