

- Reduction of wiring of spatially separated systems
- Control of 14 switching outputs with changeover contacts
- Separate fault output
- Universally applicable up to 230 V AC, 3 A / 30 V DC, 2 A

AHD-R101-2 is a device with 15 potential-free switching outputs, of which 14 are freely available. One switching contact is used to signal device faults.

If required, the device can be controlled redundantly at two bit-serial inputs. The data protocol is compatible to the following Böning devices:

- Data station AHD-DPU 9
- Data Station AHD 882
- Data stations AHD-SAS 15 and AHD-PS 15

The new device AHD-R101-2 also serves as a replacement for the previous AHD-R101. The desired function variant is now selected with DIP switches.

AHD-R101-2 is designed for rail mounting on TS 32 and TS 35. For connection plug-in terminal strips with a total of 51 terminals are available. All relays are designed as potential-free changeover contacts with 3 terminals each.

## Technical data

| Power supply | $24 \mathrm{VDC}(+30 \% /-25 \%)$ |
| :--- | :--- |
| Current consumption | Max. 350 mA at 24 V DC |
| Operating temperature | $-10^{\circ} \mathrm{C} . .70^{\circ} \mathrm{C}$ |
| Storage temperature | $-30^{\circ} \mathrm{C} \ldots .85^{\circ} \mathrm{C}$ |
| Weight | Approx. 0.55 kg |
| Degree of protection | IP 10 |
| External dimensions | $147 \times 112 \times 55 \mathrm{~mm}$ |
| Inputs | $2 \times$ serial (Opto-coupler) |
| Outputs | $15 \times$ change-over contacts, max. |
|  | 230 V AC / 3 A or 30 V DC / 2 A |
|  | $-\mathrm{K} 1 \ldots 14$ freely available |
|  | $-\mathrm{K} 15=$ fault contact (NC/NO) |
| Installation | Mounting rail TS 32 and TS 35 |
| Approvals | $\mathrm{DNV}, \mathrm{LR}$ (more on request) |
| Item number | 19924 |

## Dimensions



## Operating Modes / DIP Switch Settings

| DIP Switch Replacement for |  | Function / Description |
| :---: | :---: | :---: |
| Setting | Previous AHD-R101 |  |
| Mode 1 | Item no. 14754 | Data received from AHD-DPU 9 or AHD 882: |
| $1=\mathrm{ON}$ | V2.0A (AHD-DPU 9 / | Read at S1, after data failure, error contact K15 opens, |
| $2=$ OFF | AHD 882, No Hold) | all relays K1..K14 return to their idle state. |
| 3 3 OFF |  |  |
| Mode 2 | Item no. 14753 | Function as V2.0A, but with the following difference: |
| 1 = OFF | V2.0B (AHD-DPU 9 / | After data failure relays K1...K14 are held in their last |
| $2=\mathrm{ON}$ | AHD 882, Hold) | state |
| 3 OFF |  |  |
| Mode 3 | Item no. 14756 | 2 channel version for redundant systems, data received |
| $1=\mathrm{ON}$ | V2.1C (AHD-DPU 9, | from AHD-DPU 9 or AHD 882: |
| $2=O N$ | Double Serial) | Data by default read at S1, after data failure at S1 error |
| $3=$ OFF |  | contact K15 opens, data now read at S2. After renewed data reception at $\mathrm{S} 1, \mathrm{~S} 1$ is processed again. After data failure at S 1 and S 2 for at least 5 s , all relays $\mathrm{K} 1 \ldots \mathrm{~K} 15$ return to their idle state. |
| Mode 4 | Item no. 18584 | Function as V2.1C, but with the following difference: |
| 1 = OFF | V2.1D (AHD-DPU 9, | The error contact K15 opens only after failure of both |
| $2=$ OFF | Double Serial 2) | data sources S1 and S2. |
| $3=\mathrm{ON}$ |  |  |
| Mode 5 | Item no. 15463 | Function like V2.0A, but data received from AHD-SAS 15 |
| $1=\mathrm{ON}$ | V1.52 (AHD-SAS 15, | or AHD-PS 15: |
| $2=$ OFF | No Hold) | Data-compatible to AHD-SAS 15 / AHD-PS 15 |
| $3=\mathrm{ON}$ |  |  |
| Mode 6 | Item no. 15315 | Function like V2.0B, but data received from AHD-SAS 15 |
| 1 = OFF | V1.53 (AHD-SAS 15, | or AHD-PS 15: |
| $2=O N$ | Hold) | Data-compatible to AHD-SAS 15 / AHD-PS 15 |
| $3=O N$ |  |  |



Note: To set the DIP switches, remove the front panel first!

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[^0]:    Böning Automationstechnologie GmbH \& Co. KG • Am Steenöver 4 • D-27777 Ganderkesee • E-Mail: info@boening.com • ww.boening.com HoA-1834 V3 Date: 2022-10-26, Approved 2022-01-25 StJ, The manufacturer accepts no liability for possible errors contained in descriptions and diagrams. Subject to change due to technical progress.

