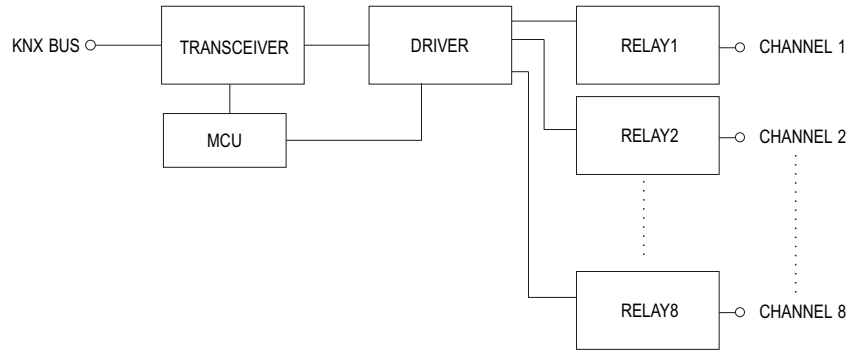




SPECIFICATION

| ORDER NO. | | KAA-8R-16S | KAA-8R-10S | |
|------------------------------------|---|--|--------------------------------|-------------------------|
| SUPPLY | SAFETY MODEL NO. | KAA-8R-S | KAA-8R-10S | |
| | KNX BUS VOLTAGE | 21~31V | | |
| | CURRENT CONSUMPTION | <10mA | | |
| | POWER CONSUMPTION | <180mW | | |
| | Nr. OF SWITCHING OUTPUT | 8 | | |
| | Nr. OF SHUTTER OUTPUT | 4 | | |
| | OUTPUT TYPE | Independent, potential-free bistable(latching) relay | | |
| OUTPUT SWITCHING RATINGS | VOLTAGE | 230VAC@50Hz | | |
| | CURRENT | OHMIC LOAD | 16A | 10A |
| | | CAPACITIVE LOAD | 220 μ F(See Note.2) | 220 μ F(See Note.2) |
| | MAX. INRUSH CURRENT | 800A(max. 200 μ s),165A(max. 20ms) | | |
| | EN60947-4-1 AC1(COS θ =0.8) | 16A | 10A | |
| | EN60947-4-1 AC3(COS θ =0.45) | 8A | 5A | |
| | EN60947-4-1 AC5a(COS θ =0.45) | 8A | 8A | |
| | EN60947-4-1 AC5b | 16A | 10A | |
| MAX. TOTAL CURRENT OF THE ACTUATOR | 80A | 56A | | |
| OUTPUT SERVICE LIFE | MECHANICAL SERVICE LIFE | >10 ⁶ | | |
| | ELECTRICAL ENDURANCE EN60669-1 19.1 | 10 ⁴ (See Note.2) | 4*10 ⁴ (See Note.2) | |
| | EN60669-1 19.2 , FLOURSCENT LAMP(AX) | 10 ⁴ (See Note.2) | 10 ⁴ (See Note.2) | |
| OPERATING & DISPLAY | PROGRAMMING BUTTON/LED | Program the individual address | | |
| | MANUAL BUTTON/LED | Manual control and indication | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +45°C (3K5) | | |
| | STORAGE TEMP. | -35 ~ +70°C | | |
| | WORKING HUMIDITY | 10 ~ 95% RH non-condensing | | |
| | PROTECTION CLASS | II , According to EN61140 | | |
| | OVER VOLTAGE CATEGORY | III , According to EN60664-1 | | |
| | POLLUTION DEGREE | 2, According to EN60664-1 | | |
| | DEGREE OF PROTECTION | IP20,According to EN60529 | | |
| SAFETY & EMC | SAFETY STANDARDS | BS EN/EN50491-3, BS EN/EN60669-1, BS EN/EN60669-2-1, BS EN/EN60669-2-5(See Note.2), EAC TP TC 004 approved | | |
| | EMC EMISSION | Compliance to BS EN/EN50491-5-1,-2,-3, BS EN/EN50090-2-2, BS EN/EN60669-2-1, BS EN/EN60669-2-5, BS EN/EN63044-5-1,-2,-3(See Note.2), EAC TP TC 020 | | |
| | EMC IMMUNITY | Compliance to BS EN/EN50491-5-1,-2,-3, BS EN/EN50090-2-2, BS EN/EN60669-2-1, BS EN/EN60669-2-5, BS EN/EN63044-5-1,-2,-3(See Note.2), EAC TP TC 020 | | |
| | WITHSTAND VOLTAGE | Between switching and SELV control circuit: 3.5KVAC | | |
| CONNECTIONS | SCREW TERMINAL | 0.5 – 4.0mm ² solid core 0.5 - 2.5mm ² finely stranded | | |
| | KNX BUS CONNECTION TERMINAL | 0.8mm ϕ , solid core | | |
| OTHERS | MTBF | 597.8K hrs min. Telcordia SR-332 (Bellcore) ; 447.9K hrs min. MIL-HDBK-217F (25°C) | | |
| | DIMENSION | 72*90*57mm (W*H*D) | | |
| | MOUNTING WIDTH IN UNITS | 4 | | |
| | DIN RAIL MOUNTING | 35mm mounting rail according to DIN EN60715 | | |
| | PACKING | 0.312Kg ; 48pcs/16Kg/1.02CUFT | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Notified Body test report is provided.</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | |

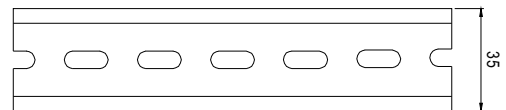
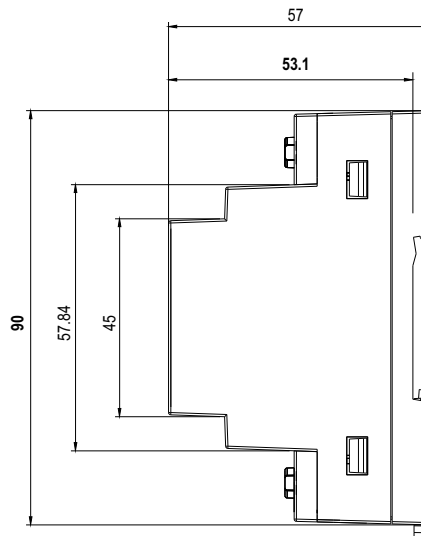
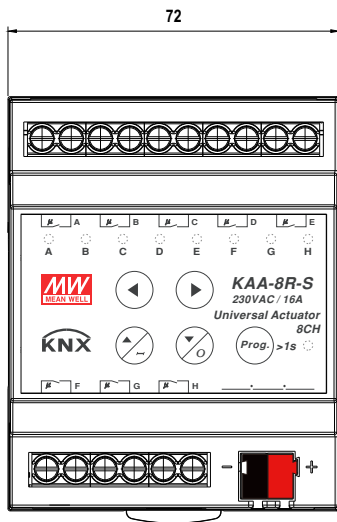
■ Block Diagram



■ Mechanical Specification

Case No. KAA

Unit:mm



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

■ Max. output load per channel

| Maximum load | CAA-8R-S | CAA-8R-10S |
|--|----------------------|----------------------|
| Resistive load or heater | 3680W | 2300W |
| LED driver | refer to table below | refer to table below |
| Incandescent lamps | 2300W | 2300W |
| Halogen lamps 230V | 2300W | 2300W |
| Halogen lamps, electronic transformer | 1300W | 1300W |
| Fluorescent lamps, not compensated | 2000W | 2000W |
| Fluorescent lamps, parallel comp. | 1200W | 1200W |
| Max. number of electronic transformers | 15 | 15 |
| Shutter motor | 600W | 600W |

■ Nr. of driver per channel

| The maximum number of the MEANWELL LED driver that can be connected to each channel at 230V is shown as below | | |
|---|----------|------------|
| Suggested model | CAA-8R-S | CAA-8R-10S |
| APC-8 | 22 | 22 |
| APC-12 | 11 | 11 |
| APC-16 | 18 | 18 |
| APC-25 | 11 | 11 |
| APC-35 | 11 | 11 |
| APC-8E | 22 | 22 |
| APC-12E | 18 | 18 |
| APC-16E | 15 | 15 |
| APV-8 | 22 | 22 |
| APV-12 | 11 | 11 |
| APV-16 | 18 | 18 |
| APV-25 | 11 | 11 |
| APV-35 | 11 | 11 |
| APV-8E | 22 | 22 |
| APV-12E | 18 | 18 |
| APV-16E | 15 | 15 |
| LCM-25 | 25 | 25 |
| LCM-40 | 25 | 25 |
| LCM-60 | 25 | 25 |
| LCM-25DA | 25 | 25 |
| LCM-40DA | 25 | 25 |
| LCM-60DA | 25 | 25 |
| LPC-20 | 11 | 11 |
| LPC-35 | 9 | 9 |
| LPC-60 | 8 | 8 |
| LPC-100 | 7 | 7 |
| LPC-150 | 13 | 5 |



| The maximum number of the MEANWELL LED driver that can be connected to each channel at 230V is shown as below | | |
|---|----------|------------|
| Suggested model | KAA-8R-S | KAA-8R-10S |
| LPF-16 | 18 | 18 |
| LPF-25 | 16 | 16 |
| LPF-40 | 16 | 16 |
| LPF-60 | 9 | 9 |
| LPF-90 | 7 | 7 |
| LPF-16D | 18 | 18 |
| LPF-25D | 16 | 16 |
| LPF-40D | 16 | 16 |
| LPF-60D | 9 | 9 |
| LPF-90D | 7 | 7 |
| LPH-18 | 16 | 16 |
| LPHC-18 | 16 | 16 |
| LPV-20 | 11 | 11 |
| LPV-35 | 9 | 9 |
| LPV-60 | 8 | 8 |
| LPV-100 | 7 | 7 |
| LPV-150 | 8 | 8 |
| NPF-40 | 10 | 10 |
| NPF-60 | 10 | 10 |
| NPF-90 | 8 | 8 |
| NPF-120 | 8 | 8 |
| NPF-40D | 10 | 10 |
| NPF-60D | 10 | 10 |
| NPF-90D | 8 | 8 |
| NPF-120D | 8 | 8 |
| PCD-16B | 80 | 80 |
| PCD-25B | 53 | 53 |
| PCD-40B | 45 | 45 |
| PCD-60B | 26 | 26 |
| PLC-30 | 23 | 23 |
| PLC-45 | 23 | 23 |
| PLC-60 | 23 | 23 |
| PLC-100 | 13 | 13 |
| PLD-16B | 40 | 40 |
| PLD-25 | 32 | 32 |
| PLD-40B | 32 | 32 |
| PLD-60B | 32 | 32 |
| PLM-12 | 53 | 53 |
| PLM-25 | 53 | 53 |
| PLM-40 | 53 | 53 |
| PLN-20 | 23 | 23 |
| PLN-30 | 23 | 23 |
| PLN-45 | 23 | 23 |
| PLN-60 | 23 | 23 |
| PLN-100 | 13 | 13 |
| PLP-30 | 32 | 32 |
| PLP-45 | 27 | 27 |
| PLP-60 | 23 | 23 |
| PWM-40 | 10 | 10 |
| PWM-60 | 10 | 10 |
| PWM-90 | 8 | 8 |
| PWM-120 | 8 | 8 |



| The maximum number of the MEANWELL LED driver that can be connected to each channel at 230V is shown as below | | |
|---|----------|------------|
| Suggested model | KAA-8R-S | KAA-8R-10S |
| HLN-40H | 10 | 10 |
| HLN-60H | 9 | 9 |
| HLN-80H | 7 | 7 |
| HLP-40H | 7 | 7 |
| HLP-60H | 9 | 9 |
| HLP-80H | 7 | 7 |
| CEN-60 | 22 | 22 |
| CEN-75 | 22 | 22 |
| CEN-100 | 22 | 22 |
| CLG-60 | 23 | 23 |
| CLG-100 | 13 | 13 |
| CLG-150 | 8 | 8 |
| ELG-75 | 10 | 10 |
| ELG-100 | 8 | 8 |
| ELG-150 | 8 | 8 |
| ELG-75-C | 10 | 10 |
| ELG-100-C | 13 | 13 |
| ELG-150-C | 8 | 8 |
| HBG-100 | 8 | 8 |
| HBG-160 | 8 | 8 |
| HBG-240 | 7 | 7 |
| HBG-60 | 18 | 18 |
| HLG-40H | 16 | 16 |
| HLG-60H | 9 | 9 |
| HLG-80H | 7 | 7 |
| HLG-100H | 8 | 8 |
| HLG-120H | 8 | 8 |
| HLG-150H | 8 | 8 |
| HLG-185H | 8 | 8 |
| HLG-240H | 7 | 5 |
| HLG-320H | 7 | 6 |
| HLG-600H | 4 | 3 |
| HLG-60H-C | 8 | 8 |
| HLG-80H-C | 8 | 8 |
| HLG-120H-C | 10 | 10 |
| HLG-185H-C | 9 | 9 |
| HLG-240H-C | 7 | 7 |
| HLG-320H-C | 7 | 6 |
| HSG-70 | 9 | 9 |
| HVG-65 | 20 | 20 |
| HVG-100 | 8 | 8 |
| HVG-150 | 8 | 8 |
| HVG-240 | 5 | 5 |
| HVG-320 | 4 | 4 |
| HVGC-65 | 20 | 20 |
| HVGC-100 | 8 | 8 |
| HVGC-150 | 8 | 8 |
| HVGC-240 | 5 | 5 |
| HVGC-320 | 4 | 4 |

■ Configuration and Commissioning

The application program(database) can be downloaded via Online Catalogs from ETS or via https://www.meanwell.com//Upload/PDF/KNX_Application%20Database.pdf

It is also used to check the corresponding firmware version that works with database.

※ KNXInterface

- Apply KNX signal between KNX+ and KNX-.

The application program(database) can be downloaded via Online Catalogs from ETS or via <http://www.meanwell.com/productCatalog.aspx>

The device is equipped with KNX Data Secure. KNX Data Secure offers protection against manipulation in building automation and can be configured in the ETS project. Detailed specialist knowledge is required. A device certificate, which is attached to the device, is required for the first configuration. After configuration and ready for runtime (daily) operation, it is recommended to remove the certificate from the device and to store it securely. For details, please refer to the instruction manual.

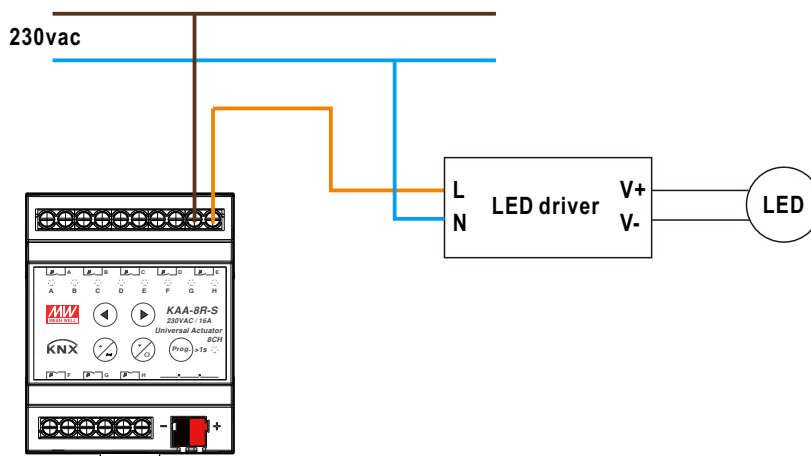
MEAN WELL

Device Certificate

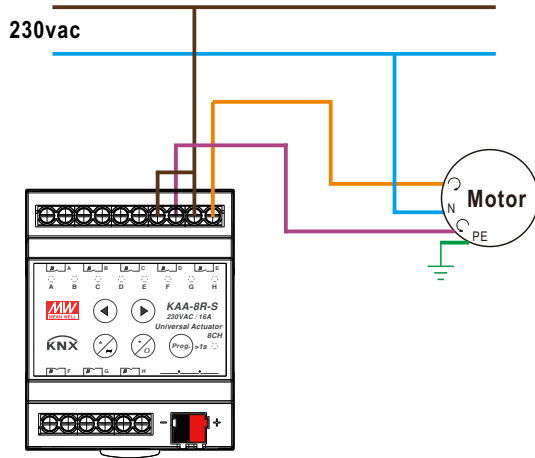


■ Typical application

- ◎ Application 1: Work with non-dimmable driver

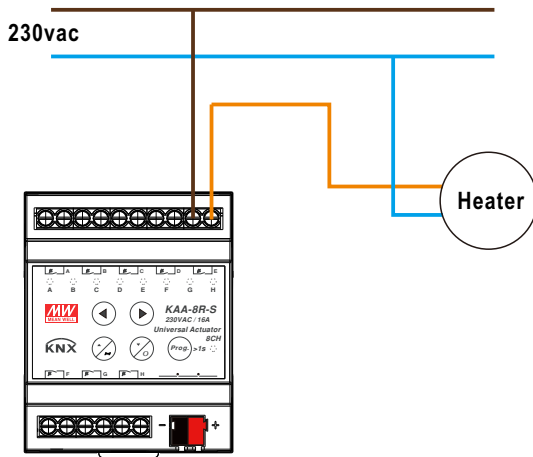


◎ Application 2: Work with shutter/blind control



Note: Check installation manual of shutter motor for wiring.

◎ Application 3: Work with Heater



■ Recommended Screwdriver, Wire and Torque Setting

1. Screwdriver (Width*Thick): Slotted screwdriver 2.5*0.4~3.5*0.6
2. Wire: 0.5~4.0mm² solid core or 0.5~2.5mm² finely stranded
3. Torque: 0.8Nm

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>