

# ST-REL3-HG220/21 - Relay connectors



2821041

<https://www.phoenixcontact.com/us/products/2821041>

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Relay connector, equipped with Hengstler miniature round relay, contacts (AgCdO+Au): small to large loads, 1 changeover contact, input voltage 220 V DC, with LED display, pluggable into basic terminal blocks

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 2821041                        |
| Packing unit                         | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | C460                           |
| Product key                          | DK6123                         |
| GTIN                                 | 4017918076962                  |
| Weight per piece (including packing) | 62.89 g                        |
| Weight per piece (excluding packing) | 62 g                           |
| Customs tariff number                | 85364900                       |
| Country of origin                    | DE                             |

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## Technical data

### Product properties

|                         |                       |
|-------------------------|-----------------------|
| Product type            | Relay Module          |
| Operating mode          | 100% operating factor |
| Mechanical service life | approx. $10^7$ cycles |

### Data management status

|                              |            |
|------------------------------|------------|
| Date of last data management | 19.03.2025 |
|------------------------------|------------|

### Electrical properties

|                                                 |                                          |
|-------------------------------------------------|------------------------------------------|
| Maximum power dissipation for nominal condition | 1.43 W                                   |
| Test voltage (Winding/contact)                  | 2 kV AC (50 Hz, 1 min., winding/contact) |

### Input data

#### Coil side

|                                           |                                                                              |
|-------------------------------------------|------------------------------------------------------------------------------|
| Nominal input voltage $U_N$               | 220 V DC                                                                     |
| Input voltage range                       | 176 V DC ... 242 V DC                                                        |
| Input voltage range in reference to $U_N$ | 0.8 ... 1.1                                                                  |
| Typical input current at $U_N$            | 6.5 mA                                                                       |
| Typical response time                     | 15 ms                                                                        |
| Typical release time                      | 25 ms                                                                        |
| Protective circuit                        | Damping diode, polarity protection; Damping diode, polarity protection diode |
| Operating voltage display                 | yes                                                                          |

### Output data

#### Switching

|                                       |                                                                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Contact switching type                | Single contact, 1 changeover contact                                                                                                 |
| Type of switch contact                | Single contact                                                                                                                       |
| Contact material                      | AgCdO, hard gold-plated                                                                                                              |
| Maximum switching voltage             | 250 V AC/DC                                                                                                                          |
| Limiting continuous current           | 6 A                                                                                                                                  |
| Maximum inrush current                | 6 A                                                                                                                                  |
| Interrupting rating (ohmic load) max. | 120 W (at 24 V DC)<br>180 W (at 48 V DC)<br>105 W (at 60 V DC)<br>60 W (at 110 V DC)<br>90 W (at 220 V DC)<br>1500 VA (for 250 V AC) |

### Connection data

|                   |                    |
|-------------------|--------------------|
| Connection method | Plug-in connection |
|-------------------|--------------------|

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## Dimensions

|        |         |
|--------|---------|
| Width  | 20.8 mm |
| Height | 33 mm   |
| Depth  | 66.5 mm |

## Material specifications

|       |             |
|-------|-------------|
| Color | transparent |
|-------|-------------|

## Environmental and real-life conditions

### Ambient conditions

|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (operation)         | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

## Standards and regulations

|                       |                                   |
|-----------------------|-----------------------------------|
| Standards/regulations | DIN VDE 0110b, Gr. C for 250 V DC |
|                       | DIN VDE 0160 (in relevant parts)  |

## Mounting

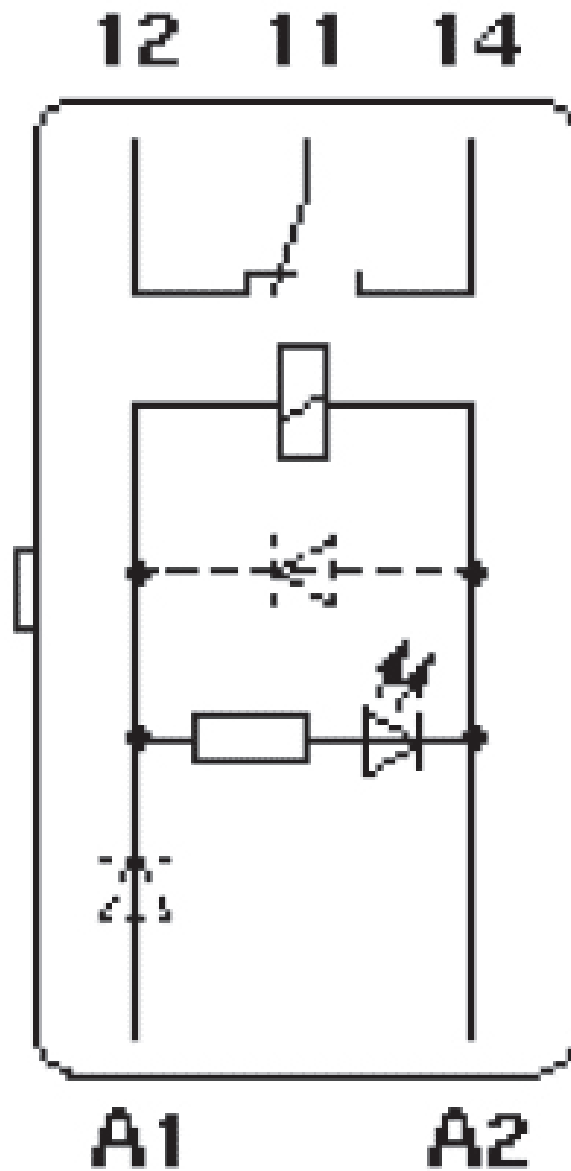
|               |                  |
|---------------|------------------|
| Mounting type | Plug-in mounting |
|---------------|------------------|

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## Drawings

Circuit diagram



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## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                                                                                                                                                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-50                                                                                                                                                                                                                           |
|                                        | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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