

## OPT-...



Pluggable miniature optical coupler  
VDE, UL, CSA applied for

| Description                                    | Input voltage          | Type              | Order No.  | Pcs. Pkt. |
|------------------------------------------------|------------------------|-------------------|------------|-----------|
| Pluggable miniature optical couplers, capacity | 24 V DC                | OPT-24DC/24DC/2   | 29 66 59 5 | 5         |
|                                                | 60 V DC                | OPT-60DC/24DC/2   | 29 66 60 5 | 5         |
|                                                | 120 V DC <sup>1)</sup> |                   |            |           |
|                                                | 230 V DC <sup>1)</sup> |                   |            |           |
| input                                          | 24 V DC                | OPT-24DC/48DC/100 | 29 66 61 8 | 5         |
|                                                | 60 V DC                | OPT-60DC/48DC/100 | 29 66 62 1 | 5         |
|                                                | 120 V DC <sup>1)</sup> |                   |            |           |
|                                                | 230 V DC <sup>1)</sup> |                   |            |           |

## Technical data

| Input data                                  |                | Power optical coupler                            |         | Input optical coupler                            |         |
|---------------------------------------------|----------------|--------------------------------------------------|---------|--------------------------------------------------|---------|
| Nominal input voltage U <sub>N</sub>        |                | 24 V DC                                          | 60 V DC | 24 V DC                                          | 60 V DC |
| Permissible range (of U <sub>N</sub> )      |                | 0.8-1.2                                          | 0.9-1.1 | 0.8-1.2                                          | 0.9-1.1 |
| Switching level                             | 1 signal ("H") | ≥ 16 V                                           | ≥ 35 V  | ≥ 16 V                                           | ≥ 52 V  |
|                                             | 0 signal ("L") | ≤ 10 V                                           | ≤ 20 V  | ≤ 10 V                                           | ≤ 40 V  |
| Typ. input current at U <sub>N</sub>        |                | 7 mA                                             | 3 mA    | 6 mA                                             | 3 mA    |
| Typ. turn-on time at U <sub>N</sub>         |                | 20 μs                                            | 35 μs   | 20 μs                                            | 50 μs   |
| Typ. turn-off time at U <sub>N</sub>        |                | 500 μs                                           | 700 μs  | 300 μs                                           | 800 μs  |
| Transmission frequency f <sub>limit</sub>   |                | 300 Hz                                           | 300 Hz  | 300 Hz                                           | 100 Hz  |
| Output data                                 |                | OPT-.../24DC/2                                   |         | OPT-.../48DC/100                                 |         |
| Max. switching voltage                      |                | 33 V DC                                          |         | 48 V DC                                          |         |
| Min. switching voltage                      |                | 3 V DC                                           |         | 3 V DC                                           |         |
| Limiting continuous current                 |                | 2 A (see derating curve)                         |         | 100 mA                                           |         |
| Max. inrush current                         |                | 15 A (10 ms)                                     |         | —                                                |         |
| Output connection                           |                | 2-conductor floating                             |         | 2-conductor floating                             |         |
| Output circuit                              |                | polarity protection,<br>surge voltage protection |         | polarity protection,<br>surge voltage protection |         |
| Voltage drop at limiting continuous current |                | ≤ 200 mV                                         |         | ≤ 1 V                                            |         |
| General data                                |                |                                                  |         |                                                  |         |
| Test voltage: I/O                           |                | 2.5 kV, 50 Hz, 1 min.                            |         |                                                  |         |
| Ambient temperature range                   |                | – 20 °C to + 60 °C                               |         |                                                  |         |
| Nominal operating mode                      |                | 100 % ED                                         |         |                                                  |         |

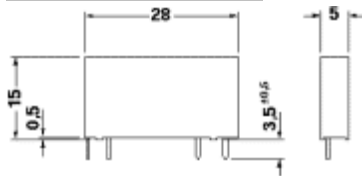
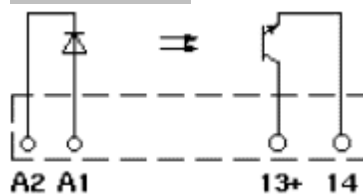
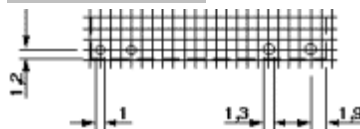
Standards/regulations

IEC 664/IEC 664 A/DIN VDE 0110,  
contamination class 2, surge voltage category III,  
as desired, in rows with zero spacing

Installation position/mounting

1

) With the 120 V and 230 V modules, a 60 V optical coupler OPT-60DC/... is normally used because of the input circuit integrated in the base terminal block.

**Dimensional drawing****Block diagram****Drilling diagram****Diagram**

Performations for assembly: view of the connections  
Basic grid dimension 1,25 mm and 1,27 mm

