

# Interface Relays

## Overview

Murrelektronik Interface Relays are highly compact and lightweight relays especially useful where cabinet space is a consideration. Encased in a self-extinguishing plastic housing, these high quality relays offer a long useful life. Great for use with PLC automation systems, electric power plants, energy management systems, medium voltage panels, industrial machines, and more.

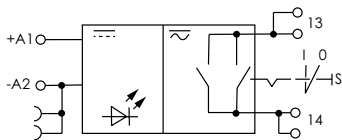
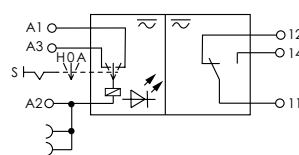
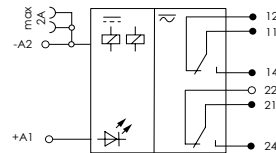
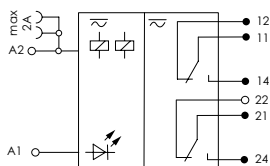
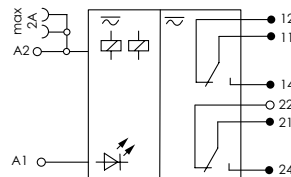
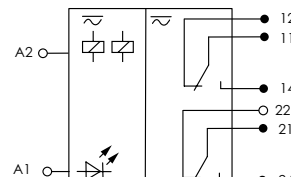
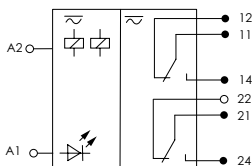
## Features

- 35mm DIN-rail mount
- Status Indicator LED - Relay energized
- Wide range of coil voltage from 24 to 230 VDC/VAC
- High level of electromagnetic compatibility (EMC)
- Self-extinguishing plastic housing

**51101****51152****52102**

| Interface Relays             |         |              |               |                |              |                           |                     |
|------------------------------|---------|--------------|---------------|----------------|--------------|---------------------------|---------------------|
| Part Number                  | Price   | Coil Voltage | Configuration | Contact Rating | Load Voltage | Action                    | Drawing Link        |
| <a href="#"><b>51101</b></a> | \$29.50 | 24 VDC       | SPST          | 3A             | 250 VAC/VDC  | manual-auto toggle switch | <a href="#">PDF</a> |
| <a href="#"><b>51152</b></a> | \$27.00 | 24 VAC/VDC   | SPDT          | 8A             | 250 VAC/VDC  | H-O-A toggle switch       | <a href="#">PDF</a> |
| <a href="#"><b>52102</b></a> | \$19.50 | 24 VDC       | DPDT          | 6A             | 250 VAC/VDC  | —                         | <a href="#">PDF</a> |
| <a href="#"><b>52103</b></a> | \$22.50 | 24 VAC/VDC   | DPDT          | 6A             | 250 VAC/VDC  | —                         | <a href="#">PDF</a> |
| <a href="#"><b>52111</b></a> | \$25.50 | 24 VAC/VDC   | DPDT          | 6A             | 250 VAC/VDC  | —                         | <a href="#">PDF</a> |
| <a href="#"><b>52130</b></a> | \$32.50 | 110 VAC/VDC  | DPDT          | 6A             | 250 VAC/VDC  | —                         | <a href="#">PDF</a> |
| <a href="#"><b>52140</b></a> | \$44.00 | 230 VAC/VDC  | DPDT          | 6A             | 250 VAC/VDC  | —                         | <a href="#">PDF</a> |

## Wiring Diagrams

**51101****51152****52102****52103****52111****52130****52140**

# Interface Relays Specifications

| Interface Relays Specifications  |    |                                    |                                 |                                 |                                 |                                 |                                 |                                 |
|----------------------------------|----|------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Part Number                      |    | 51101                              | 51152                           | 52102                           | 52103                           | 52111                           | 52130                           | 52140                           |
| Input Specifications             |    |                                    |                                 |                                 |                                 |                                 |                                 |                                 |
| Nominal Voltage                  |    | 24VDC                              | 24 VAC/VDC<br>50/60 Hz          | 24VDC                           | 24 VAC/VDC<br>50/60 Hz          | 24 VAC/VDC<br>50/60 Hz          | 110 VAC/VDC<br>50/60 Hz         | 230 VAC/VDC<br>50/60 Hz         |
| Operating Voltage Range          |    | 19.2–28.0 VDC                      | 19.2–28.0<br>VAC/VDC            | 19.2–30.0<br>VDC                | 19.2–30.0<br>VAC/VDC            | 19.2–30.0<br>VAC/VDC            | 95.0–121<br>VAC/VDC             | 195.0–253.0<br>VAC/VDC          |
| Power Consumption                | AC | n/a                                | 0.38 VA                         | n/a                             | 0.48 VA                         | 0.48 VA                         | 0.8 VA                          | 1VA                             |
|                                  | DC | 0.24 W                             | 0.38 W                          | 0.43 W                          | 0.48 W                          | 0.48 W                          | 0.8 W                           | 1W                              |
| Contact Specifications           |    |                                    |                                 |                                 |                                 |                                 |                                 |                                 |
| Type                             |    | SPST                               | SPDT                            | DPDT                            | DPDT                            | DPDT                            | DPDT                            | DPDT                            |
| Material                         |    | Silver Nickel<br>(Ag Ni 015)       | Silver Nickel<br>(Ag Ni 015)    | Silver Tin Oxide<br>(Ag Sn 02)  | Silver Tin Oxide<br>(Ag Sn 02)  | Silver Tin Oxide<br>(Ag Sn 02)  | Silver Tin Oxide<br>(Ag Sn 02)  | Silver Tin Oxide<br>(Ag Sn 02)  |
| Operate Time Max                 |    | 10ms                               | 10ms                            | 15ms                            | 15ms                            | 15ms                            | 15ms                            | 15ms                            |
| Release Time Max                 |    | 15ms                               | 20ms                            | 20ms                            | 20ms                            | 20ms                            | 20ms                            | 20ms                            |
| Wire Size Max                    |    | 14 AWG (stranded) / 12 AWG (solid) |                                 |                                 |                                 |                                 |                                 |                                 |
| Max Ratings                      | AC | 3A/250 VAC<br>1250VA               | 8A/250 VAC<br>2000VA            | 6A/250 VAC<br>1500VA            | 6A/250 VAC<br>1500VA            | 6A/250 VAC<br>1500VA            | 6A/250 VAC<br>1500VA            | 6A/250 VAC<br>1500VA            |
|                                  | DC | 3A/250 VDC<br>240W                 | 8A/250 VDC<br>240W              | 6A/250 VDC<br>120W              | 6A/250 VDC<br>120W              | 6A/250 VDC<br>120W              | 6A/250 VDC<br>120W              | 6A/250 VDC<br>120W              |
| Minimum Load                     |    | 100mA                              | 100mA                           | 100mA                           | 100mA                           | 1mA                             | 100mA                           | 5mA                             |
| Mechanical Life Time             |    | 10 x 10 <sup>6</sup> operations    |                                 |                                 |                                 |                                 |                                 |                                 |
| Electrical Life Time             |    | 6 x 10 <sup>4</sup> operations     |                                 |                                 |                                 |                                 |                                 |                                 |
| General Specifications           |    |                                    |                                 |                                 |                                 |                                 |                                 |                                 |
| Connection                       |    | Screw terminal (M3)                |                                 |                                 |                                 |                                 |                                 |                                 |
| Tightening Torque                |    | 0.2 N·m (+0.1)                     |                                 |                                 |                                 |                                 |                                 |                                 |
| Ambient Temperature              |    | -25 to +60°C<br>[-13 to +140°F]    | -25 to +50°C<br>[-13 to +122°F] | -25 to +60°C<br>[-13 to +140°F] | -25 to +60°C<br>[-13 to +140°F] | -25 to +60°C<br>[-13 to +140°F] | -25 to +50°C<br>[-13 to +122°F] | -25 to +60°C<br>[-13 to +140°F] |
| Storage Temperature              |    | -40 to +80°C<br>[-40 to +176°F]    |                                 |                                 |                                 |                                 |                                 |                                 |
| Protection Rating                |    | IP20                               |                                 |                                 |                                 |                                 |                                 |                                 |
| Mounting                         |    | 35mm DIN-rail                      |                                 |                                 |                                 |                                 |                                 |                                 |
| Relay Indicator                  |    | Red LED                            | Red LED                         | Green LED                       | Green LED                       | Yellow LED                      | Green LED                       | Green LED                       |
| Weight (g [oz])                  |    | 43.0 [1.51]                        | 46.0 [1.62]                     | 55 [1.91]                       | 55 [1.91]                       | 55 [1.91]                       | 55 [1.91]                       | 55 [1.91]                       |
| Agency Approvals and Standards * |    | CE                                 |                                 |                                 | CSA 1252427, cURus E140415, CE  |                                 |                                 |                                 |

\* To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

| Interface Relays Accessories |         |                                                                                                                                                      |
|------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                  | Price   | Description                                                                                                                                          |
| <a href="#">90962</a>        | \$15.00 | Murrelektronik interface relay plug link, push-in type, 2-pole, gray. Package of 5.<br>For use with MurrElektronik 51152 and 51101 interface relays. |



[90962](#)