

RS
TBY-ADV151-48-PS-2KB-Z

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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Similar to illustration

The digital input interfaces via relay are used to isolate the field sensors from the card and/or to adapt the operation of the said elements to the voltage required by the DCS. The interfaces also support additional characteristics that provide many benefits such as:

- **Redundancy: the interfaces have 2 50-pole (AKB) connectors for redundancy purposes.**
- **Many of the interfaces activate a relay to indicate if one of the two possible power sources has dropped below a value of approximately 12 V.**
- **The cards can be mounted via tension clamp or screw connection.**
- **The input sensors can be connected in two ways: supplied with power directly from the card or directly from the field.**

General ordering data

| | |
|------------|---|
| Type | TBY-ADV151-48-PS-2KB-Z |
| Order No. | 1384250000 |
| Version | Interface, RS, 2 x AKB (50P), LM2NZF 5.08mm |
| GTIN (EAN) | 4050118185614 |
| Qty. | 1 pc(s). |

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Technical data
Dimensions and weights

| | | | |
|------------|-----------|-----------------|------------|
| Length | 317 mm | Length (inches) | 12.48 inch |
| Width | 131 mm | Width (inches) | 5.157 inch |
| Height | 95 mm | Height (inches) | 3.74 inch |
| Net weight | 864.766 g | | |

Temperatures

| | | | |
|-----------------------------|-------------|-----------------------------|-------------|
| Operating temperature, max. | 70 °C | Operating temperature, min. | -25 °C |
| Storage temperature, max. | 85 °C | Storage temperature, min. | -40 °C |
| Operating temperature | -25...70 °C | Storage temperature | -40...85 °C |

General data

| | | | |
|----------------------------------|-------|------------------------|-----|
| LED status display per relay | green | Disconnecter per relay | No |
| Fuse per relay | Yes | Switch | No |
| LED status of the supply voltage | green | Power supply fuse | 1 A |

Connection data

| | | | |
|----------------------------|------------------------|--------------------------------|--------------------------------|
| Connection to PLC | Yokogawa Centum CS3000 | Connection to the card | ADV151, ADV161 (2 TBY by Card) |
| Connection on control side | 2 x AKB (50P) | Number of poles (control side) | 50-pole plug |
| Connection (field side) | LM2NZF 5.08mm | Connection supply | LMNZF 5.08mm |

Rating data

| | |
|-------------------------|--------------------------------------|
| Mechanical service life | 5 x 10 ⁶ switching cycles |
|-------------------------|--------------------------------------|

Ratings data input

| | | | |
|---------------|---------------|---------------|------------------------------------|
| Input voltage | 48 V DC ± 10% | Input current | 7 mA (fuse on) / 0.5 mA (fuse off) |
|---------------|---------------|---------------|------------------------------------|

Ratings data output

| | | | |
|-------------------------|--------------|----------------------------|------------------|
| Relay type | RSS | Contact material | AgNi gold-plated |
| Rated voltage (text) | 18...30 V DC | Max. DC continuous current | 10 mA |
| Minimum contact current | 1 mA | Minimum contact voltage | 1 V |

Insulation coordinates (EN50178)

| | | | |
|------------------------------------|-----------|----------------------------------|-----------|
| Rated input insulation voltage | ≤ 50 V DC | Rated output insulation voltage | ≤ 50 V DC |
| Overvoltage category input/output | III | Overvoltage category input/input | III |
| Overvoltage category output/output | III | Pollution severity level | 2 |
| Pulse voltage test (1,2/50µs) | 1.5 kV | Insulation test voltage | 0.35 kVAC |
| Clearance input/output | ≥ 5.5 mm | | |

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Technical data**Connection field**

| | | | |
|------------------------------|--------------------------|----------------------------------|----------------------|
| Type of connection | Tension-clamp connection | Clamping range, min. | 0.13 mm ² |
| Clamping range, max. | 2.5 mm ² | Solid, min. H05(07) V-U | 0.2 mm ² |
| Solid, max. H05(07) V-U | 2.5 mm ² | Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 1.5 mm ² | Flexible with sleeve, max. | 1.5 mm ² |
| Flexible with sleeve, min. | 0.25 mm ² | Sleeve with plastic collar, max. | 1.5 mm ² |
| Min. wire cross-section, AWG | AWG 24 | Max. wire cross-section, AWG | AWG 14 |
| Stripping length | 7.5 mm | | |

Supply connection

| | | | |
|------------------------------|--------------------------|-----------------------------------|----------------------|
| Type of connection | Tension-clamp connection | Clamping range, min. | 0.13 mm ² |
| Clamping range, max. | 2.5 mm ² | Solid, min. H05(07) V-U | 0.2 mm ² |
| Solid, max. H05(07) V-U | 2.5 mm ² | Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 1.5 mm ² | Flexible with sleeve, max. | 1.5 mm ² |
| Flexible with sleeve, min. | 0.25 mm ² | Ferrule with plastic collar, max. | 1.5 mm ² |
| Wire cross-section, min. AWG | AWG 14 | Wire cross-section, max. AWG | AWG 24 |
| Stripping length | 7.5 mm | | |

Classifications

| | | | |
|-------------|-------------|------------|-------------|
| ETIM 6.0 | EC002780 | ETIM 7.0 | EC002780 |
| eClass 9.0 | 27-14-11-52 | eClass 9.1 | 27-24-22-16 |
| eClass 10.0 | 27-14-11-52 | | |

Approvals

Approvals



ROHS

Conform

Downloads
 Brochure/Catalogue [CAT 4.5 ELECTR 16/17 EN](#)

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Drawings

