

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

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VARIOFACE Professional output module with eight channels, each with a pluggable 1 PDT relay and fuse, for 24 V DC

### Your advantages

- ✓ Slim overall width of just 87.6 mm
- ✓ LED status indicator per signal path and supply voltage
- ✓ Polarity protection diode
- ✓ Fuse per output circuit as short-circuit protection
- ✓ Plug-in miniature relays each with a SPDT



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 pc                                                                                                    |
| GTIN                                 | <br>4 046356 948159 |
| GTIN                                 | 4046356948159                                                                                           |
| Weight per Piece (excluding packing) | 320.000 g                                                                                               |
| Custom tariff number                 | 85369010                                                                                                |
| Country of origin                    | United States                                                                                           |
| Note                                 | Made to Order (non-returnable)                                                                          |

### Technical data

#### Note

|                         |                                                                           |
|-------------------------|---------------------------------------------------------------------------|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---------------------------------------------------------------------------|

#### Dimensions

|        |          |
|--------|----------|
| Width  | 87.6 mm  |
| Height | 109.8 mm |
| Depth  | 63 mm    |

#### Ambient conditions

# Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

## Technical data

### Ambient conditions

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

### Input data

|                                           |                     |
|-------------------------------------------|---------------------|
| Nominal input voltage $U_N$               | 24 V DC             |
| Input voltage range in reference to $U_N$ | 0.9 ... 1.1         |
| Typical input current at $U_N$            | 9 mA                |
| Typical response time                     | 5 ms                |
| Typical release time                      | 8 ms                |
| Type of protection                        | Free-wheeling diode |
| Protective circuit/component              | Damping diode       |
| Operating voltage display                 | Green LED           |
| Status display/channel                    | Yellow LED          |

### Output data

|                                              |                        |
|----------------------------------------------|------------------------|
| Contact type                                 | Single contact, 1-PDT  |
| Contact material                             | AgSnO                  |
| Maximum switching voltage                    | 250 V AC/DC            |
| Minimum switching voltage                    | 12 V AC/DC             |
| Limiting continuous current                  | 5 A (observe derating) |
| Min. switching current                       | 10 mA                  |
| Interrupting rating (ohmic load) max.        | 120 W (24 V DC)        |
|                                              | 20 W (48 V DC)         |
|                                              | 18 W (60 V DC)         |
|                                              | 23 W (110 V DC)        |
|                                              | 40 W (220 V DC)        |
|                                              | 1250 VA (250 V AC)     |
| Error detection (line break / short-circuit) | no                     |

### General

|                         |                           |
|-------------------------|---------------------------|
| No. of channels         | 8                         |
| Mechanical service life | $2 \times 10^7$ cycles    |
| Operating mode          | 100% operating factor     |
| Mounting position       | any                       |
| Assembly instructions   | In rows with zero spacing |
| Color                   | gray                      |

### Connection data

|                       |                   |
|-----------------------|-------------------|
| Connection name       | Controller level  |
| Connection method     | IDC/FLK pin strip |
| Number of connections | 1                 |
| Number of positions   | 14                |
| Pitch                 | 2.54 mm           |

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Technical data

#### Connection data 2

|                                  |                                              |
|----------------------------------|----------------------------------------------|
| Connection name                  | Field level                                  |
| Connection method                | Push-in connection                           |
| Stripping length                 | 8 mm                                         |
| Conductor cross section solid    | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section AWG      | 26 ... 14                                    |

#### Supported controller

|                     |                             |
|---------------------|-----------------------------|
| Controller          | SIEMENS S7-1500             |
| - suitable I/O card | 6ES7 522-1BH00-0AB0         |
|                     | 6ES7 522-1BH01-0AB0         |
|                     | 6ES7 522-1BL00-0AB0         |
|                     | 6ES7 522-1BL01-0AB0         |
| Controller          | ABB S800 I/O                |
| - suitable I/O card | DO810                       |
|                     | DO840                       |
| Controller          | ALLEN-BRADLEY ControlLogix  |
| - suitable I/O card | 1756-OB32                   |
|                     | 1756-OB16E                  |
| Controller          | ALLEN-BRADLEY PLC 5         |
| - suitable I/O card | 1771 OBN                    |
| Controller          | ALLEN-BRADLEY SLC 500       |
| - suitable I/O card | 1746 OB 32                  |
| Controller          | Emerson DeltaV              |
| - suitable I/O card | VE4002S1T1B3                |
|                     | VE4002S1T2B3                |
|                     | VE4002S1T2B3 Series 2       |
|                     | VE4002S1T2B6                |
| Controller          | GE-FANUC RX3i               |
| - suitable I/O card | IC694MDL754                 |
| Controller          | HONEYWELL Experion PKS C200 |
| - suitable I/O card | TC-ODD 321                  |
| Controller          | MITSUBISHI MELSEC L         |
| - suitable I/O card | LY41PT1P                    |
|                     | LY42PT1P                    |
| Controller          | MITSUBISHI MELSEC Q         |
| - suitable I/O card | QY81P                       |
|                     | QY82P                       |
| Controller          | SIEMENS S7-300 / ET 200 M   |
| - suitable I/O card | CPU 313C-2DP                |
|                     | CPU 314C-2DP                |

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Technical data

#### Supported controller

|                     |                     |
|---------------------|---------------------|
|                     | CPU 314C-2PtP       |
|                     | 6ES7 322-1BH01-0AA0 |
|                     | 6ES7 322-1BL00-0AA0 |
|                     | 6ES7 323-1BH01-0AA0 |
|                     | 6ES7 323-1BL00-0AA0 |
|                     | CPU 313C            |
|                     | CPU 313C-2PtP       |
| Controller          | SIEMENS S7-400      |
| - suitable I/O card | 6ES7 422-1BL00-0AA0 |
|                     | 6ES7 422-7BL00-0AB0 |

#### Standards and Regulations

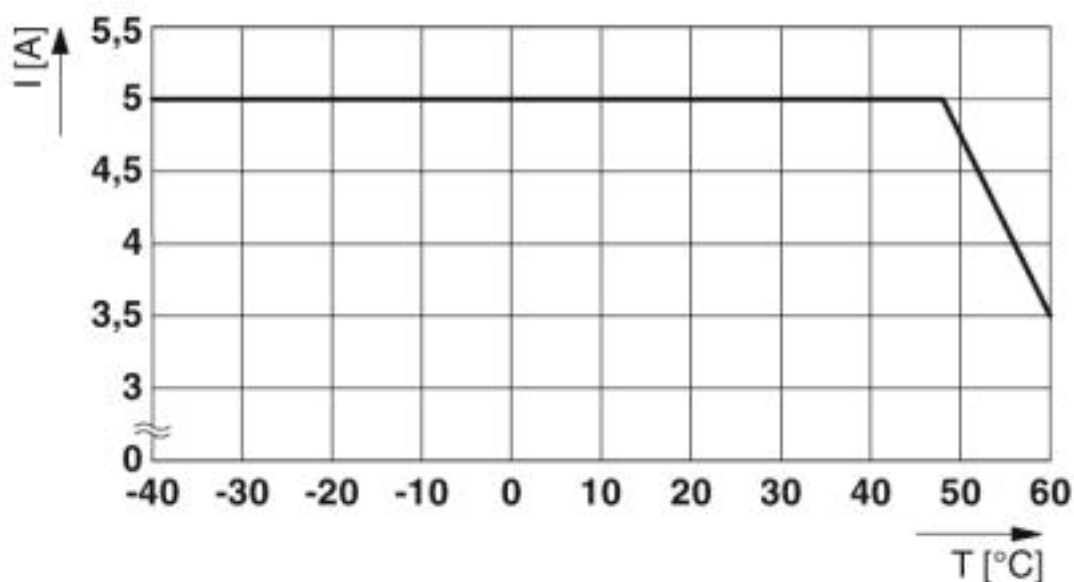
|                                  |              |
|----------------------------------|--------------|
| Connection in acc. with standard | CSA          |
| Standards/regulations            | DIN EN 50178 |

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

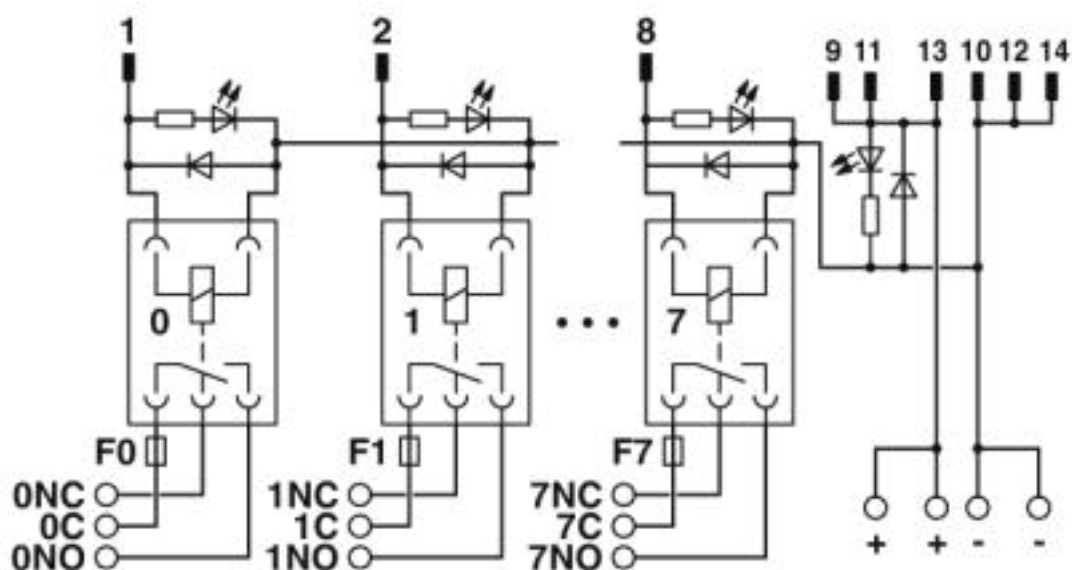
### Drawings

Diagram



## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

Circuit diagram



### Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27371100 |
| eCl@ss 4.1 | 27371100 |
| eCl@ss 5.0 | 27371000 |
| eCl@ss 5.1 | 27371000 |
| eCl@ss 6.0 | 27371000 |
| eCl@ss 7.0 | 27141152 |
| eCl@ss 8.0 | 27141152 |
| eCl@ss 9.0 | 27141152 |

ETIM

|          |          |
|----------|----------|
| ETIM 4.0 | EC002780 |
| ETIM 5.0 | EC002780 |
| ETIM 6.0 | EC002780 |
| ETIM 7.0 | EC002780 |

UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11     | 39121515 |
| UNSPSC 12.01  | 39121515 |
| UNSPSC 13.2   | 39121432 |
| UNSPSC 18.0   | 39121432 |
| UNSPSC 19.0   | 39121432 |
| UNSPSC 20.0   | 39121432 |

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Classifications

#### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121432 |
|-------------|----------|

### Approvals

#### Approvals

#### Approvals

CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

|                    |                                                                                    |                                                                                                                                         |         |
|--------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------|
| CSA                |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 2122203 |
| Nominal voltage UN |                                                                                    | 240 V                                                                                                                                   |         |
| Nominal current IN |                                                                                    | 5 A                                                                                                                                     |         |
| mm²/AWG/kcmil      |                                                                                    | 26-16                                                                                                                                   |         |

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Recognized      |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
| Nominal voltage UN |                                                                                     | 250 V                                                                                                                                                 |               |
| Nominal current IN |                                                                                     | 5 A                                                                                                                                                   |               |
| mm²/AWG/kcmil      |                                                                                     | 26-14                                                                                                                                                 |               |

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Recognized     |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705 |
| Nominal voltage UN |                                                                                     | 250 V                                                                                                                                                 |               |
| Nominal current IN |                                                                                     | 5 A                                                                                                                                                   |               |
| mm²/AWG/kcmil      |                                                                                     | 26-14                                                                                                                                                 |               |

|     |                                                                                     |                          |  |
|-----|-------------------------------------------------------------------------------------|--------------------------|--|
| EAC |  | RU C-<br>DE.A*30.B.01742 |  |
|-----|-------------------------------------------------------------------------------------|--------------------------|--|

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Approvals

cULus Recognized



### Accessories

#### Accessories

#### System cable

Cable - FLK 14/EZ-DR/ 30/KONFEK - 2295729



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 0.3 m

Cable - FLK 14/EZ-DR/ 50/KONFEK - 2288901



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 0.5 m

Cable - FLK 14/EZ-DR/ 100/KONFEK - 2288914



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 1 m

Cable - FLK 14/EZ-DR/ 150/KONFEK - 2288927



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 1.5 m

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Cable - FLK 14/EZ-DR/ 200/KONFEK - 2288930



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 2 m

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#### Cable - FLK 14/EZ-DR/ 250/KONFEK - 2288943



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 2.5 m

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#### Cable - FLK 14/EZ-DR/ 300/KONFEK - 2288956



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 3 m

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#### Cable - FLK 14/EZ-DR/ 350/KONFEK - 2288969



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 3.5 m

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#### Cable - FLK 14/EZ-DR/ 400/KONFEK - 2288972



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 4 m

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## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Cable - FLK 14/EZ-DR/ 450/KONFEK - 2290847



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 4.5 m

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#### Cable - FLK 14/EZ-DR/ 500/KONFEK - 2290834



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 5 m

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#### Cable - FLK 14/EZ-DR/ 550/KONFEK - 2290850



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 5.5 m

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#### Cable - FLK 14/EZ-DR/ 600/KONFEK - 2290863



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 6 m

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#### Cable - FLK 14/EZ-DR/ 800/KONFEK - 2299563



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 8 m

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## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

Cable - FLK 14/EZ-DR/1000/KONFEK - 2299576



Round cable set; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 10 m

Cable - FLK EZ-DR.../.../... - 2295059



Round cable, with preassembly, not shielded, variable cable length

Cable - FLK 14/EZ-DR/ 50/KONFEK/S - 2296977



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 0.5 m

Cable - FLK 14/EZ-DR/ 100/KONFEK/S - 2296980



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 1 m

Cable - FLK 14/EZ-DR/ 200/KONFEK/S - 2297002



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 2 m

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Cable - FLK 14/EZ-DR/ 300/KONFEK/S - 2299013



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 3 m

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#### Cable - FLK 14/EZ-DR/ 400/KONFEK/S - 2299026



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 4 m

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#### Cable - FLK 14/EZ-DR/ 600/KONFEK/S - 2299039



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 6 m

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#### Cable - FLK 14/EZ-DR/ 800/KONFEK/S - 2299042



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 8 m

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#### Cable - FLK 14/EZ-DR/1000/KONFEK/S - 2299055



Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position) (The braided shield is routed to a separate cable end.); cable length: 10 m

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

Cable - FLK EZ-DR-S.../.../... - 2295046



Round cable, with preassembly, shielded, variable cable length

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Cable - FLK 14/EZ-DR/HF/ 50/KONFEK - 2305952



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 0.5 m

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Cable - FLK 14/EZ-DR/HF/ 100/KONFEK - 2305965



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 1 m

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Cable - FLK 14/EZ-DR/HF/ 150/KONFEK - 2305978



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 1.5 m

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Cable - FLK 14/EZ-DR/HF/ 200/KONFEK - 2305981



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 2 m

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## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Cable - FLK 14/EZ-DR/HF/ 250/KONFEK - 2305994



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 2.5 m

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#### Cable - FLK 14/EZ-DR/HF/ 300/KONFEK - 2304759



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 3 m

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#### Cable - FLK 14/EZ-DR/HF/ 400/KONFEK - 2304762



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 4 m

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#### Cable - FLK 14/EZ-DR/HF/ 500/KONFEK - 2304717



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 5 m

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#### Cable - FLK 14/EZ-DR/HF/ 600/KONFEK - 2306003



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 6 m

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Cable - FLK 14/EZ-DR/HF/ 700/KONFEK - 2314011



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 7 m

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#### Cable - FLK 14/EZ-DR/HF/ 800/KONFEK - 2314024



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 8 m

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#### Cable - FLK 14/EZ-DR/HF/1000/KONFEK - 2314037



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 10 m

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#### Cable - FLK 14-EZ-DR-HF/... - 2314040



Assembled, halogen-free round cable; connection 1: IDC/FLK socket strip (1x 14-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: variable

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### Terminal marking

#### Marker for terminal blocks - UC-TM 4 - 0818111



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 4.2 mm, lettering field size: 3.6 x 10.5 mm, Number of individual labels: 120

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

#### Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

#### Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

#### Zack marker strip - ZB 5,08:UNBEDRUCKT - 0809793



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.08 mm, lettering field size: 4.98 x 10.5 mm, Number of individual labels: 10

#### Zack marker strip - ZB 22:UNBEDRUCKT - 0811862



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 22 mm, lettering field size: 10.5 x 21.8 mm, Number of individual labels: 4

### Spare parts

#### Fuse set - FUSE/TE5/6.3A/T-10PCS - 2905605



Plug-in fuse (TE5®); nominal current: 6.3 A; tripping behavior: slow-blow (F)

## Active module - VIP-8RPT-24DC/21/DO/FU/PLC - 2903601

### Accessories

Single relay - REL-MR- 24DC/21 - 2961105



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 24 V DC