

Interface units

Interface units

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Weidmüller interface units

B Given the need to reduce costs in electrical cabinet construction, interface units offer an alternative to wiring concepts with point-to-point wiring. The prime function of interface units is to act as a trouble-free adapter element between standardised plug connectors and point-to-point wiring or other connection systems.

Interface units consist of the following individual components:

- Extruded profile for inserting the PCB
- End plates for fitting on the mounting rail
- Clip-on feet for locking on standardised mounting rails TS 32 and TS 35
- PCB with connecting and indicating elements, DIN plug connectors and ample marking facilities for equipment identification

The plug connectors used for the interface units can be divided into the following groups:

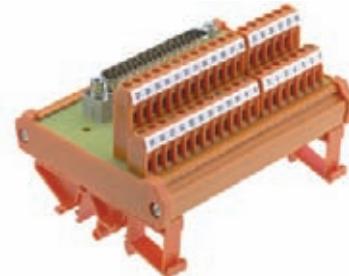
- Plug connector to IEC 603-1/DIN 41651
- Sub-miniature plug connectors (SUB-D) to IEC 807-2/DIN 41652
- Plug connectors for PCBs to IEC 603/DIN 41612 and DIN 41615
- ELCO plug connectors for hazardous area applications

Advantages of the interface units:

- Two- and three-tier PCB terminals save space
- Conventional point-to-point wiring only needed on one side, thus saving costs
- Greater safety, preventing wiring errors
- Optional: status LED on the interface units
- Rapid troubleshooting with additional test and measuring devices
- Simplified setup and documentation

Interface units let users implement pioneering concepts in switchboard design with potential for rationalisation. Customised wiring concepts can also be solved rationally through the use of special interface units.

Pre-assembled leads with the corresponding plug connector systems are used as the connection between the series-connected controller and the interface unit. This provides the greatest savings for the user. The use of interface units reduces the individual circuitry, which reduces labour and installation time and also hidden costs, in particular a reduction material costs following a reduction in the number of individual cables and leads, cable ducts, terminals and terminal blocks required. The transition to point-to-point wiring takes place directly at the interface element.



Users have a choice between screw, tension clamp or spade connections for connecting actuators and/or sensors. As an option, interface units can also integrate additional functions such as status indicator, signal disconnector, fuses or shielding. Identification systems make it easier to trace the signals to the corresponding element.

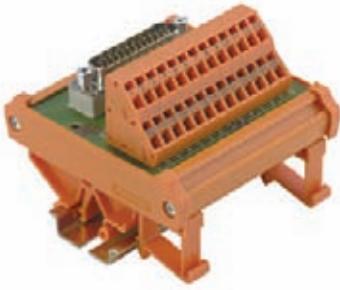
RSF interface units for pre-assembled leads with plug connectors to IEC 603-1/DIN 41651



Passive interface for 10 ... 64 signals for adapting pre-assembled leads with plug connectors to IEC 603-1 / DIN 41651 to screw or tension clamp connection systems.

When used in combination with a status indicator (LED), this guarantees rapid information about the switching state of incoming and outgoing signals.

RSSD interface units for pre-assembled leads with SUB-D plug connectors to IEC 807-2/DIN 41652



Passive interface unit for 9 ... 50 signals for adapting pre-assembled leads with SUB-D plug to IEC 807-2/DIN 41652 to screw or tension clamp connection systems.

The components are supplied with either female or male connectors. A spacer block between plug connector and PCB cushions the mechanical forces occurring between the connected cables. RSSD interface units can be supplied with an earth terminal for shielded leads as an optional feature. An additional test point simplifies testing and measuring during initial setup and when servicing the system.

RS VERT interface units as voltage distributor



Passive interface units for the distribution of dc supply voltage. These interface units are available in three designs for distribution to 8, 16 and 72 connections, for positive and negative voltages in each case:

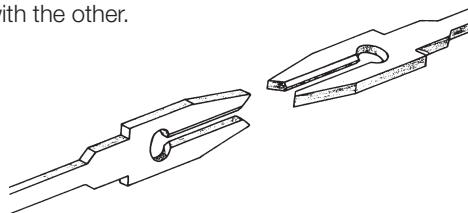
- 8x and 16x distributor just 45 mm wide overall, 72x distributor 100 mm wide
- Fed by two connection elements for positive and negative voltages in each case
- Fits on TS32/35 mounting rails

RS VERT voltage distributors can also be used in small enclosures and provide clearly organised distribution.

RS ELCO interface units for pre-assembled leads with hermaphrodite plug connector system



Weidmüller's passive interface units are used for adapting hermaphrodite ELCO multi-pole connectors, for input and output, to screw terminal systems. The hermaphrodite contact is a fork-type contact that is identical in design on both sides of the connection, but with one fork turned through 90° to engage with the other.



RS RJ45 interface units for connecting data lines



The RS RJ45 interface module offers the user a convenient, easy-to-use interface for connecting modems, notebooks and other office equipment in the electrical cabinet.

The module converts the standard RJ45 connection to a screw terminal system or acts as a coupling to connect data leads by means of two RJ45 sockets. For data transmission rates of up to 100 Mbps, it is advisable to connect one end of the shield of the data cable to a protective earth. The interface modules can be fitted on TS 32/35 mounting rails.

The advantages of card holders

Card holders for adapting Euro cards to plug connectors to IEC 603/DIN 41612 and DIN 41617

B

Card holders are used for rapid adaptation of electronic components. Just like interface units, plug connectors to IEC 803/DIN 41612/41617 are adapted to screw or spade connections on the card holder.



A card holder has the following features:

- Board with PCB terminals and standardised plug connectors to accommodate an electronic module in 19" Euro format, 160 x 100 mm or 233 x 1260 mm
- Holding post and locking mechanism for fixing the card
- Mounting plate and mounting feet for direct assembly or fitting on mounting rails

SKH2 card holders provide ideal design and functions:

- 19" Euro cards covered completely from the back
- Eject mechanism for one-hand operation
- Card can be fixed with a screw at the front, as in a 19" rack

Card holders can be used in industrial applications for quickly adapting various 19" modules while saving the cost of a 19" component rack. Racks also take up more space and can usually only be accessed from behind. In addition, they often lack screw or tension clamp terminals for external circuits.

Card holders are used when

- there are just a few cards to be accommodated and connected,
- the PCB card is in a remote location, where wiring is inconvenient,
- there is a need to extend older systems by adding more electronic modules.

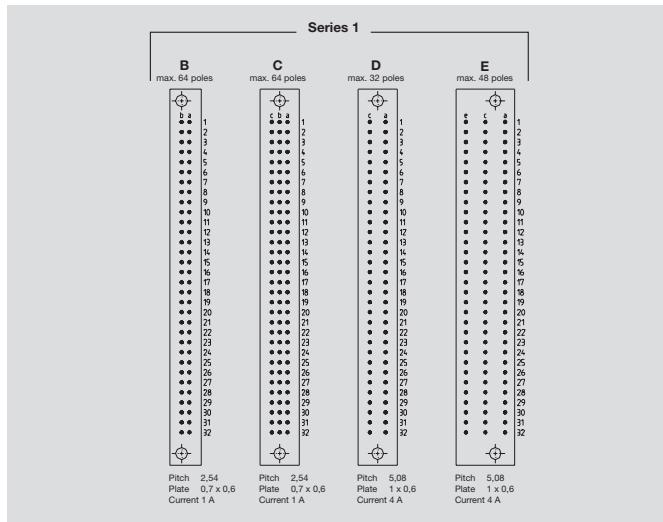
Other typical applications include testing devices in production processes and laboratories, where it is important to be able to replace the PCB quickly and handle the connection planes without difficulty.

Standards

The products meet the following standards:

- EN 50178 Electrical equipment for use in high-current installations
- DIN VDE 0109 Isolation coordination in low voltage systems including creepage and clearance paths for PCB assemblies

Plug connector types to IEC 603/DIN 41612



Series 1

Plug connectors in this series are available in multi-pole design with small contact gaps and high current load of 1 A. Versions with up to 4 A contact current are also available on the market with a pitch size of 5.08 mm and fewer poles (up to 48 poles).

Design B

64-pole plug connector with a and b row configuration and max. contact current load 1A. Rated voltage 125 V to IEC 664/EN 50178. There is also a version with 32 poles where only the even numbered poles are used.

Design C

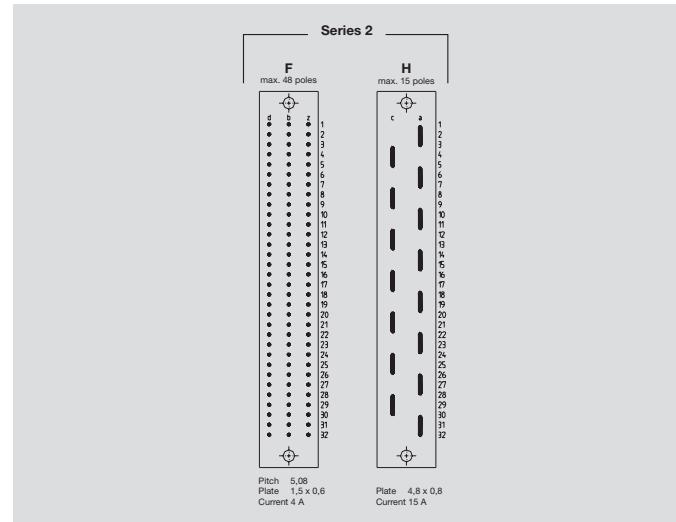
Extension of type B with row c also configured to produce a 96-pole plug connector. There is also a C 64 version where only the outer rows c and a are used. A further reduction in configuration to the even numbered poles results in type C 32, with a vertical and horizontal contact pitch size of 5.08 mm.

Design D

Dimensions and contact arrangements identical with type C 32. The reinforced contacts can take up to 4 A.

Design E

Extension of type D32, with contact row e configured to produce a 48-pole version. This plug connector with 4 A contact current in pitch size 5.08 mm is rated for high current loads. All even numbered poles in contact rows e, c and a are configured.



Series 2

This series differs from series 1 with different pitch sizes of 5.08 mm for the back connections and 3.81 mm for the contact rows on the connector face. The plastic housing is higher at the back to increase the creepage paths (metal plate, board). The wiring plane is therefore different to series 1. All contacts are rated for a current load of 4 A. The attachment holes are arranged centrally at the outer edge of the sockets.

Design F

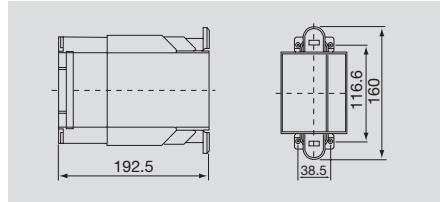
This unit offers 48 poles with complete configuration of contact rows d, b and z. Also available are 32-pole versions configured using rows z and b or z and d. The significant feature of the z and b 32-pole version is improved creepage and clearance paths.

Design H

Same dimensions as type F, configured with 11- or 15-pole high-current contacts. The connection geometry differs from the other types. The contacts can take up to max. 15 A.

19" Euro format

- For inserting 19" rack cards with Euro format 100 x 160 mm
- Converts IEC 603/ DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Mechanical lever for releasing and ejecting card
- 19" units can be fixed with screws at front
- Protective cover on rear of board
- Direct mounting or optional rail mounting on TS35

SKH2 F48**Technical data****Connection data**

Connection on process side
Stripping length
Connection on control side

PCB terminal LP2N

7.0 mm

Plug-in connector to DIN 41617 female connector

Rated data

Conversion PCB/plug connector
Rated voltage
Rated current per connection
Test voltage (~eff)
Test torque
Storage temperature
Operating temperature
Terminal rail

1:1

250 V

4 A

1.0 kV

0.40 Nm

-40 °C...+60 °C

0 °C...+55 °C

TS 35 + direct assembly

Insulation coordination (EN 50178)

Surge category
Pollution severity

III

2

Approvals

Standards

EN 50178

Clamping range (rating- / min. / max.)

mm²

Length x width x height

mm

2.5 / 0.5 / 4

80.7 x — x 192.5

Note

160 mm wide

Ordering data

Type	Qty	Order No.
SKH2 F48 LP	1	8174880000

Note**Accessories****Note**

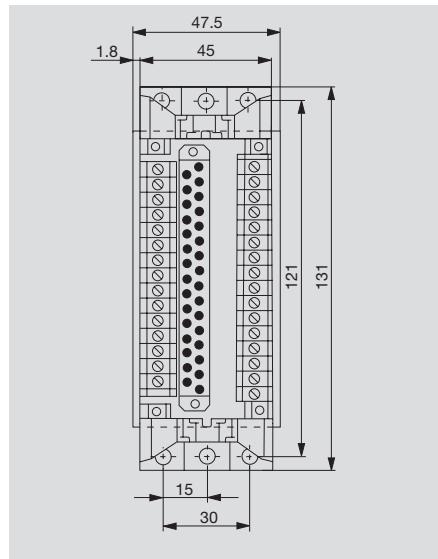
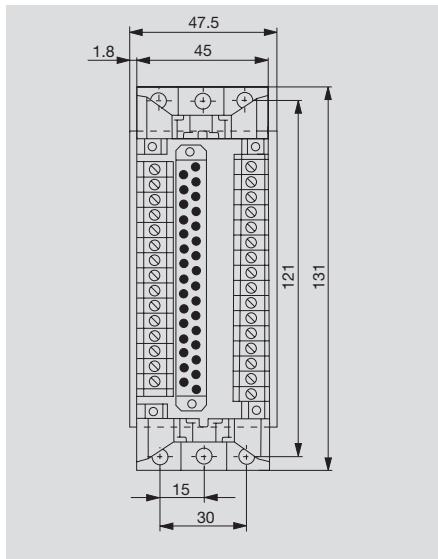
Assembly kit TS35 SKH/35 8209340000

Card holders**19" Euro format**

- For inserting cards in Euro format 100 x 160 mm
- Converts IEC 603/DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

B**Accessories:**

Fixing plate HP 0137100000 (included in scope of supply)
 Grip white ZG 0128000000
 Grip black ZG 0128060000
 Mounting plate MP 2054280000
 Mounting foot TS35 FM 0687900000

SKH 31**SKH 31 250V****Technical data****Connection data**

Connection on process side
 Stripping length
 Design/Contact complement
 Type

Rated data

Conversion PCB/plug connector
 Rated voltage/Rated current per connection
 Test voltage (~eff)/Test torque
 Storage temperature
 Operating temperature
 Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity
 Standards

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

Note**PCB terminal LP 5.08**

7.0 mm
 DIN41617 31-pole /
 PCB locking 1 clip

1:1
 125 V AC/ 150 V DC / 5 A
 1.3 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 47.5 x 131 x 144

PCB terminal LP 5.08

7.0 mm
 DIN41617 31-pole /
 PCB locking 1 clip

1:1
 250 V / 5 A
 1.5 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 47.5 x 131 x 144

Ordering data

PCB locking 1 clip

Type	Qty.	Order No.
SKH 31 LP RH1	1	0586661001

Note

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

Type	Qty.	Order No.
SKH 31 LP 250VAC RH1	1	0648661001

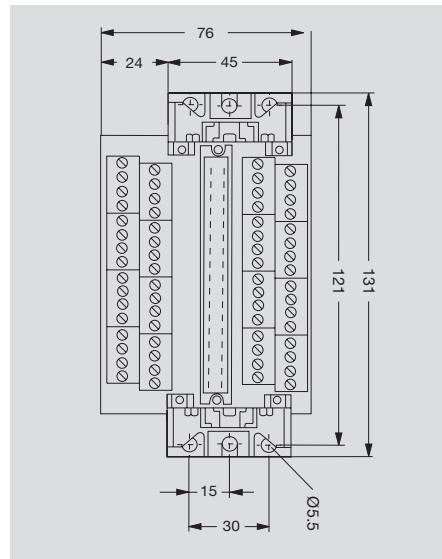
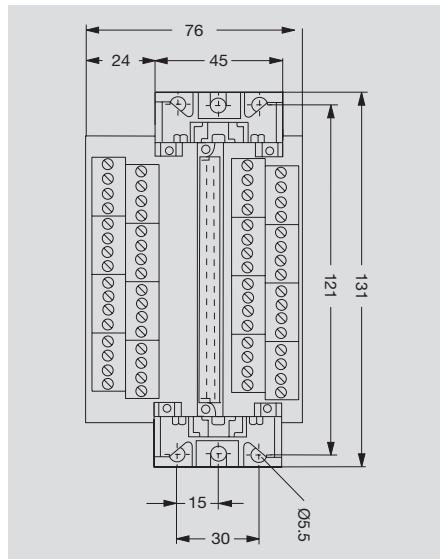
Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

19" Euro format

- For inserting cards in Euro format 100 x 160 mm
- Converts IEC 603/DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

Accessories:

Fixing plate HP 0137100000 (included in scope of supply)
 Grip white ZG 0128000000
 Grip black ZG 0128060000
 Mounting plate MP 2054280000
 Mounting foot TS35 FM 0687900000

SKH B64**SKH C64****Technical data****Connection data**

Connection on process side
 Stripping length
 Design/Contact complement
 Type

Rated data

Conversion PCB/plug connector
 Rated voltage/Rated current per connection
 Test voltage (~eff)/Test torque
 Storage temperature
 Operating temperature
 Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity
 Standards

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

Note

PCB terminal LP2N
 7.0 mm
 IEC603 B64 /a and b
 PCB locking 2 clips

1:1
 125 V AC/ 150 V DC /2 A
 0.5 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 76 x 131 x 144

PCB terminal LP2N
 7.0 mm
 IEC603 C64 /a and c
 PCB locking 2 clips

1:1
 125 V AC/ 150 V DC /2 A
 0.5 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 76 x 131 x 144

Ordering data

PCB locking 2 clips

Type	Qty.	Order No.
SKH B64 RH2	1	0577360000
SKH C64 RH2	1	0178960000

Note

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

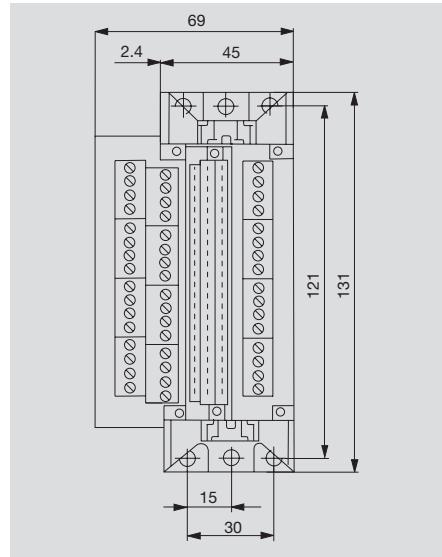
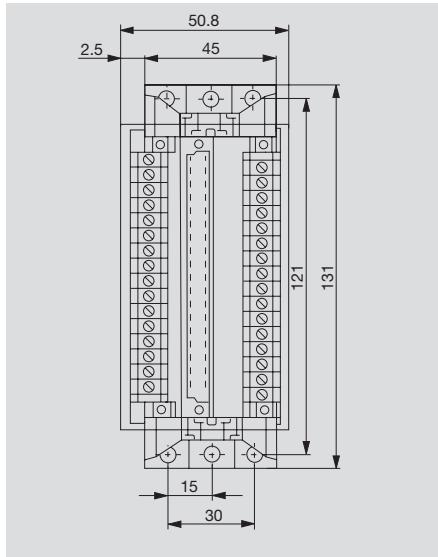
Type	Qty.	Order No.
SKH C64 RH2	1	0178960000
SKH C64 RH2	1	0646660000

Card holders**19" Euro format**

- For inserting cards in Euro format 100 x 160 mm
- Converts IEC 603/DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

B**Accessories:**

Fixing plate HP 0137100000 (included in scope of supply)
 Grip white ZG 0128000000
 Grip black ZG 0128060000
 Mounting plate MP 2054280000
 Mounting foot TS35 FM 0687900000

SKH D32**SKH E48****Technical data****Connection data**

Connection on process side
 Stripping length
 Design/Contact complement
 Type

Rated data

Conversion PCB/plug connector
 Rated voltage/Rated current per connection
 Test voltage (~eff)/Test torque
 Storage temperature
 Operating temperature
 Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity
 Standards

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

Note**PCB terminal LP 5.08**

7.0 mm

IEC603 D32 /a and c

PCB locking 1 clip

1:1

250 V / 6 A

2.0 kV/0.40 Nm

-40 °C...+60 °C

0 °C...+55 °C

TS 35 + direct assembly

III /2

EN 50178

2.5 / 0.5 / 4

50.8 x 131 x 144

PCB terminal LP2N

7.0 mm

IEC603 E48 /e, c, a

PCB locking 1 clip

1:1

125 V AC/ 150 V DC /5 A

1.3 kV/0.40 Nm

-40 °C...+60 °C

0 °C...+55 °C

TS 35 + direct assembly

III /2

EN 50178

2.5 / 0.5 / 4

69 x 131 x 144

Ordering data

PCB locking 1 clip

Type	Qty.	Order No.
SKH D32 LP 5/16 RH2	1	0586761001

Note

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

Type	Qty.	Order No.
SKH E48 LP2/LP	1	0690660000

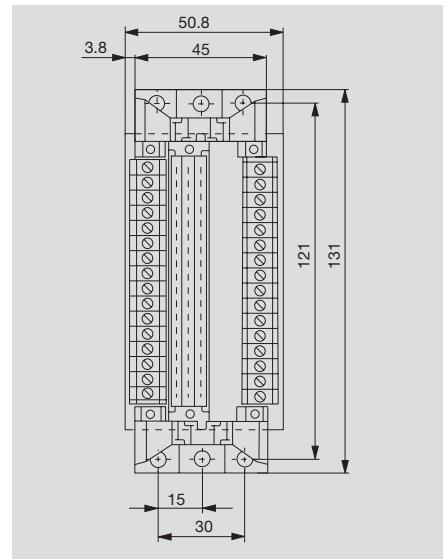
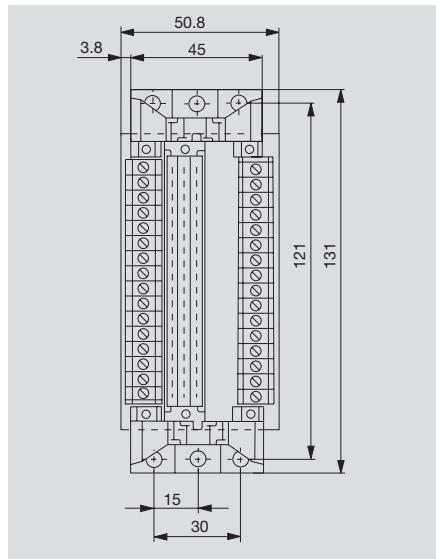
Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

19" Euro format

- For inserting cards in Euro format 100 x 160 mm
- Converts IEC 603/DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

Accessories:

Fixing plate HP 0137100000 (included in scope of supply)
 Grip white ZG 0128000000
 Grip black ZG 0128060000
 Mounting plate MP 2054280000
 Mounting foot TS35 FM 0687900000

SKH F32 Z&B**SKH F32 Z&D****Technical data****Connection data**

Connection on process side
 Stripping length
 Design/Contact complement
 Type

Rated data

Conversion PCB/plug connector
 Rated voltage/Rated current per connection
 Test voltage (~eff)/Test torque
 Storage temperature
 Operating temperature
 Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity
 Standards

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

Note**PCB terminal LP 5.08**

7.0 mm
 IEC603 F32 /z and b
 PCB locking 1 clip

1:1
 250 V / 6 A
 1.3 kV / 0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 50.8 x 131 x 144

PCB terminal LP 5.08

7.0 mm
 IEC603 F32 /z and d
 PCB locking 1 clip

1:1
 250 V / 6 A
 1.3 kV / 0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 50.8 x 131 x 144

Ordering data

PCB locking 1 clip

Type	Qty.	Order No.
SKH F32 (Z&B) LP RH2	1	0586861001

Note

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

Type	Qty.	Order No.
SKH F32 (Z&D) LP RH2	1	0586961001

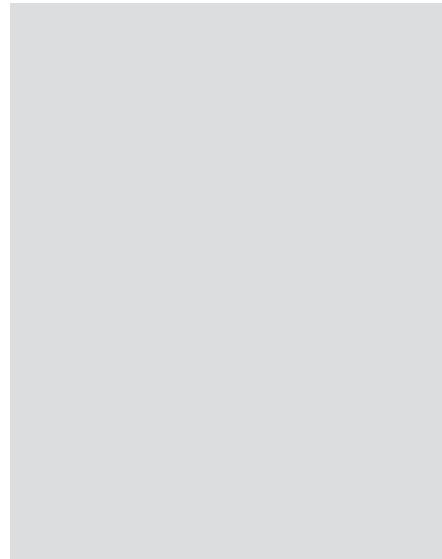
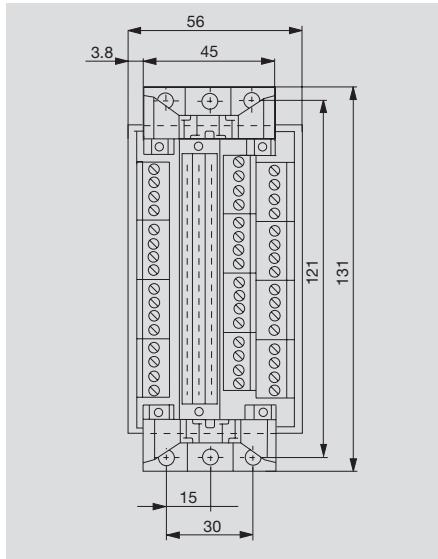
Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

Card holders**19" Euro format**

- For inserting cards in Euro format 100 x 160 mm
- Converts IEC 603/DIN 41612 or DIN 41617 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

B**Accessories:**

Fixing plate HP 0137100000 (included in scope of supply)
 Grip white ZG 0128000000
 Grip black ZG 0128060000
 Mounting plate MP 2054280000
 Mounting foot TS35 FM 0687900000

SKH F48**SKH H15****Technical data****Connection data**

Connection on process side
 Stripping length
 Design/Contact complement
 Type

Rated data

Conversion PCB/plug connector
 Rated voltage/Rated current per connection
 Test voltage (~eff)/Test torque
 Storage temperature
 Operating temperature
 Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity
 Standards

Dimensions

Clamping range (rating- / min. / max.)
 Length x width x height

Note**PCB terminal LP2N**

7.0 mm
 IEC603 F48 /z, b, d
 PCB locking 1 clip

1:1
 125 V AC/ 150 V DC /5 A
 1.3 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 56 x 131 x 144

PCB terminal LP 5.08

7.0 mm
 IEC603 H15 /
 PCB locking 1 clip

1:1
 250 V /10 A
 1.3 kV/0.40 Nm
 -40 °C...+60 °C
 0 °C...+55 °C
 TS 35 + direct assembly

III /2
 EN 50178

2.5 / 0.5 / 4
 56 x 131 x 144

Ordering data

PCB locking 1 clip

Type	Qty.	Order No.
SKH F48	1	0587060000

Note

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

Type	Qty.	Order No.
SKH H15S	1	8051300000

Mounting plate MP 2054280000
 Mounting foot TS35 FM4 0687900000

19" Double Euro format

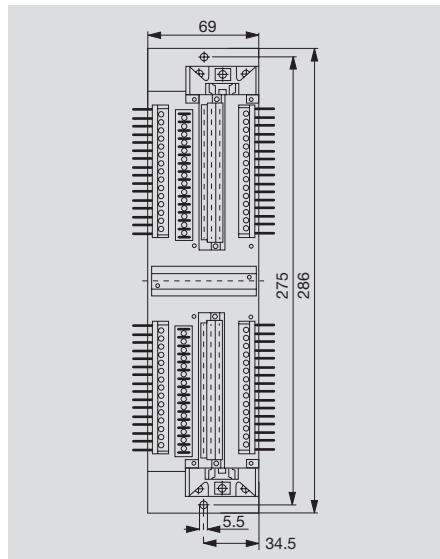
- For inserting cards in Double Euro format 233 x 160 mm
- Converts IEC 603/DIN 41612 plug-in connectors to PCB connection elements
- Direct mounting or rail mounting on TS35 with accessories

Accessories:

Fixing plate HP 0136800000 (included in scope of supply)

Grip white ZG 0128000000

Grip black ZG 0128060000

SKH (233 x 160 mm)**Technical data****Connection data**

Connection on process side

Stripping length

Design/Contact complement

Type

Rated data

Conversion PCB/plug connector

Rated voltage/Rated current per connection

Test voltage (~eff)/Test torque

Storage temperature

Operating temperature

Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity

Standards

Dimensions

Clamping range (rating- / min. / max.)

mm²

Length x width x height

mm

Note

Screw connection

7.0 mm

/z, b, d/ a and c

PCB locking 2 clips

1:1

125 V AC/ 150 V DC /5 A

1.3 kV/0.40 Nm

-40 °C...+70 °C

0 °C...+55 °C

TS 35 + direct assembly

III /2

EN 50178

IEC603 C64 a, c

2.5 / 0.5 / 4

69 x 286 x 144

IEC603 D32 a, c

2.5 / 0.5 / 4

69 x 286 x 144

Ordering data

Type	Design
PCB locking 2 clips	IEC603 C64 a, c
PCB locking 2 clips	IEC603 D32 a, c

Type	Qty.	Order No.
SKH C64*2 (A&C) RH2	1	8013120000
SKH D32*2 LP5.08/16 RH2	1	8050981001

Note

Mounting plate MP 2051430000

Mounting foot TS35 FM4 0687900000

Interface units IEC 603-1

Interface units IEC 603-1

- Pin connector with locking feature to IEC 603-1
- Tension clamp or screw connection system
- 45 or 87 mm wide
- For mounting on TS32, TS35 x 7.5 and TS35 x 15

B

RSF Z/ IEC 603-1



RSF S 45 mm/ IEC 603-1



Technical data

Connection data

Connection on process side
Stripping length
Connection on control side

PCB terminal LM2NZF

7.0 mm

Plug-in connector to IEC 603-1/ DIN 41651

PCB terminal LPK 2 H

7.0 mm

Plug-in connector to IEC 603-1/ DIN 41651

Rated data

Conversion PCB/plug connector
Rated voltage
Rated current per connection
Test voltage (~eff)
Test torque
Storage temperature
Operating temperature
Terminal rail

1:1

60 V AC/ 75 V DC

1 A

1.0 kV

-40 °C...+70 °C

0 °C...+55 °C

TS 35 + TS 32

1:1

60 V AC/ 75 V DC

1 A

1.0 kV

0.40 Nm

-40 °C...+70 °C

0 °C...+55 °C

TS 35

Insulation coordination (EN 50178)

Surge category
Pollution severity

III

2

III

2

Approvals

Standards

EN 50178

EN 50178

Clamping range (rating- / min. / max.)

mm²

1.5 / 0.5 / 2.5

1.5 / 0.5 / 2.5

Length x width x height

mm

87.0 x – x 64.0

45.0 x – x 65.5

Note

Ordering data

10-pole
14-pole
16-pole
20-pole
26-pole
34-pole
40-pole
50-pole
60-pole
64-pole

Type	Width	Order No.
RS F10 Z	50.0 mm	8537190000
RS F14 Z	50.0 mm	8537200000
RS F20 Z	65.0 mm	8537110000
RS F26 Z	80.0 mm	8537180000
RS F34 Z	110.0 mm	8537130000
RS F40 Z	115.0 mm	8537140000
RS F50 Z	145.0 mm	8537150000

Type	Width	Order No.
RS F10 LPK 2H/12	49.0 mm	8155610000
RS F14 LPK 2H/16	56.0 mm	8258980000
RS F16 LPK 2H/18	64.0 mm	8265540000
RS F20 LPK 2H/22	71.0 mm	8155600000
RS F26 LPK 2H/28	86.0 mm	8213470000
RS F34 LPK 2H/36	106.0 mm	8155590000
RS F40 LPK 2H/42	121.0 mm	8155580000
RS F50 LPK 2H/52	150.3 mm	8155570000
RS F60 LPK 2H/62	180.0 mm	8259000000
RS F64 LPK 2H/66	186.0 mm	8155550000

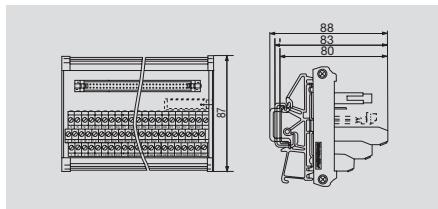
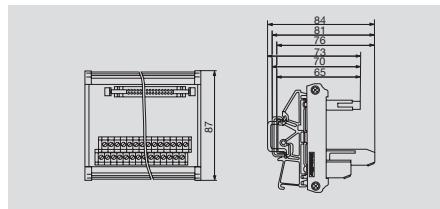
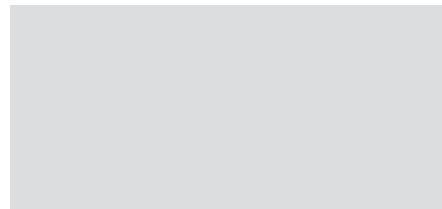
Note

Accessories

Note

Interface units IEC 603-1

- Pin connector with locking feature to IEC 603-1
- Tension clamp or screw connection system
- 87 mm wide
- For mounting on TS32, TS35 x 7.5 and TS35 x 15

RSF S/ IEC 603 -1**RSF S/ IEC 603-1****Technical data****Connection data**

Connection on process side
Stripping length
Connection on control side

PCB terminal LP2N
7.0 mm
Plug-in connector to IEC 603-1/ DIN 41651

PCB terminal LP3R
7.0 mm
Plug-in connector to IEC 603-1/ DIN 41651

Rated data

Conversion PCB/plug connector
Rated voltage
Rated current per connection
Test voltage (~eff)
Test torque
Storage temperature
Operating temperature
Terminal rail

1:1
60 V AC/ 75 V DC
1 A
1.0 kV
0.50 Nm
-40 °C...+60 °C
0 °C...+55 °C
TS 35 + TS 32

1:1
60 V AC/ 75 V DC
1 A
1.0 kV
0.50 Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35 + TS 32

Insulation coordination (EN 50178)

Surge category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

Clamping range (rating- / min. / max.)

mm²

Length x width x height

mm

2.5 / 0.5 / 4
87.0 x — x 70.0

2.5 / 0.5 / 4
87.0 x — x 76.0

Note**Ordering data**

10-pole
14-pole
16-pole
20-pole
26-pole
34-pole
40-pole
50-pole
60-pole
64-pole

Type	Width	Order No.
RS F10 LP2N 5/10	50.0 mm	0224961001
RS F14 LP2N 5/14	50.0 mm	0225061001
RS F16 LP2N 5/16	55.0 mm	0225161001
RS F20 LP2N 5/20	65.0 mm	0224261001
RS F26 LP2N 5/26	80.0 mm	0224861001
RS F34 LP2N 5/34	110.0 mm	0224361001
RS F40 LP2N 5/40	115.0 mm	0224461001
RS F50 LP2N 5/50	145.0 mm	0224561001
RS F60 LP2N 5/60	180.0 mm	0224661001
RS F64 LP2N 5/64	180.0 mm	0224761001

Type	Width	Order No.
RS F10 LP3R 3/12	40.0 mm	8012850000
RS F14 LP3R 3/14	45.0 mm	8012860000
RS F16 LP3R 3/18	50.0 mm	8012870000
RS F20 LP3R 3/21	50.0 mm	8012910000
RS F26 LP3R 3/27	55.0 mm	8012920000
RS F34 LP3R 3/36	70.0 mm	8012930000
RS F40 LP3R 3/42	80.0 mm	8012940000
RS F50 LP3R 3/51	95.0 mm	8012950000
RS F60 LP3R 3/63	115.0 mm	8012960000
RS F64 LP3R 3/66	120.0 mm	8012970000

Note**Accessories****Note**

Interface units IEC 807-2

Interface units IEC 807-2

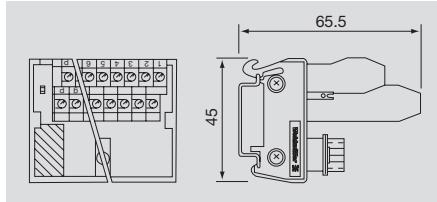
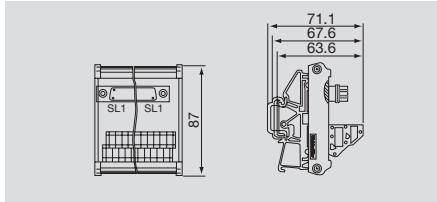
- Pin and socket connector with screw locking system UNC 4/40
- Tension clamp or screw connection system
- 45 or 87 mm wide
- For mounting on TS32, TS35 x 7.5 and TS35 x 15

B

RSSD Z/ SUB-D



RSSD S/ SUB-D



Technical data

Connection data

Connection on process side
Stripping length
Connection on control side

PCB terminal LM2NZF

7.0 mm
D-SUB to IEC 807-2

PCB terminal LPK 2 H

7.0 mm
D-SUB to IEC 807-2

Rated data

Conversion PCB/plug connector
Rated voltage
Rated current per connection
Test voltage (~eff)
Test torque
Storage temperature
Operating temperature
Terminal rail

1:1
125 V AC/ 150 V DC
1.5 A
1.0 kV
-40 °C...+70 °C
0 °C...+55 °C
TS 35 + TS 32

1:1
125 V AC/ 150 V DC
1.5 A
1.0 kV
0.40 Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35

Insulation coordination (EN 50178)

Surge category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

Clamping range (rating- / min. / max.)

mm²

1.5 / 0.5 / 2.5

Length x width x height

mm

45.0 x — x 65.5

87.0 x — x 63.6

Note

Ordering data

Male connectors
Male connectors
Male connectors
Male connectors
Male connectors
Female connectors
Female connectors
Female connectors

Type	Width	Order No.
RS SD9 SZ	45.0 mm	8537260000
RS SD15 SZ	60.0 mm	8537390000
RS SD25 SZ	80.0 mm	8537370000
RS SD37 SZ	110.0 mm	8537240000
RS SD50 SZ	145.0 mm	8537350000
RS SD9 BZ	45.0 mm	8537320000
RS SD15 BZ	60.0 mm	8537400000
RS SD25 BZ	80.0 mm	8537380000
RS SD37 BZ	110.0 mm	8537250000

Type	Width	Order No.
RS SD9S UNC LPK2	50.0 mm	8259010000
RS SD15S UNC LPK2	61.0 mm	8233350000
RS SD25S UNC LPK2	86.0 mm	8155650000
RS SD37S UNC LPK2	116.0 mm	8155660000
RS SD50S UNC LPK2	154.0 mm	8155670000
RS SD9B UNC LPK2	50.0 mm	8216480000
RS SD15B UNC LPK2	61.0 mm	8209730000
RS SD25B UNC LPK2	86.0 mm	8155620000
RS SD37B UNC LPK2	116.0 mm	8155630000

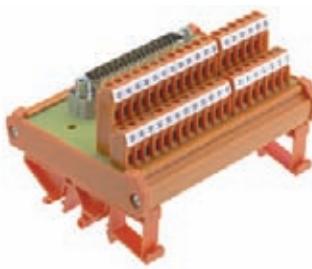
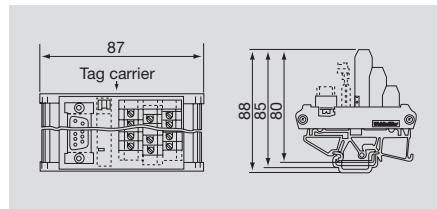
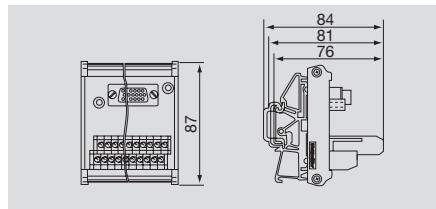
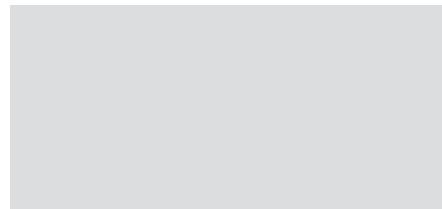
Note

Accessories

Note

Interface units IEC 807-2

- Pin and socket connector with screw locking system UNC 4/40
- PCB connection element with screw connection
- Clip-on foot for mounting on TS32, TS35 x 7.5 and TS35 x 15

RSSD S/ SUB-D**RSSD S/ SUB-D****Technical data****Connection data**

Connection on process side
Stripping length
Connection on control side

PCB terminal LP2N
7.0 mm
D-SUB to IEC 807-2

PCB terminal LP3R
7.0 mm
D-SUB to IEC 807-2

Rated data

Conversion PCB/plug connector
Rated voltage
Rated current per connection
Test voltage (~eff)
Test torque
Storage temperature
Operating temperature
Terminal rail

1:1
125 V AC/ 150 V DC
1.5 A
1.0 kV
0.50 Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35 + TS 32

1:1
125 V AC/ 150 V DC
1.5 A
1.0 kV
0.50 Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35 + TS 32

Insulation coordination (EN 50178)

Surge category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

Clamping range (rating- / min. / max.)

mm²

2.5 / 0.5 / 4

Length x width x height

mm
87.0 x — x 76.0

2.5 / 0.5 / 4
87.0 x — x 80.0

Note**Ordering data**

Male connectors
Male connectors
Male connectors
Male connectors
Male connectors
Female connectors
Female connectors
Female connectors
Female connectors

Type	Width	Order No.
RS SD9S UNC 4.40 LP2N	45.0 mm	8003901001
RS SD15S UNC 4.40	60.0 mm	8005201001
RS SD25S UNC 4.40 LP2N	80.0 mm	8005181001
RS SD37S UNC 4.40 LP2N	110.0 mm	8003881001
RS SD50S UNC 4.40 LP2N	154.0 mm	8005161001
RS SD9B UNC 4.40 LP2N	45.0 mm	8003911001
RS SD15B UNC 4.40 LP2N	60.0 mm	8005211001
RS SD25B UNC 4.40 LP2N	80.0 mm	8005191001
RS SD37B UNC 4.40 LP2N	110.0 mm	8003891001
RS SD50B UNC 4.40 LP2N	154.0 mm	8005171001

Type	Width	Order No.
RS SD9S LP3R	40.0 mm	8019930000
RS SD15S LP3R	45.0 mm	8019940000
RS SD25S LP3R	60.0 mm	8019950000
RS SD37S LP3R	80.0 mm	8019960000
RS SD50S LP3R	100.0 mm	8019970000
RS SD9B LP3R	40.0 mm	8019880000
RS SD15B LP3R	45.0 mm	8019890000
RS SD25B LP3R	60.0 mm	8019900000
RS SD37B LP3R	80.0 mm	8019910000
RS SD50B LP3R	100.0 mm	8019920000

Note**Accessories****Note**

Supply voltage distributor modules

Supply voltage distributor modules

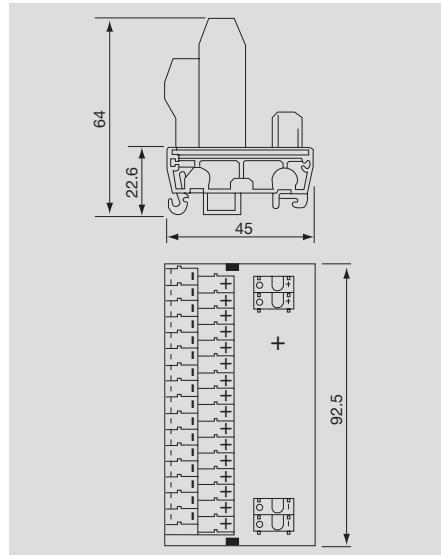
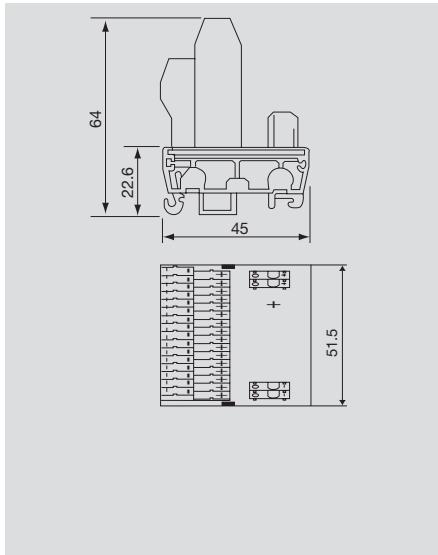
- Distribution module for 2 supply connections to 8 or 16 potential distribution terminals
- 45 mm wide
- Potential distributor designed as 2-tier connection element
- Total current max. 10 A
- For mounting on rail TS 35

B

RS VERT 8 LPK2



RS VERT 16 LPK2



Technical data

Connection data

Connection on process side
Stripping length
Conversion PCB/plug connector

Rated data

Rated voltage
Total current feed, max.
Electrical distribution, plus/minus
Storage temperature
Operating temperature
Housing/Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity

PCB terminal LPK 2

7.0 mm
8-way supply voltage distributor +/- / 2-pole feed

24 V AC/DC

10 A

+/- potential

-40 °C...+60 °C

0 °C...+55 °C

RS 45 section /TS 35

PCB terminal LPK 2

7.0 mm
16-way supply voltage distributor +/- / 2-pole feed

24 V AC/DC

10 A

+/- potential

-40 °C...+60 °C

0 °C...+55 °C

RS 45 section /TS 35

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

1.5 / 0.5 / 2.5
45 x 92.5 x 64

Note

III / 2

Ordering data

Type	Qty.	Order No.
RS VERT8 LPK2	1	8252010000

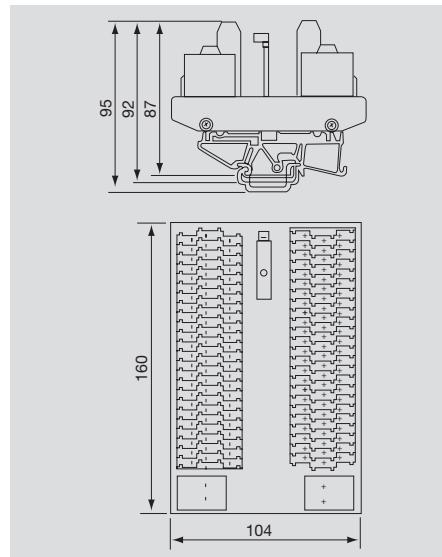
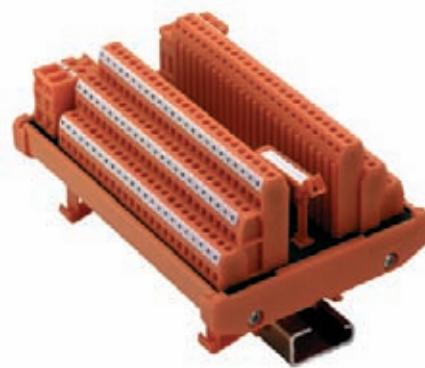
Type	Qty.	Order No.
RS VERT16 LPK2	1	8234620000

Note

Supply voltage distributor modules

- Distribution module for 2 supply connections to 72 potential distribution terminals
- Potential distributor designed as 3-tier connection element
- Total current max. 20 A
- For mounting on rail TS 32/35

RS VERT 144 LPK3



Technical data

Connection data

Connection on process side
Stripping length
Conversion PCB/plug connector

Rated data

Rated voltage
Total current feed, max.
Electrical distribution, plus/minus
Storage temperature
Operating temperature
Housing/Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity

Dimensions

Clamping range (rating- / min. / max.)
Length x width x height

Note

Ordering data

PCB terminal LPK 3

7.0 mm
72-way supply voltage distributor +/- / 2-pole feed

250 V AC/DC

20 A

+/- potential

-40 °C...+60 °C

0 °C...+55 °C

RS 100 section /TS 35 + TS 32

III / 2

1.5 / 0.5 / 2.5

104 x 160 x 87

Note

Interface units with RJ45 plug connectors

Interface units with RJ45 plug connectors

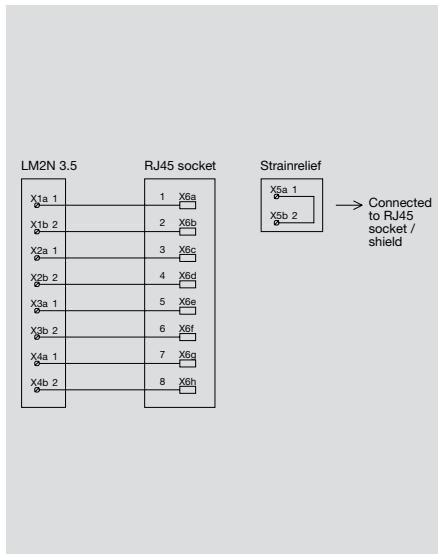
- Direct coupling of PC and modem in control cabinet
- Connection of typical office equipment
- Data rate Cat5 100 Mbit
- Available as RJ 45/screw connection conversion or as RJ 45 coupling
- For mounting on rail TS 32/35

B

RS RJ45



RS RJ45 2WAY



X1.1	—	X2.1
X1.2	—	X2.2
X1.3	—	X2.3
X1.4	—	X2.4
X1.5	—	X2.5
X1.6	—	X2.6
X1.7	—	X2.7
X1.8	—	X2.8
X3.1	—	X4.1
X3.2	—	X4.2
X3.3	—	X4.3
X3.4	—	X4.4
X3.5	—	X4.5
X3.6	—	X4.6
X3.7	—	X4.7
X3.8	—	X4.8

Technical data

Connection data

Connection on process side
Connection on control side
Design
Conversion PCB/plug connector

Rated data

Rated current per connection
Number of signals
Contact material
Storage temperature
Operating temperature
Housing
Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note

Ordering data

Type	Qty.	Order No.
RS RJ45	10	8611320000

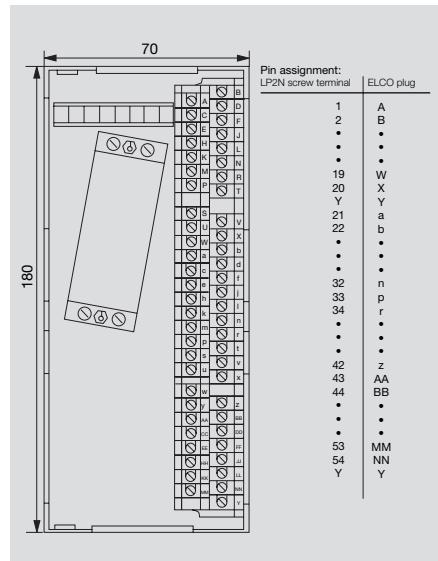
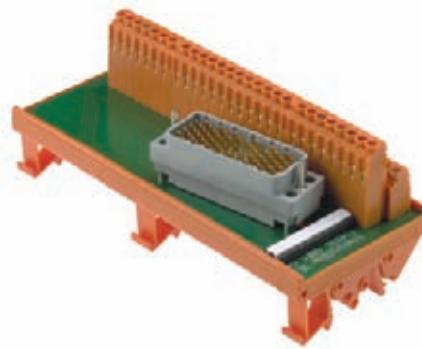
Type	Qty.	Order No.
RS RJ45 2WAY	1	8555440000

Note

ELCO interface units

- Conversion from screw connection system to hermaphroditic ELCO plug-in connector
- Cable easily fitted thanks to angled arrangement of the ELCO plug on the left or right side of the module
- High shock and vibration resistance
- Suitable for low currents
- Consecutive numbering
- For mounting on TS32, TS35 x 7.5 and TS 35 x 15

RS ELCO



Technical data

Connection data

Connection on process side
Design
Stripping length
Connection on control side

Rated data

Rated voltage
Rated current per connection
Test voltage (~eff)
Storage temperature
Operating temperature
Housing
Terminal rail

Insulation coordination (EN 50178)

Surge category/Pollution severity

Dimensions

Clamping range (rating- / min. / max.)
Length x width x height

Note

PCB terminal LP2N

ELCO connector 56-pole

7.0 mm

ELCO type 8016

125 V AC/ 150 V DC

1.5 A

1.5 KV

-40 °C...+70 °C

0 °C...+55 °C

RS 70 section

TS 35 + TS 32

III / 2

left right

2.5 / 0.5 / 4 2.5 / 0.5 / 4

70 x 160 x 76 70 x 160 x 76

Ordering data

Type	Qty.	Order No.
left	1	1149361001
right	1	1149461001
at left	1	6253780000
at right	1	6253790000

Note

PLC system interface

Wiring and circuitry is becoming increasingly complicated as a result of the growing complexity of machines and systems in process, automation and building services control systems. Conventional connections (point-to-point wiring) between PLC controllers and peripheral devices results in high installation and commissioning costs. The Weidmüller range of PLC system interface products provides the user with a quickly and easily installed output level for SIEMENS SIMATIC® S7.

The specific front adapters replace the usual screw terminal technology used on the PLC input/output cards. 40- or 10-pole connectors transfer the PLC signals to the active or passive components via pre-assembled control leads.

The PLC signals are converted either

- in double word mode to a 40-pole ribbon cable connector,
or
- in byte mode to 4 ribbon cable connectors each with 10 poles.
- PLC I/O cards usually have two connection systems:
- screw clamp,
- crimp connectors.

In both cases, the signals have to be wired individually with the corresponding connection elements.

Disadvantages of individual wiring:

- High assembly costs
- The risk of wiring mistakes increases with the number of individual wires at one point
- Requires considerable space in the switchboard
- High installation workload
- Time-consuming routing and assembly of connecting leads
- High labelling and documentation workload

System advantages

• Fast

- Reduced planning and design times
- Time-saving installation
- Less time required for commissioning and troubleshooting
- Minimised wiring effort on site thanks to plug-type connectors

• Safe

- Rules out the risk of wiring mistakes
- Clear organisation in the switchboard (system cable instead of individual wires)
- Marking corresponds with PLC
- Additional individual marking

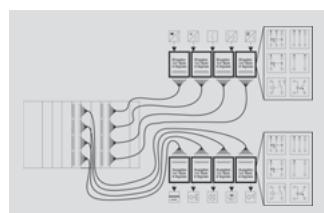
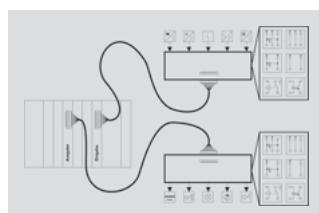
• Variable

- Multitude of about 40 different I/O components
- Variable cable lengths
- Modular design of all components
- 1 x 4 byte and 4 x 1 byte system designs without signal routing module
- Functions mixed by byte to an input or output level
- Expansion possible without difficulty
- Flexibility due to simple swapping of input/output interfaces

• Small

- Saves space in cable ducts
- Small module widths
- No terminal levels

Use of PLC front adapters



SIEMENS SIM S7/300 and SIM S7/400

Front adapters SIM S7/300 and SIM S7/400 are contacted quickly and safely to the input and output modules of Siemens Simatic® S7-300 and S7-400 controllers.

Pre-assembled control leads with 10- or 40-pole socket connectors to IEC 603-1/DIN 41651 connect the PLC input/output groups to the passive and active interface units of the PLC system interface.

Electrical isolation of the power supply is accomplished by means of plug-in cross connection on PLC adapters and input/output modules with the following options:

- 1 x 32 signals
- 2 x 16 signals
- 4 x 8 signals

There are two options for the power feed to PLC I/O cards:

- Direct feed on the front adapter via screw terminals
- Feed via passive/active components by means of pre-assembled control wire (max. 1A/byte)

For the 32-bit PLC components, there is a choice of front adapters with four 10-pole < 4 x 1 byte structure or 40-pole control lead < 1 x 4 byte structure. This enables fast, cost-efficient installation and allows wiring mistakes to be minimised and commissioning times to be reduced.

Pole configuration

	SIM S7/300...KONV	SIM S7/400...KONV
Front adapter	Socket 4 x 10 poles	1 x 40 poles 4 x 10 poles 1 x 40 poles
Pin 1	X 1.9 B0+	X 1.32 B0+
Pin 2	X 1.1	X 1.40
Pin 3	X 1.2	X 1.39
Pin 4	X 1.3	X 1.38
Pin 5	X 1.4	X 1.37
Pin 6	X 1.5	X 1.36
Pin 7	X 1.6	X 1.35
Pin 8	X 1.7	X 1.34
Pin 9	X 1.8	X 1.33
Pin 10	X 1.10 B0-	X 1.31 B0-
Pin 11	X 2.9 B1+	X 1.22 B1+
Pin 12	X 2.1	X 1.30
Pin 13	X 2.2	X 1.29
Pin 14	X 2.3	X 1.28
Pin 15	X 2.4	X 1.27
Pin 16	X 2.5	X 1.26
Pin 17	X 2.6	X 1.25
Pin 18	X 2.7	X 1.24
Pin 19	X 2.8	X 1.23
Pin 20	X 2.10 B1-	X 1.21 B1-
Pin 21	X 3.9 B2+	X 1.12 B2+
Pin 22	X 3.1	X 1.20
Pin 23	X 3.2	X 1.19
Pin 24	X 3.3	X 1.18
Pin 25	X 3.4	X 1.17
Pin 26	X 3.5	X 1.16
Pin 27	X 3.6	X 1.15
Pin 28	X 3.7	X 1.14
Pin 29	X 3.8	X 1.13
Pin 30	X 3.10 B2-	X 1.11 B2-
Pin 31	X 4.9 B3+	X 1.2 B3+
Pin 32	X 4.1	X 1.10
Pin 33	X 4.2	X 1.9
Pin 34	X 4.3	X 1.8
Pin 35	X 4.4	X 1.7
Pin 36	X 4.5	X 1.6
Pin 37	X 4.6	X 1.5
Pin 38	X 4.7	X 1.4
Pin 39	X 4.8	X 1.3
Pin 40	X 4.10 B3-	X 1.1 B3-
Pin 41		X 4.2
Pin 42		X 4.3
Pin 43		X 4.4
Pin 44		X 4.5
Pin 45		X 4.6
Pin 46		X 4.7
Pin 47		X 4.8
Pin 48		X 1.10 B0-
Pin 48		X 2.10 B1-
Pin 48		X 3.10 B2-
Pin 48		X 4.10 B3-
Plug-in cross connectors	B0+/B1+ B1+/B2+ B2+/B3+ B0-/B1- B1-/B2- B2-/B3-	B0+/B1+ B1+/B2+ B2+/B3+ B0+/B1+ B1+/B2+ B2+/B3+

PLC front adapter for SIEMENS S7

PLC front adapter for SIEMENS S7

- Pre-assembled control cable
- Control cable 1x40- or 4x10 pole in 4 standard lengths
- Separate feeding of the supply voltage via screw connection terminals
- Outstanding cross connectability using ZQV system
- Versatile accessories
- Inexpensive coupling of the interface modules

B

Front adapter for SIEMENS S7 300 E/A-modules

Digital input:

S7/300 6ES7 321-1BL00-0AA0, 32DI

Digital output :

S7/300 6ES7 322-1BL00-0AA0, 32DO

Digital input/output:

S7/300 6ES7 323-1BL00-0AA0, 16DI/16DO

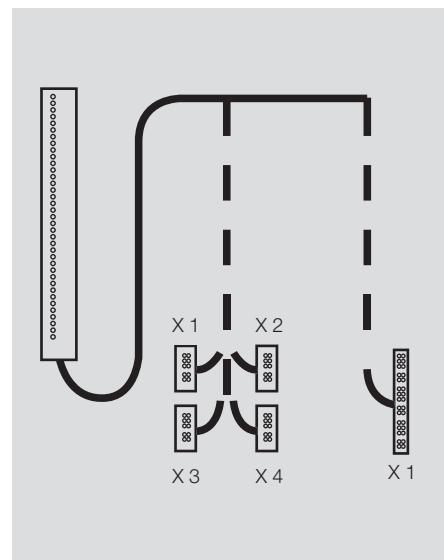
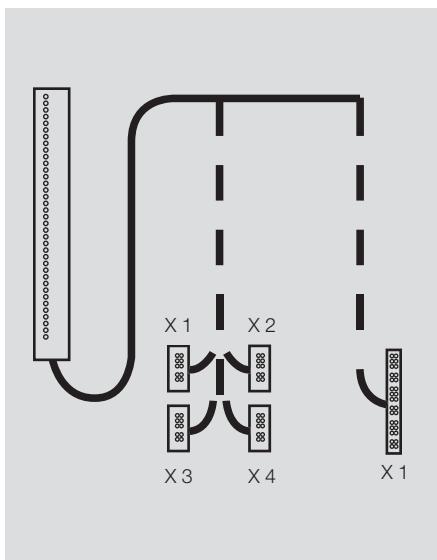
SIEMENS S7/300 1 x 4 Byte

Simatic S7/300 1x4 Byte



SIEMENS S7/300 4 x 1 Byte

Simatic S7/300 4x1Byte



Technical data

Connection data

Connection on process side
Type of connection

Design

Configuration of single conductor
Connection system, supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Current-carrying capacity/ cable 10-pole/Line, 40-pole
Voltage supply/Byte discon.
Total current feed, max.

Dimensions

Clamping range (rating- / min. / max.)
Length x width x height

Note

Ordering data

2 m control line
2.5 m control line
3 m control line
5 m control line

Note

SIEMENS front panel housing

1x40-pole pre-assembled cable with IEC603/1 plug-in connector
1x40-pole pre-assembled cable with female connector

7-core control line AWG 26/7

PCB screw connection terminals

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/26 A/ dT = 20 K

yes

16 A

SIEMENS front panel housing

4 x 10-pole pre-assembled cable with IEC603/1 plug-in connector
4x10-pole pre-assembled cable with 10-pole female connector

7-core control line AWG 26/7

PCB screw connection terminals

32 / 4x1 byte

60 V AC/ 75 V DC

1 A

11.5 A/ dT = 20 K /

yes

16 A

115 x 22 x 32

Type Qty. Order No.

Type	Qty.	Order No.
SIM S7/300 FB40 2.0M	1	8433290200
SIM S7/300 FB40 2.5M	1	8433290250
SIM S7/300 FB40 3.0M	1	8433290300
SIM S7/300 FB40 5.0M	1	8433290500

Type	Qty.	Order No.
SIM S7/300 FB4*10 2.0M	1	8433310200
SIM S7/300 FB4*10 2.5M	1	8433310250
SIM S7/300 FB4*10 3.0M	1	8433310300
SIM S7/300 FB4*10 5.0M	1	8433310500

PLC front adapter for SIEMENS S7

- Pre-assembled control cable
- 1x40-pole or 4x10-pole cables in 4 standard lengths
- Separate feeding of supply voltage via screw connection terminals
- Outstanding cross connectability using ZQV system
- Versatile system accessories
- Inexpensive coupling of interface modules

Front adapter for SIEMENS S7 400 I/O modules

Digital input:

S7/400 6ES7 421-1BL00-0AA0, 32DI

Digital output:

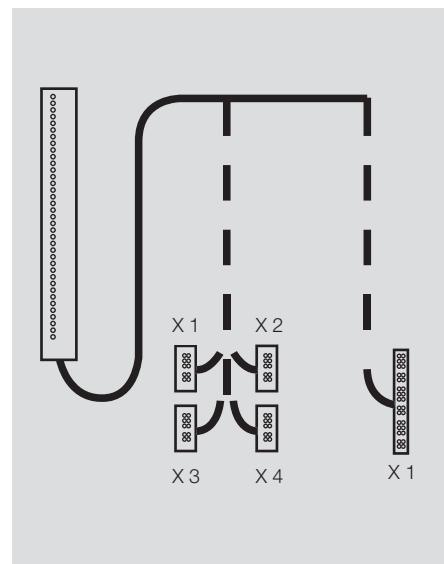
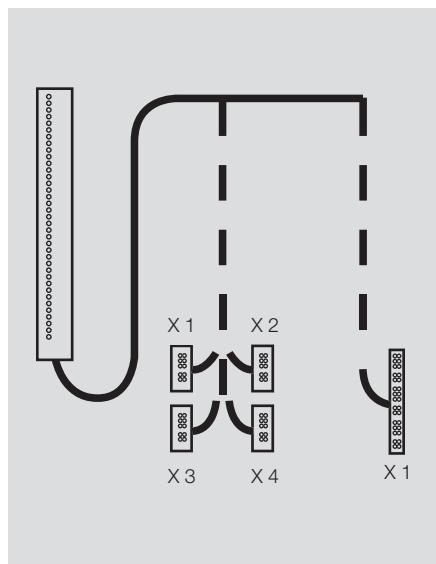
S7/400 6ES7 422-1BL00-0AA0, 32DO

SIEMENS S7/400 1x 4 Byte

Simatic S7/400 1x4Byte

**SIEMENS S7/400 4 x 1 Byte**

Simatic S7/400 4x1Byte

**Technical data****Connection data**Connection on process side
Type of connection

Design

Configuration of single conductor
Connection system, supply voltage/other connections**Rated data**Number of signals
Rated voltage
Rated current per connection
Current-carrying capacity/ cable 10-pole/Line, 40-pole
Voltage supply/Byte discon.
Total current feed, max.**Dimensions**Clamping range (rating- / min. / max.)
Length x width x height mm²**Note****Ordering data**2 m control line
2.5 m control line
3 m control line
5 m control line**Note****SIEMENS front panel housing**1x40-pole pre-assembled cable with IEC603/1 plug-in connector
1x40-pole pre-assembled cable with female connector7-core control line AWG 26/7
PCB screw connection terminals

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/26 A dT = 20 K

yes

16 A

SIEMENS front panel housing4 x 10-pole pre-assembled cable with IEC603/1 plug-in connector
4x10-pole pre-assembled cable with 10-pole female connector7-core control line AWG 26/7
PCB screw connection terminals

32 / 4x1 byte

60 V AC/ 75 V DC

1 A

11.5 A dT = 20 K /

yes

16 A

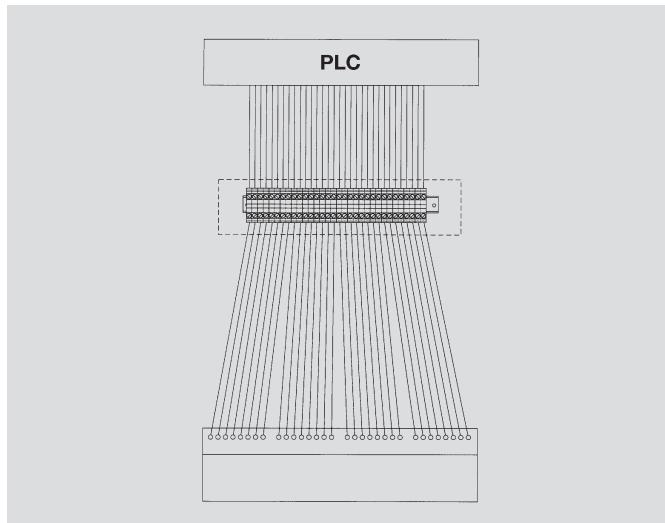
Type	Qty.	Order No.
SIM S7/400 FB40 2.0M	1	8335900200
SIM S7/400 FB40 2.5M	1	8335900250
SIM S7/400 FB40 3.0M	1	8335900300
SIM S7/400 FB40 5.0M	1	8335900500

Type	Qty.	Order No.
SIM S7/400 FB4*10 2.0M	1	8335910200
SIM S7/400 FB4*10 2.5M	1	8335910250
SIM S7/400 FB4*10 3.0M	1	8335910300
SIM S7/400 FB4*10 5.0M	1	8335910500

Passive components

The RSF40 or RS F10 passive interface units for 32 or 8 signals allow for efficient connection of peripheral initiators, sensors and actuators to PLC input/output modules. The link between the PLC and the interface module consists of the controller-specific front adapter and the pre-assembled control lead. This wiring version replaces point-to-point wiring, which is prone to mistakes and is costly to install. The necessary auxiliary voltage is provided at the connection units. An optional status indicator (LED) shows the switching state and the operating voltages.

Individual wiring



Input/output module RS 45 profile designed for

- 1:1 signal transfer of 32 or 8 signals to PLC input/output modules,
- connection of RS F40 LPK2 and RS F10 LPK2 two-wire and three-wire sensors/initiators to PLC input/output modules.

Features

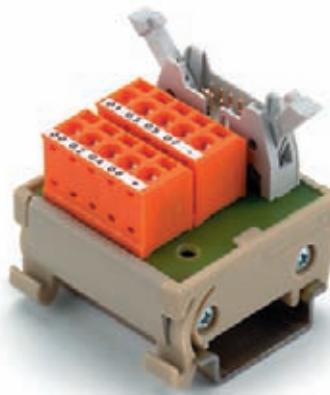
- Choice of screw or tension clamp terminal
- RS45 modules with extremely narrow width of 45 mm
- 32x module via plug-in jumpers in sensor groups (1 x 32, 2 x 16 or 4 x 8 signals)
- Signals grouped by byte
- Test point on the board through connection element
- Clearly organised terminal marking
- Additional labelling panel for group identification
- Clips to TS35 DIN rail (RS 45 profile) in 45 mm width and TS 32/35 DIN rail in 87 mm width

Input/Output in single-conductor system

- Compact design
- Tension clamp connection system
- Clear connection designation
- Clips to TS 35

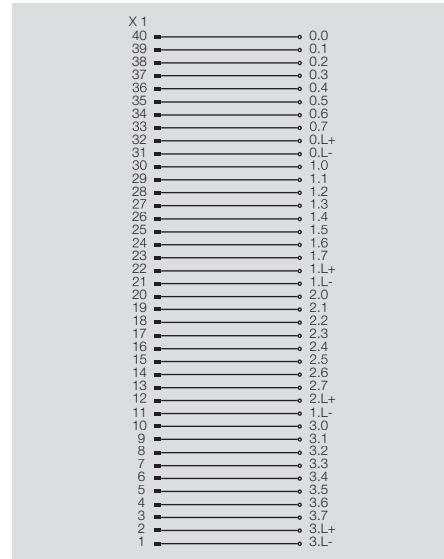
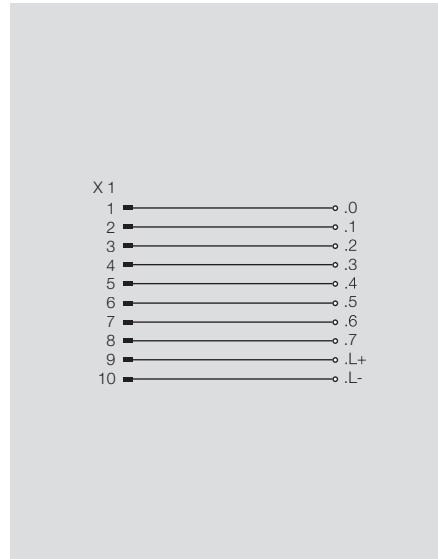
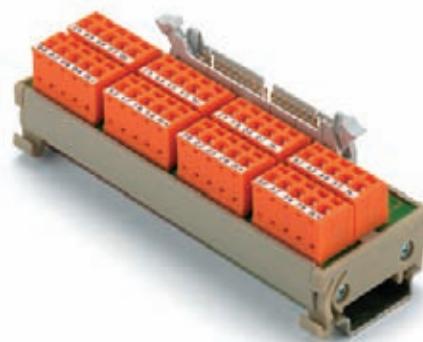
RS F10 I/O8 LMZF

I/O module



RS F40 I/O32 LMZF

I/O module



Technical data

Connection data

- Connection on process side
- Stripping length
- Connection system, supply voltage/other connections
- Coupling on control side, 8-way module
- Coupling on control side, 32-way module

Rated data

- Number of signals
- Rated voltage
- Rated current per connection
- Common potential at terminal/Voltage supply/Byte discon.
- Operating temperature/Storage temperature
- Surge category/Pollution severity
- Terminal rail

Dimensions

- Clamping range (rating- / min. / max.) mm²
- Length x width x height mm

Note

Ordering data

PCB terminal LMZF

7.0 mm

Tension clamp connection terminal

10-pole FB-socket IEC 603-1

8 / 1x1 byte

60 V AC/ 75 V DC

1 A

/

0 °C...+55 °C / -40 °C...+70 °C

II / 2

TS 35

PCB terminal LMZF

7.0 mm

Tension clamp connection terminal

40-pole FB-socket IEC 603-1

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/no

0 °C...+55 °C / -40 °C...+70 °C

II / 2

TS 35

Note

Type	Qty.	Order No.
RS F10 I/O8 LMZF	1	8428870000

Type	Qty.	Order No.
RS F40 I/O32 LMZF	1	8428880000

PLC input/output module passive

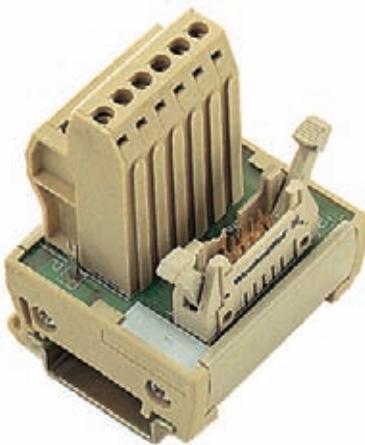
Input/Output in single-conductor system

- Compact design
- Screw connection system
- Clear connection designation
- Clips to TS 35

B

RS F10 LPK 2H/12

I/O module



RS F40 LPK 2H/42

I/O module



Technical data

Connection data

Connection on process side
Stripping length
Connection system, supply voltage/other connections
Coupling on control side, 8-way module
Coupling on control side, 32-way module

Rated data

Number of signals
Rated voltage
Rated current per connection
Common potential at terminal/Voltage supply/Byte discon.
Operating temperature/Storage temperature
Surge category/Pollution severity
Terminal rail

Dimensions

Clamping range (rating- / min. / max.)
mm ²

Length x width x height
mm

Note

Ordering data

PCB terminal LPK 2 H

7.0 mm

Screw connection

10-pole FB-socket IEC 603-1

PCB terminal LPK 2 H

7.0 mm

Screw connection

40-pole FB-socket IEC 603-1

8 / 1x1 byte

60 V AC/ 75 V DC

1 A

/-

0 °C...+55 °C / -40 °C...+70 °C

II / 2

TS 35

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

/no

0 °C...+55 °C / -40 °C...+70 °C

II / 2

TS 35

Note

Type	Qty.	Order No.
RS F10 LPK 2H/12	1	8248050000

Type	Qty.	Order No.
RS F40 LPK 2H/42	1	8248060000

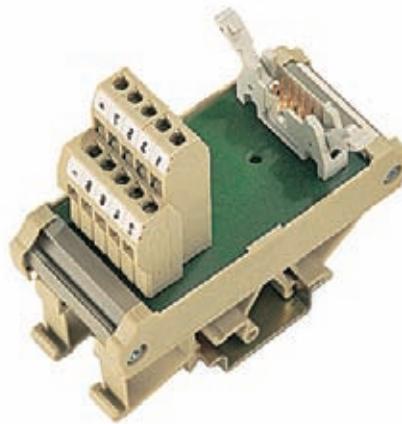
Note

Input/Output in single-conductor system

- Screw connection system
- Clear connection designation
- Optional status indicator
- Additional labelling panel for group designation
- Clips to TS 32/35

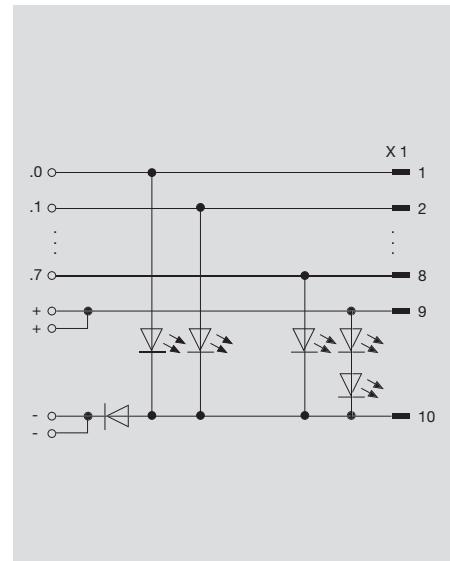
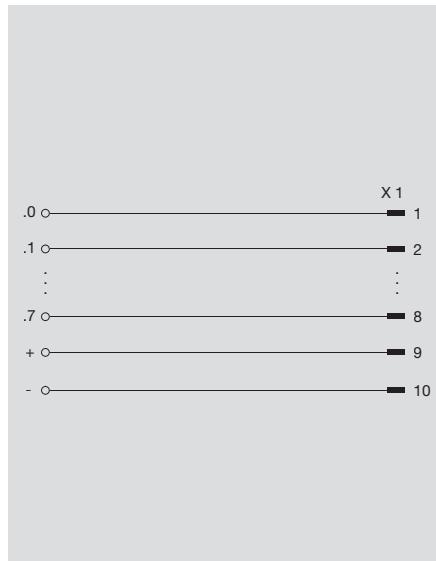
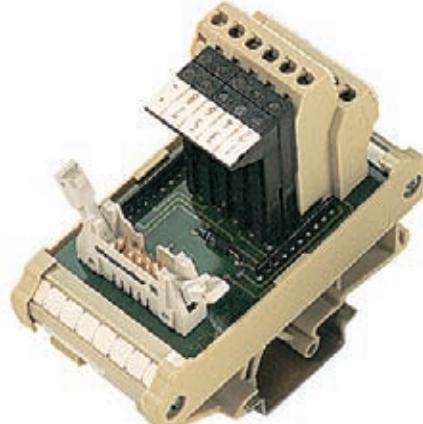
RS F10 I/O8 LPK2

I/O module



RS F10 I/O8 LD LPK2

I/O module



Technical data

Connection data

Connection on process side
Stripping length
Connection system, supply voltage/other connections
Coupling on control side, 8-way module

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Operating temperature/Storage temperature
Surge category/Pollution severity
Terminal rail

PCB terminal LPK 2 H

7.0 mm
Screw connection
10-pole FB-socket IEC 603-1
8 / 1x1 byte
60 V AC/ 75 V DC
1 A
0 °C...+55 °C / -40 °C...+70 °C
II / 2
TS 35 + TS 32

PCB terminal LPK 2 H

7.0 mm
Screw connection
10-pole FB-socket IEC 603-1
8 / 1x1 byte
24 V DC ±20 %
1 A
< 5 mA
0 °C...+55 °C / -40 °C...+70 °C
II / 2
TS 35 + TS 32

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Dimensions

1.5 / 0.5 / 2.5
87 x 40 x 80

Note

Ordering data

Type	Qty.	Order No.
RS F10 I/O8 LPK2	1	8224290000

Type	Qty.	Order No.
RS F10 I/O8 LD LPK2	1	8224260000

Note

PLC input/output module passive

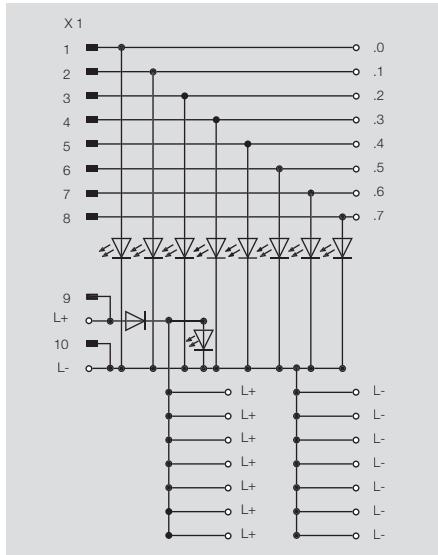
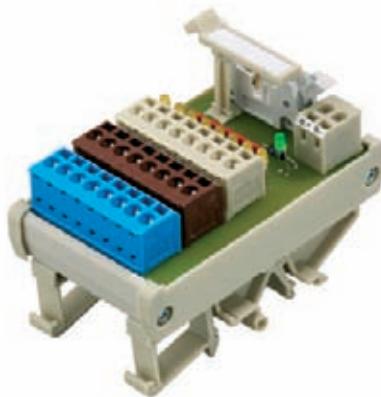
Input module in 3-conductor system

- Tension clamp connection system
- Connection of 3-wire initiators
- Optional status indicator
- Additional labelling panel for group designation
- Clips to TS 32/35

B

RS F10 INIT8 LD LMZF

Input module



Technical data

Connection data

Connection on process side
Stripping length
Connection system, supply voltage/other connections
Coupling on control side, 8-way module

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Voltage supply/Byte discon.
Operating temperature/Storage temperature
Surge category/Pollution severity
Terminal rail

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note

Ordering data

Type	Qty.	Order No.
RS F10 INIT8 LD LMZF	1	8428890000

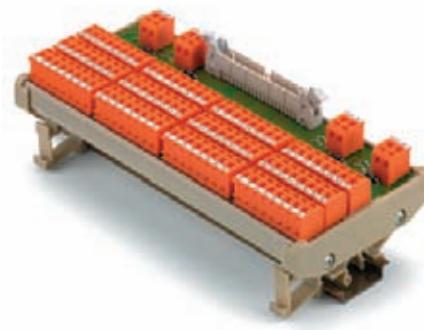
Note

Input module in 3-conductor system

- Tension clamp connection system
- Connection of 3-wire initiators
- Wire jumpers on the 32-way modules enable group-type splitting of the initiators into 1x32, 2x16 or 4x8 signals
- Clear byte-by-byte grouping of signals
- Optional status indicator
- Additional labelling panel for group designation
- Clips to TS 32/35

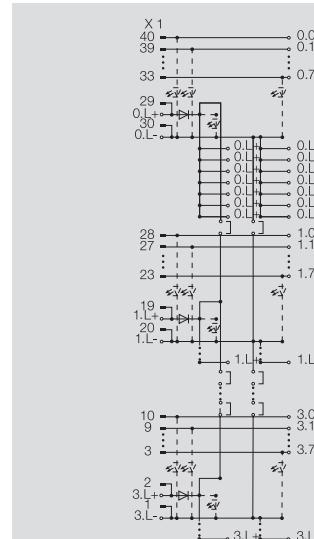
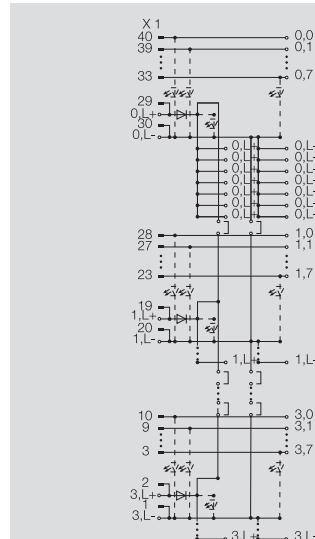
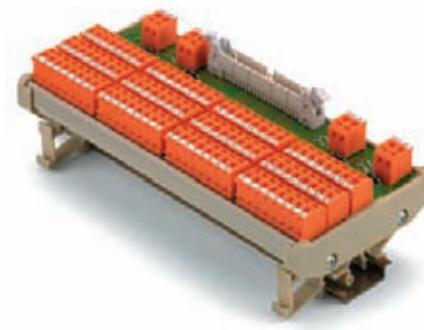
RS F40 INIT32 LMZF

Input module



RS F40 INIT32 LD LMZF

Input module



Technical data

Connection data

Connection on process side
Stripping length
Connection system, supply voltage/other connections
Coupling on control side, 32- way module

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Voltage supply/Byte discon.
Operating temperature/Storage temperature
Surge category/Pollution severity
Terminal rail

Dimensions

Clamping range (rating- / min. / max.)
Length x width x height

Note

Ordering data

PCB terminal LMZF

7.0 mm
Tension clamp connection terminal
40-pole FB-socket IEC 603-1

32 / 1x4 byte

60 V AC/ 75 V DC

1 A

+/- potential /yes

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35 + TS 32

PCB terminal LMZF

7.0 mm
Tension clamp connection terminal
40-pole FB-socket IEC 603-1

32 / 1x4 byte

24 V DC ±20 %

1 A

< 5 mA

+/- potential /yes

0 °C...+55 °C /-40 °C...+70 °C

II /2

TS 35 + TS 32

Note

Type	Qty.	Order No.
RS F40 INIT32 LMZF	1	8430980000

Type	Qty.	Order No.
RS F40 INIT32 LD LMZF	1	8428900000

Active components

Relays output modules allow transmission of electric signals between PLC controller and the actuator level. A signal isolator guarantees transmission free of reference potential and decoupling of the electric signals.

Relays output modules for controlling actuators free from reference potential from a PLC.

- RS F40 16 RS for output of 16 signals (with expansion module max. 32 signals),
- RS F40 LMZF 32 RS for output of 32 signals,
- RS F10 8RS for output of 8 signals.

The advantages of active interface components:

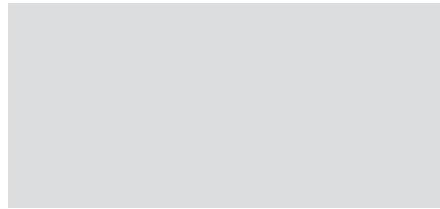
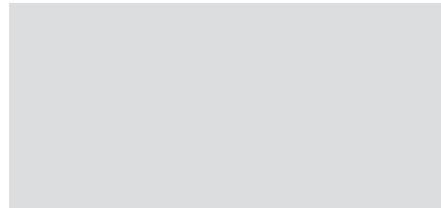
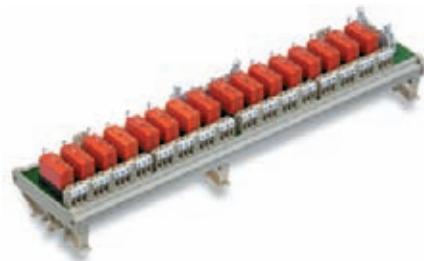
- low-disturbance and noise-free signal transmission
- power gain
- compact design
- cost- and time-saving wiring with pre-assembled lines
- screw or tension spring connections as required
- inexpensive adaptation via pre-assembled control lines to the PLC
- electrical isolation of input and output circuits
- expansion board for upgrading a 16-way module to a 32-way module
- plug-in relay
- integral switching status indicator
- labelling panel for group designation
- can be clipped to TS 32/35

Relays

- Screw connection system
- Base and expansion modules each equipped with 16 relays
- Plug-in relays with changeover contact
- Expansion module connected via 20-pole ribbon cable
- Electrical isolation of input and output circuits
- LED status indicator
- For mounting on TS 32/35

RS F40 16RS OUT

Output module



Technical data

Connection data

Number of signals
Connection on process side
Type of connection
Connection system, supply voltage/other connections
Stripping length

Input

Rated voltage
DC Response/dropout Volt
Rated current DC
Pick-up/drop-out current, DC coil
Power rating
Status indicator/LED - current consumption
Response time / Drop-out time
max. switching frequency at rated load

Output

max. switching voltage AC/max. DC
Continuous current/Making current/min. switching current
max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

Insulation coordination (EN 50178)

Operating temperature
Storage temperature
Rated voltage
Dielectric strength, Input/Output
Surge category
Pollution severity
DIN Rail compatibility
Standards/Approvals

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note

Ordering data

Basic module
Expansion module

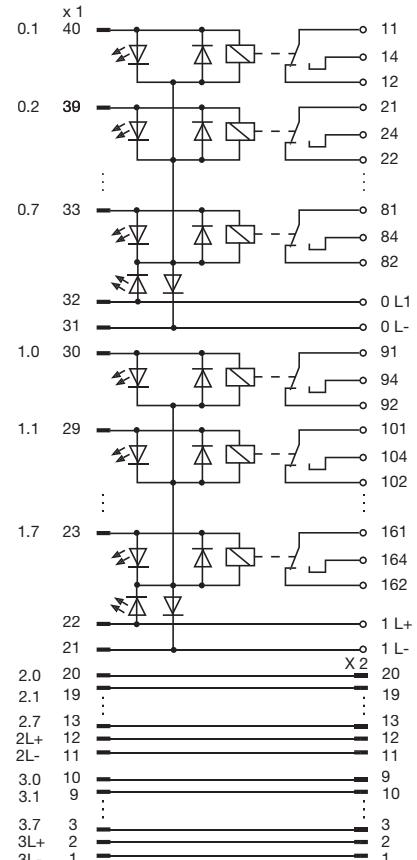
Type	Qty.	Order No.
RS F40 16RS OUT 24VDC	1	8224181001
RS F40 16RS OUT 24VDC E	1	8224191001

Note

Accessories

Note

Spare relay RT314024 4058480000



PLC input/output module active

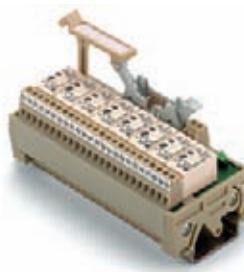
Relays

- Screw connection system
- Compact design
- Electrical isolation of input and output circuits
- Relay soldered with changeover contact
- LED status indicator
- Clips to TS 35

B

RS F10 8R OUT 24VDC

Output module



Technical data

Connection data

Type
Number of signals
Connection on process side
Type of connection
Connection system, supply voltage/other connections
Stripping length

Input

Rated voltage
DC Response/dropout Volt
Rated current DC
Pick-up/drop-out current, DC coil
Power rating
Status indicator/LED - current consumption
Response time / Drop-out time

Output

max. switching voltage AC/max. DC
Continuous current/Making current/min. switching current
max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

Insulation coordination (EN 50178)

Operating temperature
Storage temperature
Rated voltage
Dielectric strength, Input/Output
Surge category
Pollution severity
DIN Rail compatibility
Standards/Approvals

Dimensions

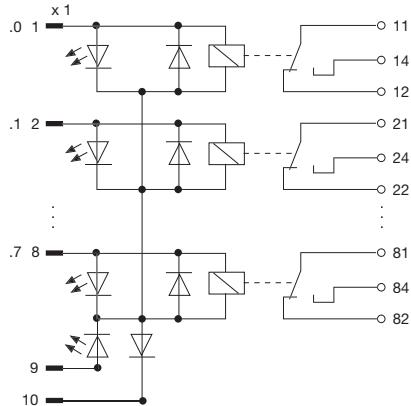
Clamping range (rating- / min. / max.)
mm ²

IEC603-1 10-pole/ screw connection

8 / 1x1 byte
Screw connection
10-pole pin connector IEC 603/1
Screw connection LM 3.5
5.00 mm

24 V DC ±10%
> 18 V / < 4 V
20 mA
20 mA/ 2mA
0.5 W
yellow / 5.00 mA
< 8 ms / < 4 ms

250 V/120 V
3 A/ 5 A /100 mA
1250 VA / 80 W
DOLD OW5691 /soldered
CO contact /AgNi



Ordering data

IEC603-1 10-pole/ screw connection

Type	Qty.	Order No.
RS F10 8R OUT 24VDC	1	8329800000

Note

Accessories

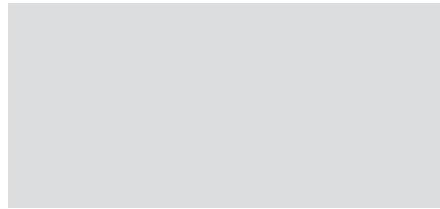
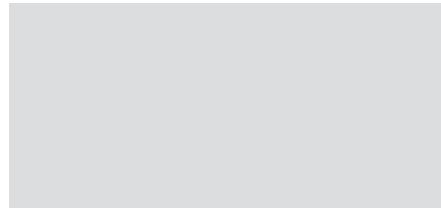
Note

Relays

- Tension clamp connection system
- Compact design
- Electrical isolation of input and output circuits
- 8 plug-in relays
- NOC design
- LED status indicator
- Additional labelling panel for group designation
- Clips to TS 32/35

RS F10 8RS OUT LMZF

Output module



Technical data

Connection data

Type
Number of signals
Connection on process side
Type of connection
Connection system, supply voltage/other connections
Stripping length

IEC603-1 10-pole/ tension clamp connection
8 / 1x1 byte
PCB terminal LMZF
10-pole pin connector IEC 603/1
Tension clamp connection

Input

Rated voltage
DC Response/dropout Volt
Rated current DC
Pick-up/drop-out current, DC coil
Power rating
Status indicator/LED - current consumption
Response time / Drop-out time

24 V DC ±10%
> 19 V / < 7 V
30 mA
20 mA/ 2mA
0.5 W
yellow / 3.00 mA
< 5 ms / < 15 ms

Output

max. switching voltage AC/max. DC
Continuous current/Making current/min. switching current
max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

250 V/125 V
3 A/5 A /10 mA
1250 VA / 600 W
FUJITSU NYP-24WK /pluggable
NO contact /AgNi 5µm Au

Insulation coordination (EN 50178)

Operating temperature
Storage temperature
Rated voltage
Dielectric strength, Input/Output
Surge category
Pollution severity
DIN Rail compatibility
Standards/Approvals

0 °C...+55 °C
-40 °C...+70 °C
300 V
2.5 kV
II
2
TS 32/35
EN 50178 /CE

Dimensions

Clamping range (rating- / min. / max.)
mm ²

1.5 / 0.5 / 2.5
mm

Note

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Ordering data

IEC603-1 10-pole/ tension clamp connection
--

Type

Note

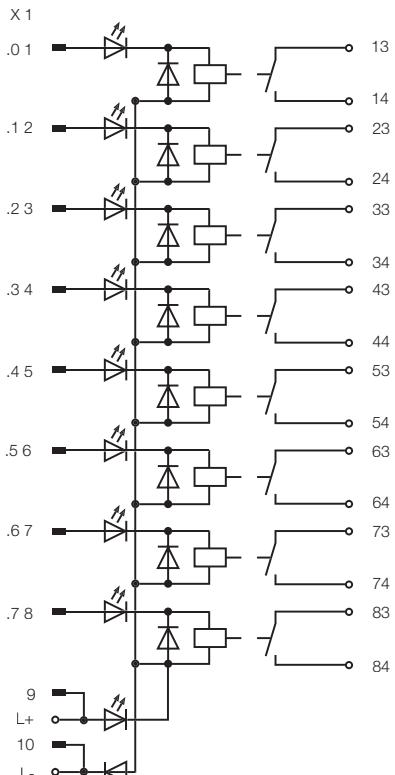
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Accessories

Note

Spare relay NYP-24 WK 4052510000

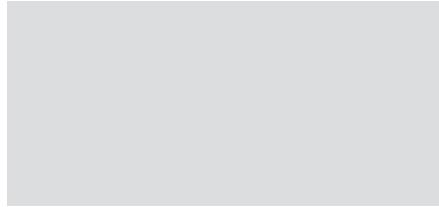


PLC input/output module active

Relays

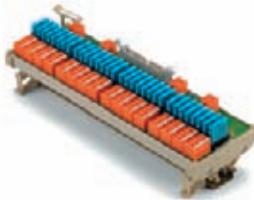
- Tension clamp connection system
- Compact design
- Electrical isolation of input and output circuits
- 32 plug-in relays
- NOC design
- LED status indicator
- Additional labelling panel for group designation
- Clips to TS 32/35

B



RS F40 32RS OUT LMZF

Output module



Technical data

Connection data

Type	IEC603-1 40-pole/ tension clamp connection
Number of signals	32 / 1x4 byte
Connection on process side	PCB terminal LMZF
Type of connection	40-pole pin connector IEC 603/1
Connection system, supply voltage/other connections	Tension clamp connection
Stripping length	7.00 mm

Input

Rated voltage	24 V DC ±10%
DC Response/dropout Volt	> 19 V / < 7 V
Rated current DC	30 mA
Pick-up/drop-out current, DC coil	20 mA/ 2mA
Power rating	0.5 W
Status indicator/LED - current consumption	yellow / 3.00 mA
Response time / Drop-out time	< 5 ms / < 15 ms

Output

max. switching voltage AC/max. DC	250 V/125 V
Continuous current/Making current/min. switching current	3 A/ 5 A /10 mA
max. switching power	1250 VA / 600 W
Type of relay/Relay mounting	FUJITSU NYP-24WK /pluggable
Type of contact/Contact base material	NO contact /AgNi 5µm Au

Insulation coordination (EN 50178)

Operating temperature	0 °C...+55 °C
Storage temperature	-40 °C...+70 °C
Rated voltage	300 V
Dielectric strength, Input/Output	2.5 kV
Surge category	II
Pollution severity	2
DIN Rail compatibility	TS 32/35
Standards/Approvals	EN 50178 / CE

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	1.5 / 0.5 / 2.5

Note

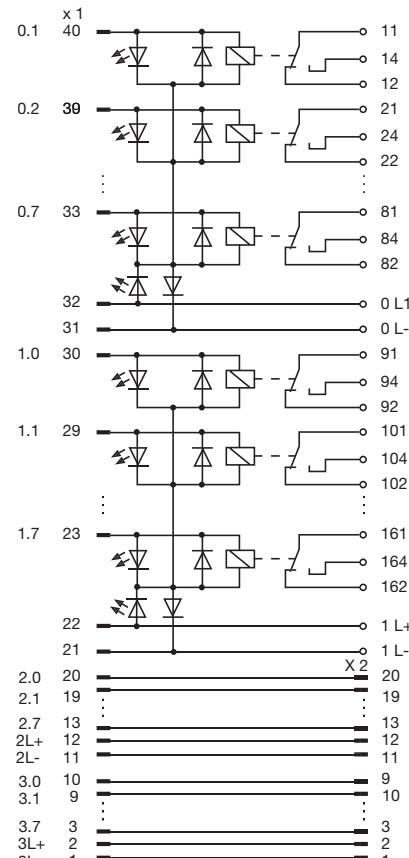
Ordering data

IEC603-1 40-pole/ tension clamp connection

Note

Accessories

Note
Spare relay NYP-24 WK 4052510000



Preassembled control lead

The control lead is preassembled with 10 or 40 pole plug-in socket according to IEC 603/1 DIN 41 651.

It is used for connecting the PLC front adapter with the passive or active PLC input/output modules.

The connecting line for the PLC system interface is available in standard lengths of 1m to 7m.



Spring socket DIN 416451 / IEC 603-1

No.	Colour code	Function
1	black	B-
2	brown	B3 +
3	red	B3.7
4	orange	B3.6
5	yellow	B3.5
6	green	B3.4
7	blue	B3.3
8	violet	B3.2
9	grey	B3.1
10	white	B3.0
11	white/black	B-
12	white/brown	B2 +
13	white/red	B2.7
14	white/orange	B2.6
15	white/yellow	B2.5
16	white/green	B2.4
17	white/blue	B2.3
18	white/violet	B2.2
19	white/grey	B2.1
20	brown/black	B2.0
21	brown/red	B-
22	brown/orange	B1 +
23	brown/yellow	B1.7
24	brown/green	B1.6
25	brown/blue	B1.5
26	brown/violet	B1.4
27	brown/grey	B1.3
28	brown/white	B1.2
29	green/black	B1.1
30	green/brown	B1.0
31	green/red	B-
32	green/orange	B0 +
33	green/blue	B0.7
34	green/violet	B0.6
35	green/grey	B0.5
36	green/white	B0.4
37	yellow-black	B0.3
38	yellow-brown	B0.2
39	yellow-red	B0.1
40	yellow-orange	B0.0

Technical data

Rated voltage
Current carrying capacity
Total current load
- 40-pole lead
- 10-pole lead
Rated cross-section of cores
Resistance value
Storage temperature

300 V
1 A
26 A/ΔT = 20 K
11,5 A/ΔT = 20 K
0,14 mm²
55 mΩ/m
-10 °C...+80 °C

Ordering data

Ribbon round conductor designed on both sides

Type	Length*	Order No.
10-pole plug connector for transfer of 1 byte to DIN 41651 / IEC 603-1		
FBK 10/100 RK	1.00 m	8235360000
FBK 10/200 RK	2.00 m	8235380000
FBK 10/350 RK	3.50 m	8235410000
FBK 10/400 RK	4.00 m	8235420000
FBK 10/500 RK	5.00 m	8235440000

Ordering data

Ribbon round conductor designed on both sides

Type	Length*	Order No.
40-pole plug connector for transfer of 4 byte to DIN 41651 / IEC 603-1		
FBK 40/050 RK	1.00 m	8216350000
FBK 40/150 RK	1.50 m	8216360000
FBK 40/200 RK	2.00 m	8216370000
FBK 40/250 RK	2.50 m	8216380000
FBK 40/300 RK	3.00 m	8216390000
FBK 40/350 RK	3.50 m	8216400000
FBK 40/400 RK	4.00 m	8216410000
FBK 40/500 RK	5.00 m	8235350000

* special lengths on request

