

Interface units

Interface units

Interface units

Overview G.2 - G.3

Interface units IEC 603-1

G.4 - G.5

Interface units IEC 807-2

G.6 - G.7

Supply voltage distributor modules

G.8 - G.9

Interface units with RJ45 plug connector

G.10

ELCO Interface units

G.11

Card holders

Overview G.12 - G.13

19" Euro format G.14 - G.22

19" Double Euro format G.23

PLC System Interface

PLC Interface

Overview G.24 - G.27

PLC Front adapter for SIEMENS S7

G.28 - G.29

PLC Input/output modules

Passive Components, Overview G.30

Input/output modules passive 1-conductor technology G.31 - G.34

Input modules passive 2-conductor technology G.35

Input modules passive 3-conductor technology G.36 - G.38

Output modules passive 2-conductor technology G.39

Aktive Components, Overview G.40

Output module relay coupler G.41 - G.44

Control lead

G.45

Accessories

Relay couplers G.46

Interface units

Weidmüller interface units

Given the need to reduce costs in switch 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.

Weidmüller interface units consist of the following individual components:

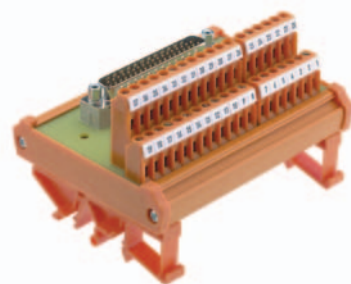
- Extruded profile for inserting the PCB
- End plates for fitting on the mounting rail
- Clip-on feet for locking on standardised mounting rails TS 32 and TS 35
- PCB with connecting and display elements, DIN plug connectors and ample marking facilities for equipment identification.

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

- Plug connector to IEC 603-1/DIN 41 651
- Sub-miniature plug connectors (SUB-D) to IEC 807-2/ DIN 41652
- Plug connectors for PCBs to IEC 603/DIN 41 612 and 41615
- ELCO plug connectors for hazardous area applications.

Preassembled 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 at 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 unit can also integrate additional functions such as status indicator, signal disconnecter, fuses or screening. Identification systems make it easier to trace the signals to the corresponding element.

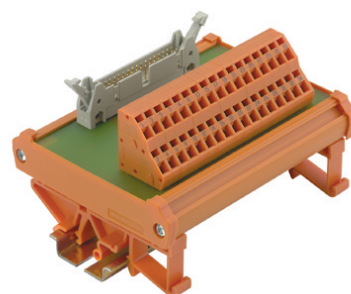


Advantages of the interface units:

- Two- and three-storey PCB terminals save space
- Conventional point-to-point wiring only needed on one side to save costs
- Greater safety, preventing wiring errors
- Optional: LED status display on the interface units
- Rapid troubleshooting with additional test and measuring devices
- Simplified initial commissioning 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.

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



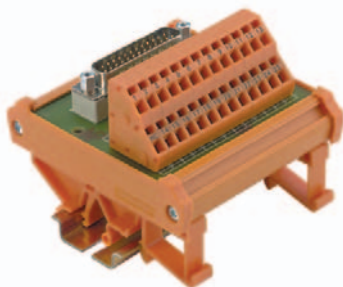
Passive interface for 10 ... 64 signals for adapting preassembled leads with plug connectors to IEC 603-1/DIN 41651 to screw or tension clamp connection systems.

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

Interface units

Weidmüller interface units

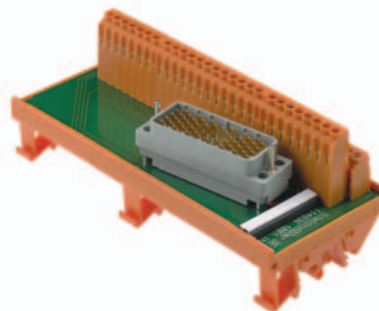
RSSD interface units for preassembled leads with SUB-D plug connectors to IEC 807-2/DIN 41652



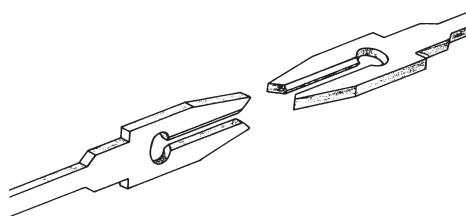
Passive interface unit for 9 ... 50 signals for adapting pre-assembled leads with SUB-D plug to IEC 807-2/DIN 41 652, to screw or tension clamp connection systems.

The components are supplied with 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 screened leads as an optional feature. An additional test point simplifies testing and measuring during initial commissioning and when servicing the system.

RS ELCO interface elements for preassembled leads with hermaphrodite plug connector system



Weidmüller's passive interface units are used for adapting hermaphroditical 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 VERT interface unit as potential distributor

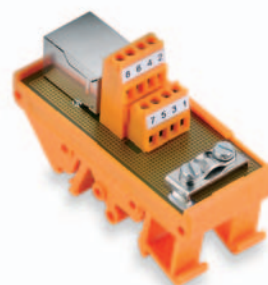


Passive interface unit for the distribution of dc supply voltage. These interface units are available in three designs for distribution to 8, 16 and 72 connections, for positive and negative potentials in each case:

- 8x and 16x distributor of 45 mm overall width, 72x distributor 100 mm width
- Fed by two connection elements for positive and negative potentials in each case
- Slots onto TS32/35 mounting rails.

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

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, laptops and other office equipment in the switch cabinet.

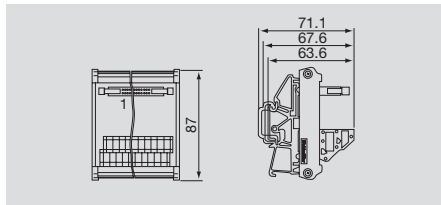
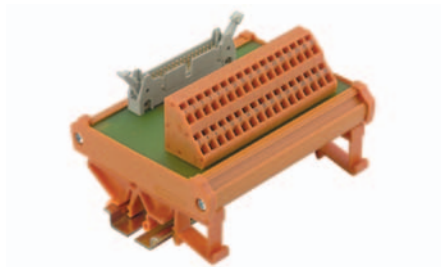
The module converts the standard RJ45 connection to a screw terminal system or acts as a coupling to connect data leads by means of two RJ45 sockets. For data transmission rates of up to 100 Mbit/s, it is advisable to connect one end of the shield of the data cable to protective earth. The interface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

Interface units IEC 603-1

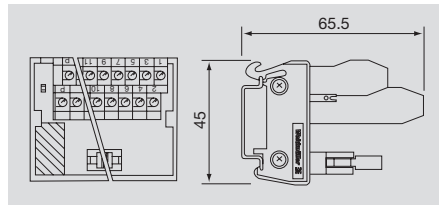
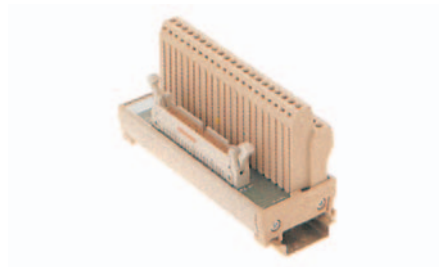
Interface units IEC 603-1

- Pin block with interlock according to IEC 603-1
- Tension clamp or screw connection technology
- Width 45 resp. 87 mm
- Mounting on TS32, TS35 x 7.5 and TS35 x 15

RSF Z / IEC 603-1



RSF S 45 mm / IEC 603-1



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LM2NZF
7.0mm
plug connector acc to IEC 603-1/ DIN 41651

PCB terminal LPK 2 H
7.0mm
plug connector acc to IEC 603-1/ DIN 41651

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
60 Vac/ 75 Vdc
1A
1kV
-40 °C...+70 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

1:1
60 Vac/ 75 Vdc
1A
1kV
0.40Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

1.50 / 0.50 / 2.50

Length x width x height

mm

87 x — x 64.0

1.50 / 0.50 / 2.50

45 x — x 65.5

Information

Ordering data

	Width
10-pole	50.0mm
14-pole	50.0mm
16-pole	55.0mm
20-pole	65.0mm
26-pole	80.0mm
34-pole	110.0mm
40-pole	115.0mm
50-pole	145.0mm
60-pole	180.0mm
64-pole	180.0mm

Type	Qty.	Order No.
RS F10 Z	1	8537190000
RS F14 Z	1	8537200000
RS F16 Z	1	8537210000
RS F20 Z	1	8537110000
RS F26 Z	1	8537180000
RS F34 Z	1	8537130000
RS F40 Z	1	8537140000
RS F50 Z	1	8537150000
RS F60 Z	1	8537160000
RS F64 Z	1	8537170000

Type	Qty.	Order No.
RS F10 LPK 2H/12	1	8155610000
RS F14 LPK 2H/16	1	8258980000
RS F16 LPK 2H/18	1	8265540000
RS F20 LPK 2H/22	1	8155600000
RS F26 LPK 2H/28	1	8213470000
RS F34 LPK 2H/36	1	8155590000
RS F40 LPK 2H/42	1	8155580000
RS F50 LPK 2H/52	1	8155570000
RS F60 LPK 2H/62	1	8259000000
RS F64 LPK 2H/66	1	8155550000

Information

Accessories

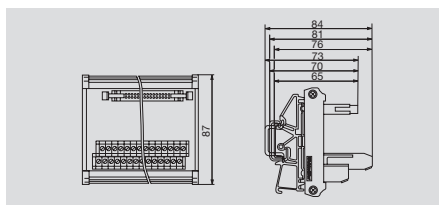
Information

Interface units IEC 603-1

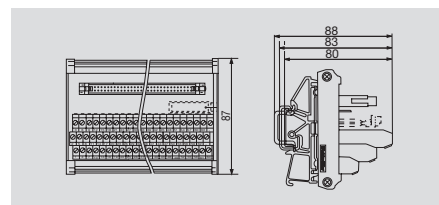
Interface units IEC 603-1

- Pin block with interlock according to IEC 603-1
- Screw connection technology
- Width 87 mm
- 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 with the process
Stripping length
Connection with the control system

PCB terminal LP2N
7.0mm
plug connector acc to IEC 603-1/ DIN 41651

PCB terminal LP3R
7.0mm
plug connector acc to IEC 603-1/ DIN 41651

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
60 Vac/ 75 Vdc
1A
1kV
0.50Nm
-40 °C...+60 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

1:1
60 Vac/ 75 Vdc
1A
1kV
0.50Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

87 x — x 70.0

2.50 / 0.50 / 4

87 x — x 76.0

Information

Ordering data

	Width
10-pole	50.0mm
14-pole	50.0mm
16-pole	55.0mm
20-pole	65.0mm
26-pole	80.0mm
34-pole	110.0mm
40-pole	115.0mm
50-pole	145.0mm
60-pole	180.0mm
64-pole	180.0mm

Type	Qty.	Order No.
RS F10 LP2N 5/10	1	0224961001
RS F14 LP2N 5/14	1	0225061001
RS F16 LP2N 5/16	1	0225161001
RS F20 LP2N 5/20	1	0224261001
RS F26 LP2N 5/26	1	0224861001
RS F34 LP2N 5/34	1	0224361001
RS F40 LP2N 5/40	1	0224461001
RS F50 LP2N 5/50	1	0224561001
RS F60 LP2N 5/60	1	0224661001
RS F64 LP2N 5/64	1	0224761001

Type	Qty.	Order No.
RS F10 LPK 3/12	1	8012850000
RS F14 LPK 3	1	8012860000
RS F16 LPK 3/18	1	8012870000
RS F20 LPK 3/21	1	8012910000
RS F26 LPK 3/27	1	8012920000
RS F34 LPK 3/36	1	8012930000
RS F40 LPK 3/42	1	8012940000
RS F50 LPK 3/51	1	8012950000
RS F60 LPK 3/63	1	8012960000
RS F64 LPK 3/66	1	8012970000

Information

Accessories

Information

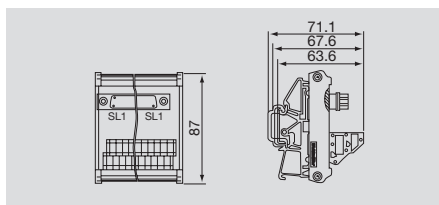
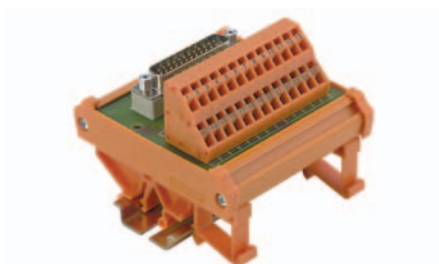
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Interface units IEC 807-2

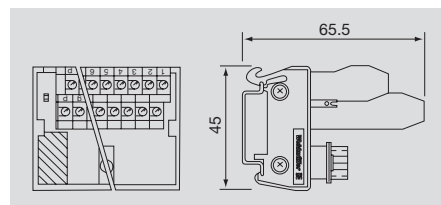
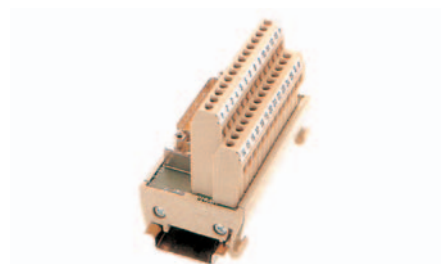
Interface units IEC 807-2

- Male- and female connector with UNC 4/40 screw-interlocking system
- Tension clamp- or screw connection technology
- Width 45 resp. 87 mm
- Locking foot for mounting on TS32, TS35 x 7.5 and TS 35 x 15

RSSD Z / SUB-D



RSSD S 45 mm / SUB-D



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LM2NZF
7.0mm
D-Sub acc. to IEC 807-2

PCB terminal LPK 2 H
7.0mm
D-Sub acc. to IEC 807-2

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc
1.50A
1kV
-40 °C...+70 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

1:1
125 Vac 150 Vdc
1.50A
1kV
0.40Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

1.50 / 0.50 / 2.50

Length x width x height

mm

87 x — x 63.6

1.50 / 0.50 / 2.50

45 x — x 65.5

Information

Ordering data

	Width
Male connector	45.0mm
Male connector	60.0mm
Male connector	80.0mm
Male connector	110.0mm
Male connector	145.0mm
Female connector	45.0mm
Female connector	60.0mm
Female connector	80.0mm
Female connector	110.0mm
Female connector	145.0mm

Type	Qty.	Order No.
RS SD9 SZ	1	8537260000
RS SD15 SZ	1	8537390000
RS SD25 SZ	1	8537370000
RS SD37 SZ	1	8537240000
RS SD50 SZ	1	8537350000
RS SD9 BZ	1	8537320000
RS SD15 BZ	1	8537400000
RS SD25 BZ	1	8537380000
RS SD37 BZ	1	8537250000
RS SD50 BZ	1	8537360000

Type	Qty.	Order No.
RS SD9S UNC LPK2	1	8259010000
RS SD15S UNC LPK2	1	8233350000
RS SD25S UNC LPK2	1	8155650000
RS SD37S UNC LPK2	1	8155660000
RS SD50S UNC LPK2	1	8155670000
RS SD9B UNC LPK2	1	8216480000
RS SD15B UNC LPK2	1	8209730000
RS SD25B UNC LPK2	1	8155620000
RS SD37B UNC LPK2	1	8155630000
RS SD50B UNC LPK2		8155640000

Information

Accessories

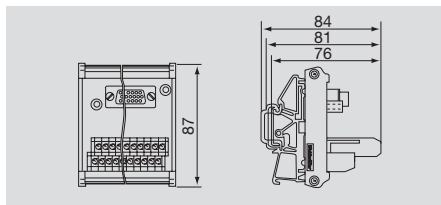
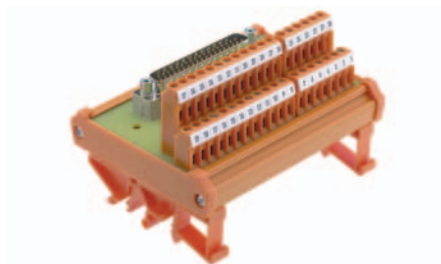
Information

Interface units IEC 807-2

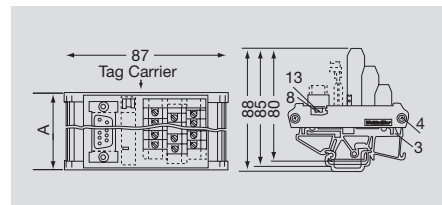
Interface units IEC 807-2

- Male- and female connector with UNC 4/40 screw-interlocking system
- PCB connection element with screw connection
- Locking foot for mounting on TS32, TS35 x 7.5 and TS 35 x 15

RSSD S / SUB-D



RSSD S / SUB-D



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LP2N
7.0mm
D-Sub acc. to IEC 807-2

PCB terminal LP3R
7.0mm
D-Sub acc. to IEC 807-2

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc
1.50A
1kV
0.50Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

1:1
125 Vac 150 Vdc
1.50A
1kV
0.50Nm
-40 °C...+70 °C
0 °C...+55 °C
TS 32, TS 35 x 7.5, TS 35 x 15

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

87 x — x 76.0

2.50 / 0.50 / 4

87 x — x 80.0

Information

Ordering data

	Width
Male connector	45.0mm
Male connector	60.0mm
Male connector	80.0mm
Male connector	110.0mm
Male connector	145.0mm
Female connector	45.0mm
Female connector	60.0mm
Female connector	80.0mm
Female connector	110.0mm
Female connector	145.0mm

Type	Qty.	Order No.
RS SD9S UNC 4.40 LP2N	1	8003901001
RS SD15S UNC 4.40	1	8005201001
RS SD25S UNC 4.40 LP2N	1	8005181001
RS SD37S UNC 4.40 LP2N	1	8003881001
RS SD50S UNC 4.40 LP2N	1	8005161001
RS SD9B UNC 4.40 LP2N	1	8003911001
RS SD15B UNC 4.40 LP2N	1	8005211001
RS SD25B UNC 4.40 LP2N	1	8005191001
RS SD37B UNC 4.40 LP2N	1	8003891001
RS SD50B UNC 4.40 LP2N	1	8005171001

Type	Qty.	Order No.
RS SD9S LPK3	1	8019930000
RS SD15S LPK3	1	8019940000
RS SD25S LPK3	1	8019950000
RS SD37S LPK3	1	8019960000
RS SD50S LPK3	1	8019970000
RS SD9B LPK3	1	8019880000
RS SD15B LPK3	1	8019890000
RS SD25B LPK3	1	8019900000
RS SD37B LPK3	1	8019910000
RS SD50B LPK3	1	8019920000

Information

Accessories

Information

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

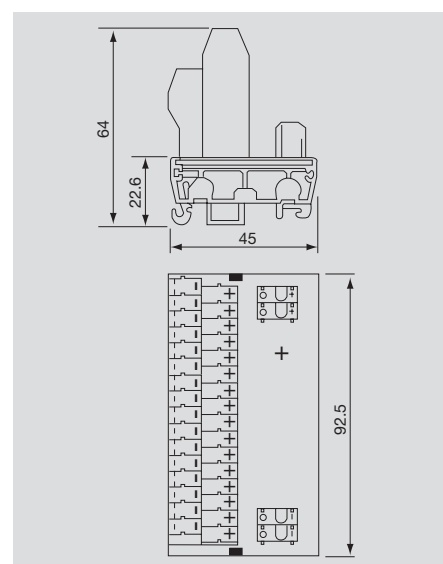
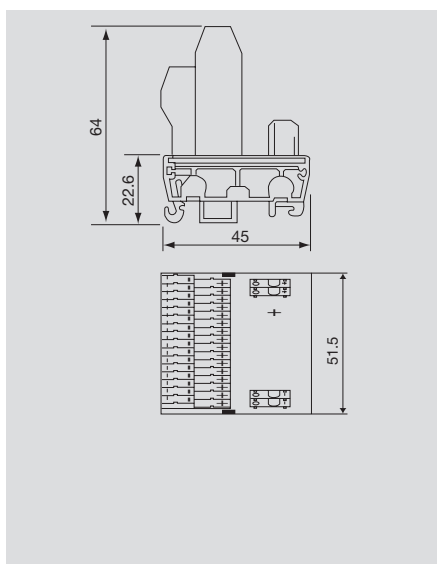
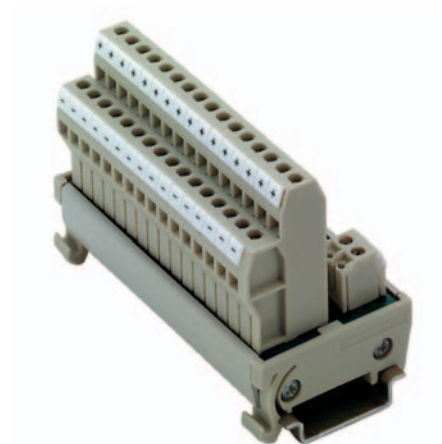
Supply voltage distributor modules

Supply voltage distributor modules

- Distributor with 2 supply connections onto 8 or 16 potentials
- Width 45 mm
- Potential distributor is designed as two-tier connection element
- Total current max. 10 A
- Assembly on mounting rail TS35

RS VERT 8 LPK2

RS VERT 16 LPK2



Technical data

Connection data

Connection with the process
Stripping length
Conversion PCB-/ plug connector

Rated data

Rated voltage
Rated current per connection
Total current feed, max.
Electrical distribution, plus/minus
Storage temperature
Ambient temp., fitted w/o distance
Enclosure/Mounting rail

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity

PCB terminal LPK 2

7.0mm

supply voltage distributor 8-way +/- / 2-pole feeding

24 Vac/dc

10A

+/- potential

-40 °C...+60 °C

0 °C...+55 °C

RS 45 section/TS 35

III/2

PCB terminal LPK 2

7.0mm

supply voltage distributor 16-way +/- / 2-pole feeding

24 Vac/dc

10A

+/- potential

-40 °C...+60 °C

0 °C...+55 °C

RS 45 section/TS 35

III/2

Dimensions

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

mm²

Length x width x height

mm

1.50 / 0.50 / 2.50

45.0 x 51.5 x 64.0

1.50 / 0.50 / 2.50

45.0 x 92.5 x 64.0

Information

Ordering data

Type	Qty.	Order No.
RS VERT8 LPK2	1	8252010000

Type	Qty.	Order No.
RS VERT16 LPK2	1	8234620000

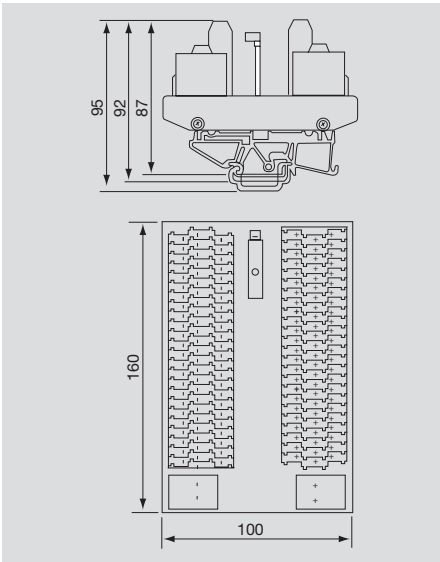
Information

Supply voltage distributor modules

Supply voltage distributor modules

- Distributor with 2 supply connections onto 72 potentials
- Potential distributor is designed as three-tier connection element
- Total current 20A
- Assembly on mounting rail TS32/35

RS VERT 144 LPK3



Technical data

Connection data

Connection with the process
Stripping length
Conversion PCB-/ plug connector

Rated data

Rated voltage
Rated current per connection
Total current feed, max.
Electrical distribution, plus/minus
Storage temperature
Ambient temp., fitted w/o distance
Enclosure/Mounting rail

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity

PCB terminal LPK 3
7.0mm
supply voltage distributor 72-way +/- / 2-pole feeding
250 V
20A
+/- potential
-40 °C...+60 °C
0 °C...+55 °C
RS 100 section/TS 32, TS 35 x 7.5, TS 35 x 15

III/2

Dimensions

Clamping range (rating- / min. / max.)	mm²	1.50 / 0.50 / 2.50
Length x width x height	mm	104.0 x 160.0 x 87.0

Information

Ordering data

Type	Qty.	Order No.
RS LPK3/144 VERT	1	8199510000

Information

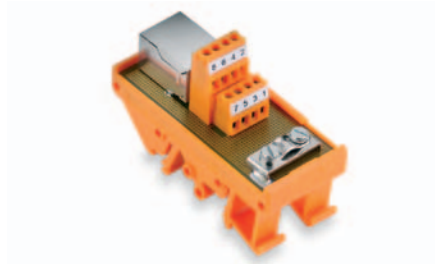
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Interface units with RJ45 plug connector

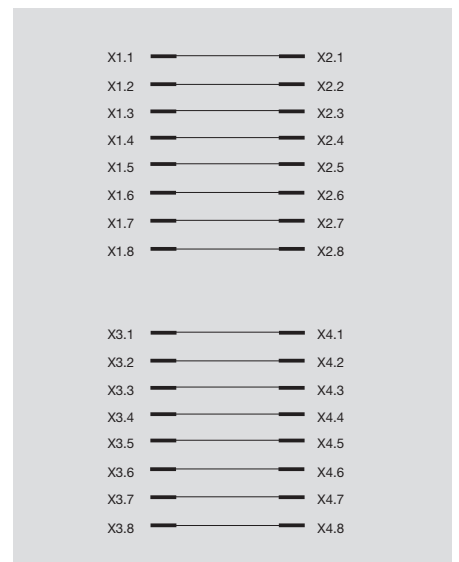
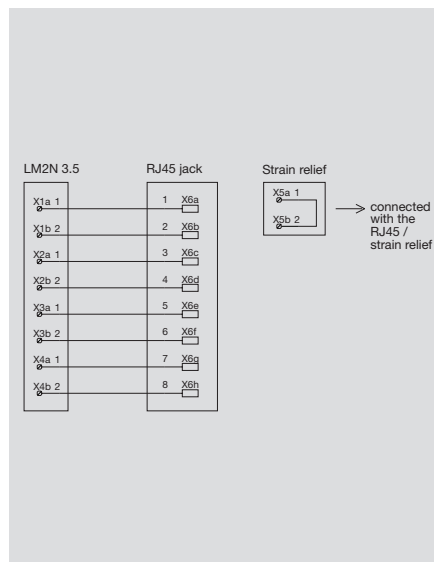
Interface units with RJ45 plug connector

- Direct coupling of PC and modem in control cabinets
- Connection of usual Office equipment
- Data transfer rate Cat5 100 Mbit
- Optional available as RJ 45 converter to screw connection or RJ45 coupling
- Assembly on mounting rail TS32/ 35

RS RJ45



RS RJ45 2WAY



Technical data

Connection data

Connection with the process
Connection with the control system
Design
Conversion PCB-/ plug connector

Rated data

Rated current per connection
Number of signals
Contact material
Storage temperature
Ambient temp., fitted w/o distance
Enclosure
Mounting rail

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity

Dimensions

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

Information

screw connection/ RJ45- connector
screw connection/ RJ45- connector
RJ45- female connector
1:1

1.50A
8 shielded
phosphor- bronze 6u AU
-40 °C...+70 °C
0 °C...+55 °C
RS 70 section
TS 32, TS 35 x 7.5, TS 35 x 15

II/2

1.50 / 0.50 / 1.50
70.0 x 30.0 x 48.0

Connect shielding of data wire with protective earth on one side

2 x RJ45- connector
2 x RJ45- connector
RJ45- female connector
1:1, RJ45 coupling

1.50A
8 shielded
phosphor- bronze 6u AU
-40 °C...+70 °C
0 °C...+55 °C
RS 70 section
TS 32, TS 35 x 7.5, TS 35 x 15

II/2

70.0 x 38.0 x 48.0

Connect shielding of data wire one-way with protective earth

Ordering data

Type	Qty.	Order No.
RS RJ45	10	8611320000

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

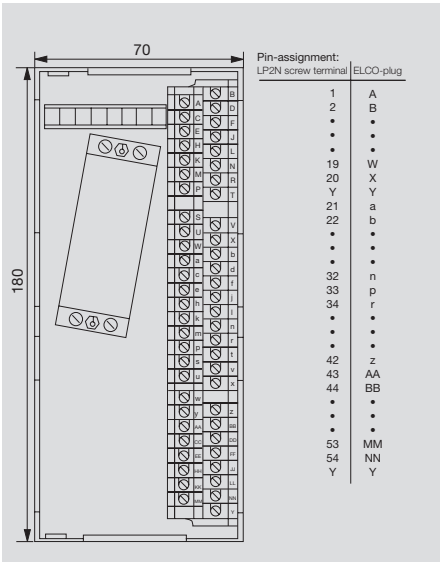
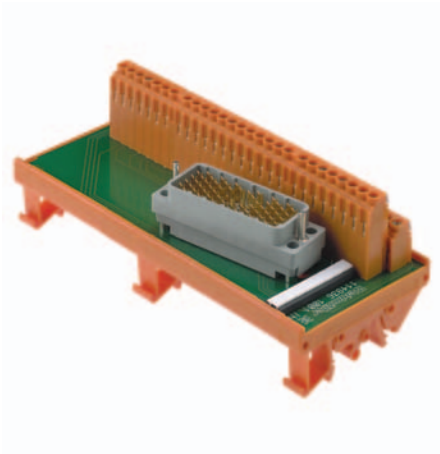
Information

ELCO Interface units

ELCO Interface units

- Conversion from screw connection technology to hermaphroditic ELCO plug connector
- Easy cable mounting by an angled assembly of the ELCO connector on left or right side of the module
- High shock- and vibration resistance
- Appropriate for small currents
- Continuous numbering
- Mounting on TS32, TS35 x 7.5 and TS35 x 15

RS ELCO



Technical data

Connection data

Connection with the process
Design
Stripping length
Connection with the control system

PCB terminal LP2N
ELCO connector 56 pole
7.0mm
ELCO type 8016

Rated data

Rated voltage
Rated current per connection
Test voltage (~RMS)
Storage temperature
Ambient temp., fitted w/o distance
Enclosure
Mounting rail

125 Vac 150 Vdc
1.50A
1.50kV
-40 °C...+70 °C
0 °C...+55 °C
RS 70 section
TS 32, TS 35 x 7.5, TS 35 x 15

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity

III/2

Dimensions

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

left	right
2.50 / 0.50 / 4	2.50 / 0.50 / 4
70.0 x 160.0 x 76.0	70.0 x 160.0 x 76.0

Information

Ordering data

Type	Type	Qty.	Order No.
left	RS ELCO LH 1..54Y LP2N	1	1149361001
right	RS ELCO RH 1..54Y LP2N	1	1149461001
Information			

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Card holders

Weidmüller interface units

Pluggable PCB holders for adapting Euro cards to plug connectors to IEC 603/DIN 41 612 and DIN 41 617



Pluggable PCB holders are used for rapid adaptation of electronic components. Just like an interface units, plug connectors to IEC 803/DIN 41612/617 are adapted to screw/spade connections on the pluggable PCB holder.

A pluggable PCB holder has the following features:

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

SKH2 pluggable PCB holders provide ideal design and functions:

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

Pluggable PCB 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.

Pluggable PCB 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.

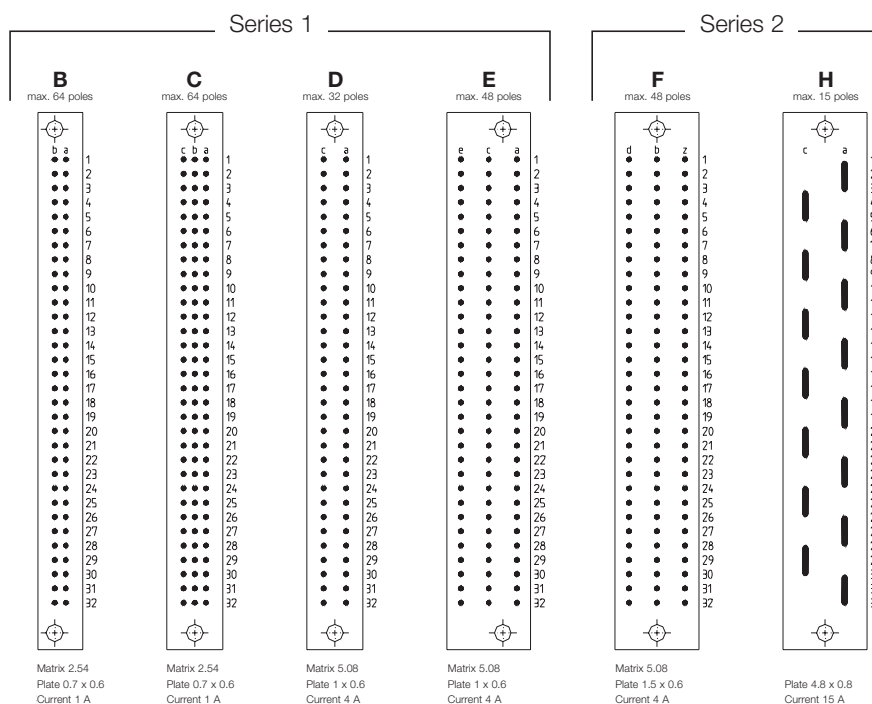
Other typical applications include testing devices in production processes and laboratories, where it is important to be able to replace the PCB quickly and handle the connection planes without difficulty.

Standards

The products meet the following standards:

- EN50178 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 commercially available in multi-pole design with low contact gaps and high current load of 1 A. Versions with up to 4 A contact current are also available on the market in a matrix size of 5.08 mm with lower pole numbers (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 matrix size of 5.08 mm.

Design D

Identical dimensions and contact arrangements to type C 32. The reinforced contacts can take up to 4 A.

Design E

Extension of type D32, with contact row "e" to produce, a 48-pole version. This plug connector with 4 A contact current in matrix 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 matrix 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-pole with complete arrangement of contact rows d, b and z. Also available are 32 pole versions configured using rows z and b or z and d. The z and b 32-pole version offers improves creepage and clearance paths as a significant feature.

Design H

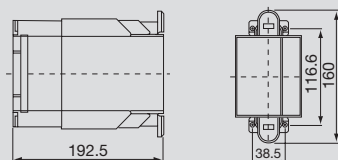
Same dimensions as type F, configured with 11 or 15 pole high current contacts. The connection geometry differs from the other types. The contacts can take up to max. 15 A.

Card holders

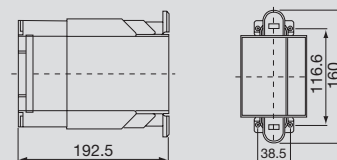
19" Euro format

- For inserting 19" rack cards with Euro format 100 x 160 mm
- Converts IEC 603/ DIN 41612 eg. DIN 41617 plug-in connectors to LP-connection elements
- Mechanical lever reliably releases and rejects card
- 19" PCB can be screwed in front
- Protection cover on reverse side
- Direct mounting or optional rail mounting on TS35

SKH2 31



SKH2 B64



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LP 5.08
7.0mm
connector DIN 41617 female connector block

PCB terminal LP2N
7.0mm
connector DIN 41617 female connector block

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc
4A
0.90kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

1:1
125 Vac 150 Vdc
2A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

60.7 x — x 192.5

2.50 / 0.50 / 4

80.7 x — x 192.5

Information

Width 160 mm

Width 160 mm

Ordering data

Type	Qty.	Order No.
SKH2 31 LPA1	1	8174800000

Type	Qty.	Order No.
SKH2 B64 LPK2N	1	8174810000

Information

Accessories

Information

Assembly kit TS35 SKH/35 8209340000

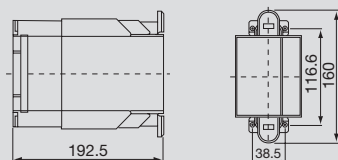
Assembly kit TS35 SKH/35 8209340000

Card holders

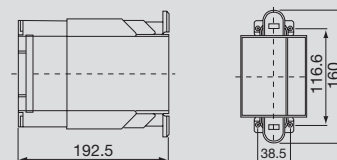
19" Euro format

- For inserting 19" rack cards with Euro format 100 x 160 mm
- Converts IEC 603/ DIN 41612 eg. DIN 41617 plug-in connectors to LP-connection elements
- Mechanical lever reliably releases and rejects card
- 19" PCB can be screwed in front
- Protection cover on reverse side
- Direct mounting or optional rail mounting on TS35

SKH2 C64



SKH2 D32



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LP2N
7.0mm
connector DIN 41617 female connector block

PCB terminal LP 5.08
7.0mm
connector DIN 41617 female connector block

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc
2A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

1:1
250 V
4A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

80.7 x — x 192.5

2.50 / 0.50 / 4

55.0 x — x 192.5

Information

Width 160 mm

Width 160 mm

Ordering data

Type	Qty.	Order No.
SKH2 C64 LPK2N	1	8174820000

Type	Qty.	Order No.
SKH2 D32 LP1	1	8174830000

Information

Accessories

Information

Assembly kit TS35 SKH/35 8209340000

Assembly kit TS35 SKH/35 8209340000

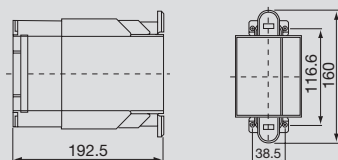
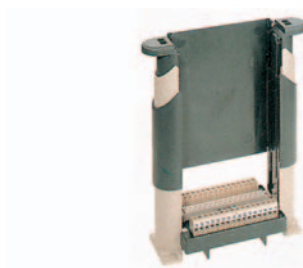
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Card holders

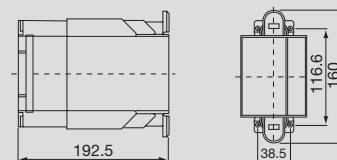
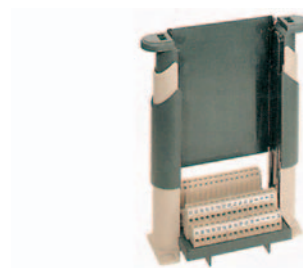
19" Euro format

- For inserting 19" rack cards with Euro format 100 x 160 mm
- Converts IEC 603/ DIN 41612 eg. DIN 41617 plug-in connectors to LP-connection elements
- Mechanical lever reliably releases and rejects card
- 19" PCB can be screwed in front
- Protection cover on reverse side
- Direct mounting or optional rail mounting on TS35

SKH2 E48



SKH2 F32 Z+B



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LP2N
7.0mm
connector DIN 41617 female connector block

PCB terminal LP 5.08
7.0mm
connector DIN 41617 female connector block

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
250 V
4A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

1:1
250 V
4A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

70.7 x — x 192.5

2.50 / 0.50 / 4

80.7 x — x 192.5

Information

Width 160 mm

Width 160 mm

Ordering data

Type	Qty.	Order No.
SKH2 E48 LPK2N LPA1	1	8174840000

Type	Qty.	Order No.
SKH2 F32 (Z+B) LPA1	1	8174850000

Information

Accessories

Information

Assembly kit TS35 SKH/35 8209340000

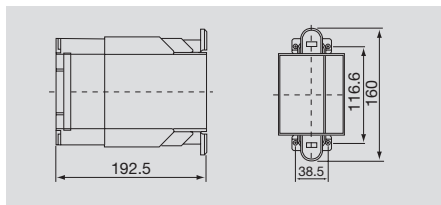
Assembly kit TS35 SKH/35 8209340000

Card holders

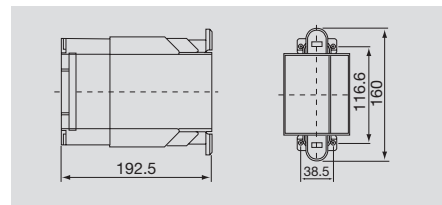
19" Euro format

- For inserting 19" rack cards with Euro format 100 x 160 mm
- Converts IEC 603/ DIN 41612 eg. DIN 41617 plug-in connectors to LP-connection elements
- Mechanical lever reliably releases and rejects card
- 19" PCB can be screwed in front
- Protection cover on reverse side
- Direct mounting or optional rail- mounting on TS35

SKH2 F32 Z+D



SKH2 F48



Technical data

Connection data

Connection with the process
Stripping length
Connection with the control system

PCB terminal LP 5.08
7.0mm
connector DIN 41617 female connector block

PCB terminal LP2N
7.0mm
connector DIN 41617 female connector block

Rated data

Conversion PCB-/ plug connector
Rated voltage
Rated current per connection
Test voltage (~RMS)
Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
250 V
4A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

1:1
250 V
4A
1kV
0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS35 assembly material SKH2/35

Insulation coordinates (EN 50178)

Overvoltage category
Pollution severity

III
2

III
2

Approvals

Standards

EN 50178

EN 50178

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

mm²

2.50 / 0.50 / 4

Length x width x height

mm

80.7 x — x 192.5

2.50 / 0.50 / 4

80.7 x — x 192.5

Information

Width 160 mm

Ordering data

Type	Qty.	Order No.
SKH2 F32 (Z+D) LPA1	1	8174860000

Type	Qty.	Order No.
SKH2 F48 LPA1	1	8174880000

Information

Accessories

Information

Assembly kit TS35 SKH/35 8209340000

Assembly kit TS35 SKH/35 8209340000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Card holders

19" Euro format

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

Accessories:

Support plate HP 0137100000 (in the scope of supply)

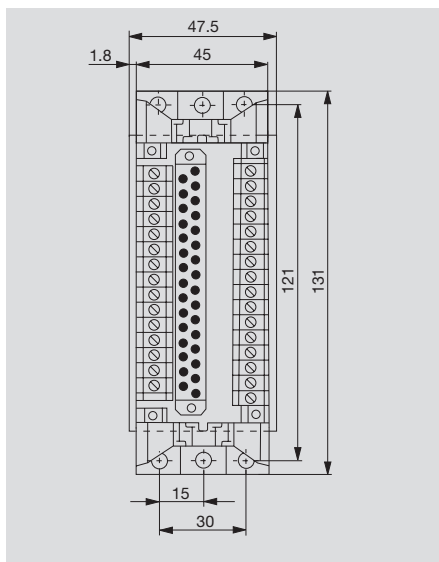
Grip white ZG 0128000000

Grip black ZG 0128060000

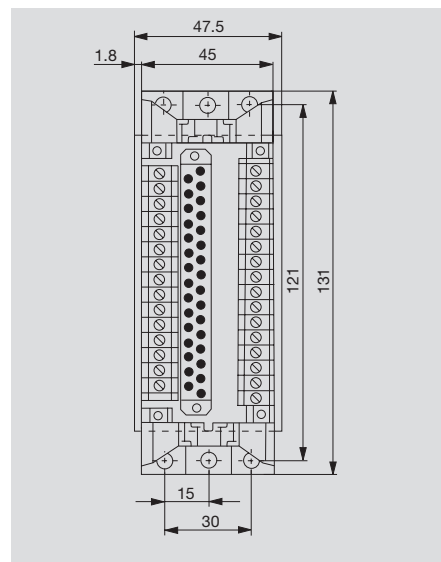
Mounting plate MP 2054280000

Mounting foot TS35 FM 0687900000

SKH 31



SKH 31 250V



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

PCB terminal LP 5.08
7.0mm
DIN41617 31 pole/
PCB interlocking 1 snap-fit

PCB terminal LP 5.08
7.0mm
DIN41617 31 pole/
PCB interlocking 1 snap-fit

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc/5A
1.25kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

1:1
250 V/5A
1.50kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

III/2
EN 50178

III/2
EN 50178

Dimensions

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

2.50 / 0.50 / 4
47.5 x 131.0 x 144.0

2.50 / 0.50 / 4
47.5 x 131.0 x 144.0

Information

Ordering data

PCB interlocking 1 snap-fit

Type	Qty.	Order No.
SKH 31 LP RH1		586661001

Type	Qty.	Order No.
SKH 31 LP 250VAC RH1		648661001

Information

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Card holders

19" Euro format

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

Accessories:

Support plate HP 0137100000 (in the scope of supply)

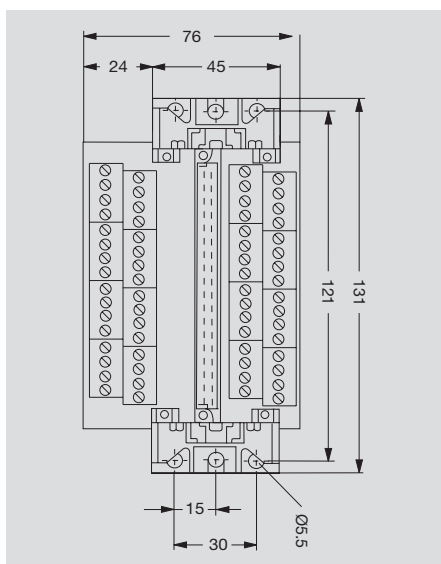
Grip white ZG 0128000000

Grip black ZG 0128060000

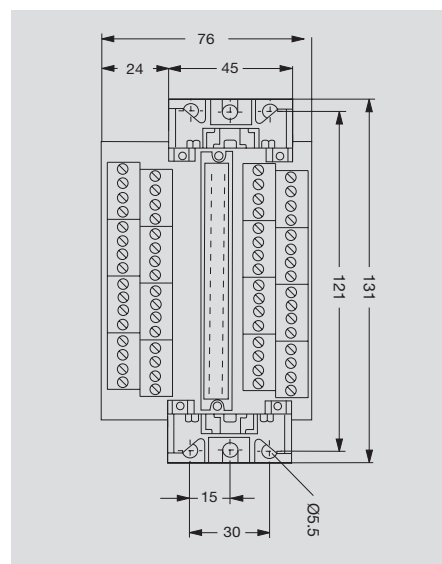
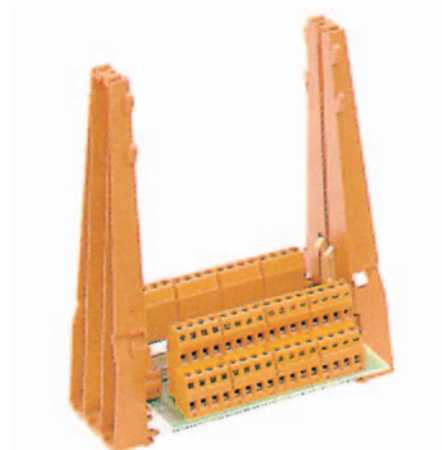
Mounting plate MP 2054280000

Mounting foot TS35 FM 0687900000

SKH B64



SKH C64



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

PCB terminal LP2N
7.0
IEC603 B64/a and b

PCB terminal LP2N
7.0mm
IEC603 C64/a and c

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc/2A
0.50kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

1:1
125 Vac 150 Vdc/2A
0.50kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

III/2
EN 50178

III/2
EN 50178

Dimensions

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

2.50 / 0.50 / 4
76.0 x 131.0 x 144.0

2.50 / 0.50 / 4
76.0 x 131.0 x 144.0

Information

Ordering data

PCB interlocking 2 snap-fits

Type	Qty.	Order No.
SKH B64 RH2	1	577360000

Type	Qty.	Order No.
SKH C64 RH1	1	178960000
SKH C64 RH2	1	646660000

Information

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Card holders

19" Euro format

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

Accessories:

Support plate HP 0137100000 (in the scope of supply)

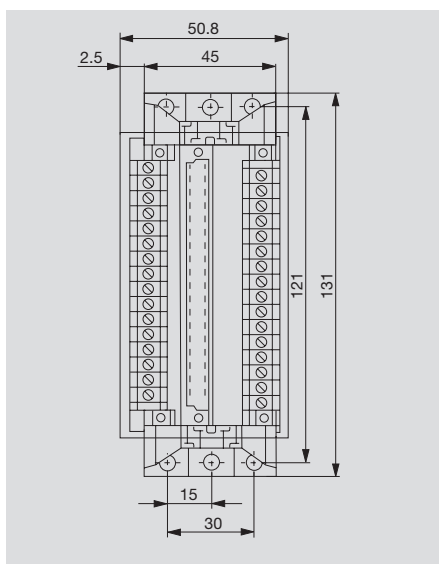
Grip white ZG 0128000000

Grip black ZG 0128060000

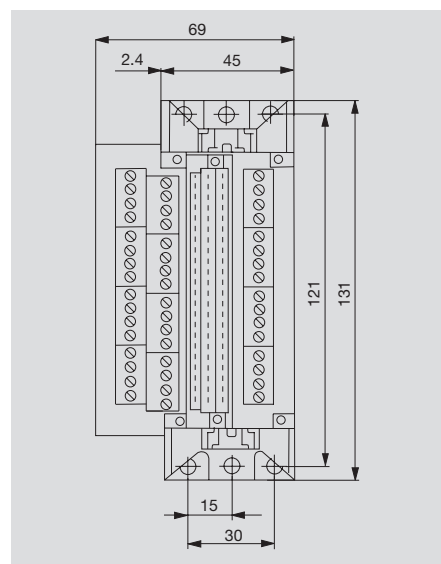
Mounting plate MP 2054280000

Mounting foot TS35 FM 0687900000

SKH D32



SKH E48



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

Dimensions

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

Information

PCB terminal LP 5.08
7.0mm
IEC603 D32/a and c
PCB interlocking 1 snap-fit

1:1
250 V/6A
2kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

III/2
EN 50178

2.50 / 0.50 / 4
50.8 x 131.0 x 144.0

PCB terminal LP2N
7.0mm
IEC603 E48/e, c, a
PCB interlocking 1 snap-fit

1:1
125 Vac 150 Vdc/5A
1.25kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

III/2
EN 50178

2.50 / 0.50 / 4
69.0 x 131.0 x 144.0

Ordering data

PCB interlocking 1 snap-fit

Type	Qty.	Order No.
SKH D32 LP 5/16 RH2	1	586761001

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Type	Qty.	Order No.
SKH E48 LP2/LP	1	690660000

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Card holders

19" Euro format

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

Accessories:

Support plate HP 0137100000 (in the scope of supply)

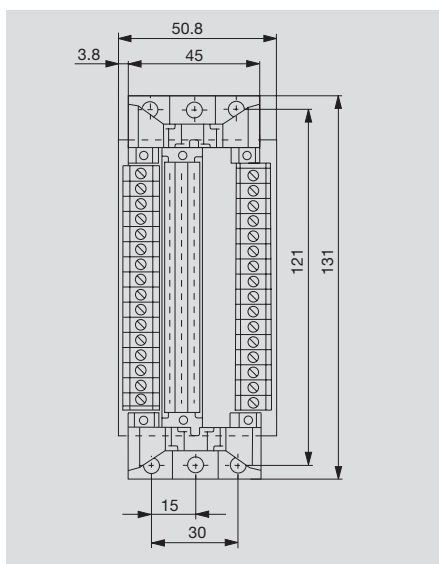
Grip white ZG 0128000000

Grip black ZG 0128060000

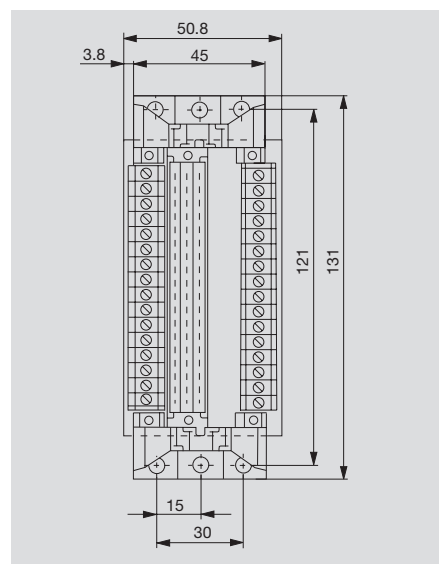
Mounting plate MP 2054280000

Mounting foot TS35 FM 0687900000

SKH F32 Z&B



SKH F32 Z&D



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

PCB terminal LP 5.08
7.0mm
IEC603 F32/z and b
PCB interlocking 1 snap-fit

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
250 V/6A
1.25kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

III/2
EN 50178

Dimensions

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

2.50 / 0.50 / 4
50.8 x 131.0 x 144.0

Information

PCB terminal LP 5.08
7.0mm
IEC603 F32/z and d
PCB interlocking 1 snap-fit

1:1
250 V/6A
1.25kV/0.40Nm
-40 °C...+60 °C
0 °C...+55 °C
direct mounting/ optional TS 35

III/2
EN 50178

2.50 / 0.50 / 4
50.8 x 131.0 x 144.0

Information

Ordering data

PCB interlocking 1 snap-fit

Type	Qty.	Order No.
SKH F32 (Z&B) LP RH2	1	586861001

Type	Qty.	Order No.
SKH F32 (Z&D) LP RH2	1	586961001

Information

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Mounting plate MP 2054280000
Mounting foot TS35 FM4 0687900000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Card holders

19" Euro format

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

Accessories:

Support plate HP 0137100000 (in the scope of supply)

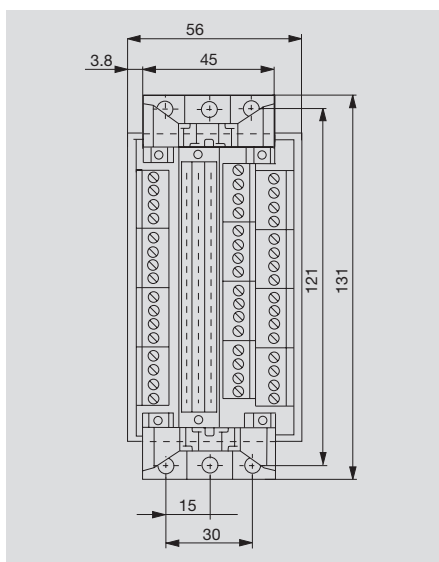
Grip white ZG 0128000000

Grip black ZG 0128060000

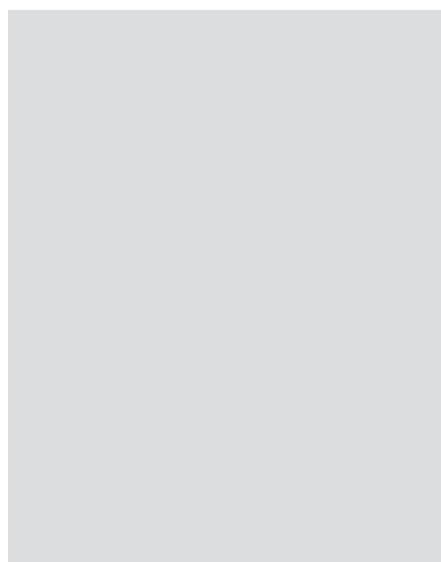
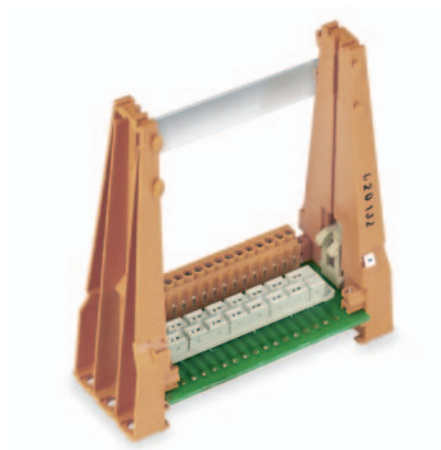
Mounting plate MP 2054280000

Mounting foot TS35 FM 0687900000

SKH F48



SKH H15



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

Dimensions

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

Information

PCB terminal LP2N

7.0mm

IEC603 F48/z, b, d

PCB interlocking 1 snap-fit

1:1

125 Vac 150 Vdc/5A

1.25kV/0.40Nm

-40 °C...+60 °C

0 °C...+55 °C

direct mounting/ optional TS 35

III/2

EN 50178

2.50 / 0.50 / 4

56.0 x 131.0 x 144.0

PCB terminal LP 5.08

7.0mm

IEC603 H15/

PCB interlocking 1 snap-fit

1:1

250 V/10A

1.25kV/0.40Nm

-40 °C...+60 °C

0 °C...+55 °C

direct mounting/ optional TS 35

III/2

EN 50178

2.50 / 0.50 / 4

56.0 x 131.0 x 144.0

Ordering data

PCB interlocking 1 snap-fit

Type	Qty.	Order No.
SKH F48	1	587060000

--	--	--

--	--	--

Information

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

Card holders

19" Double Euro format

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

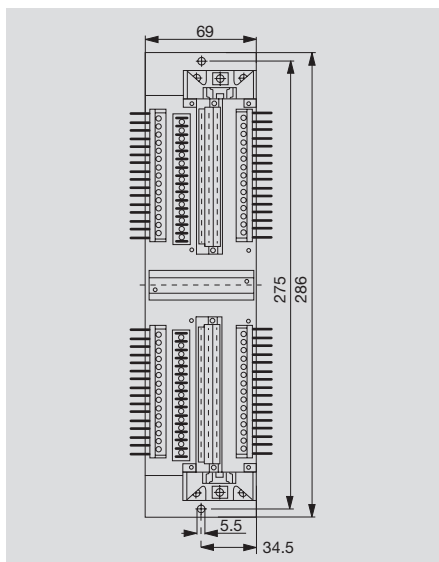
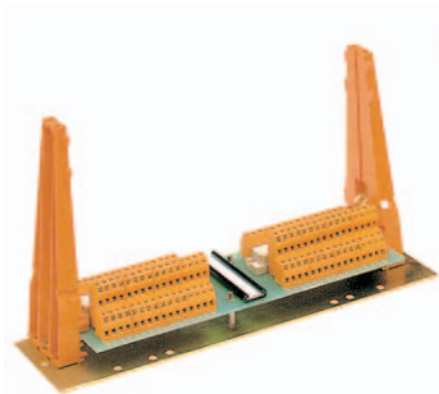
Accessories:

Support plate HP 0136800000 (in the scope of supply)

Grip white ZG 0128000000

Grip black ZG 0128060000

SKH (233 x 160 mm)



Technical data

Connection data

Connection with the process
Stripping length
Design/Contact complement
Type

screw connection
7.0mm
/z, b, d/ a und c
PCB interlocking 2 snap-fits

Rated data

Conversion PCB-/ plug connector
Rated voltage/Rated current per connection
Test voltage (~RMS)/Test torque
Storage temperature
Ambient temp., fitted w/o distance
Mounting rail

1:1
125 Vac 150 Vdc/5A
1.25kV/0.40Nm
-40 °C...+70 °C
0 °C...+55 °C
direct mounting/ optional TS 35

Insulation coordinates (EN 50178)

Overvoltage category/Pollution severity
Standards

III/2
EN 50178

Dimensions

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

IEC603 C64 a, c	IEC603 D32 a, c
2.50 / 0.13 / 4	2.50 / 0.13 / 4
69.0 x 286.0 x 144.0	69.0 x 286.0 x 144.0

Information

Ordering data

Type	Design
PCB interlocking 2 snap-fits	IEC603 C64 a, c
PCB interlocking 2 snap-fits	IEC603 D32 a, c
PCB interlocking 2 snap-fits	IEC603 F48 z,b,d

Type	Qty.	Order No.
SKH C64x2 (A&C) RH2	1	8013120000
SKH D32x2 LP5.08/16 RH2	1	8050981001
SKH F48x2 RH2	1	8009260000

Information

Mounting plate MP 2051430000
Mounting foot TS35 FM4 0687900000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Interface

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 connection (point-to-point wiring) of PLC controllers to the peripheral devices results in high installation and commissioning costs. The family 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 preassembled 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.

Individual wiring

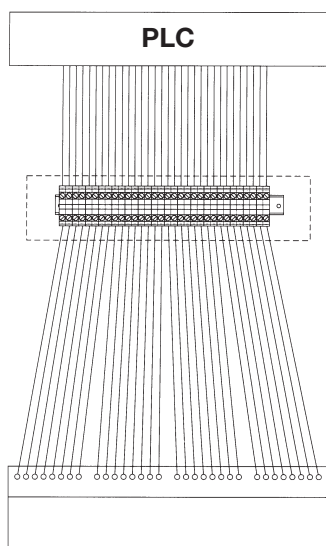
PLC I/O cards usually have two connection systems:

- 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
- Takes up a lot of space in the switch-board
- High installation workload
- A lot of time spent on routing and assembly of connecting leads
- High labelling and documentation workload.



System wiring

The basic principle is the connection of PLC-specific front adapters to passive and active input/output modules using preassembled leads. The PLC adapters are plugged directly to the I/O cards. Within the adapters, the PLC-specific connection level is adapted to ribbon cable plug connectors to IEC 603-1/ DIN 41651. The passive and active input/output modules can therefore be used regardless of the corresponding controller type.

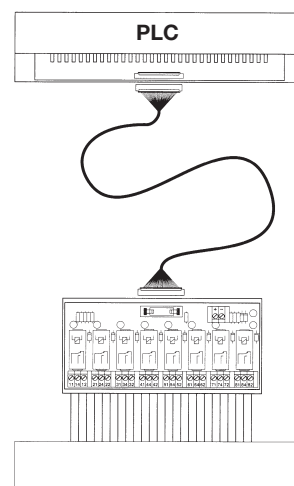
There are two possible connection versions:

- in double word mode to a 40-pole ribbon cable connector
- or
- in byte mode to 4 ribbon cable connectors each with 10 poles.

System wiring offers the following advantages over point-to-point wiring:

- Minimum wiring workload
- Reduced installation times
- Simplified commissioning and documentation.

The product series of PLC system interface modules offers a quickly and easily installed input and output level for SIEMENS SIMATIC® S7.



PLC system interface

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

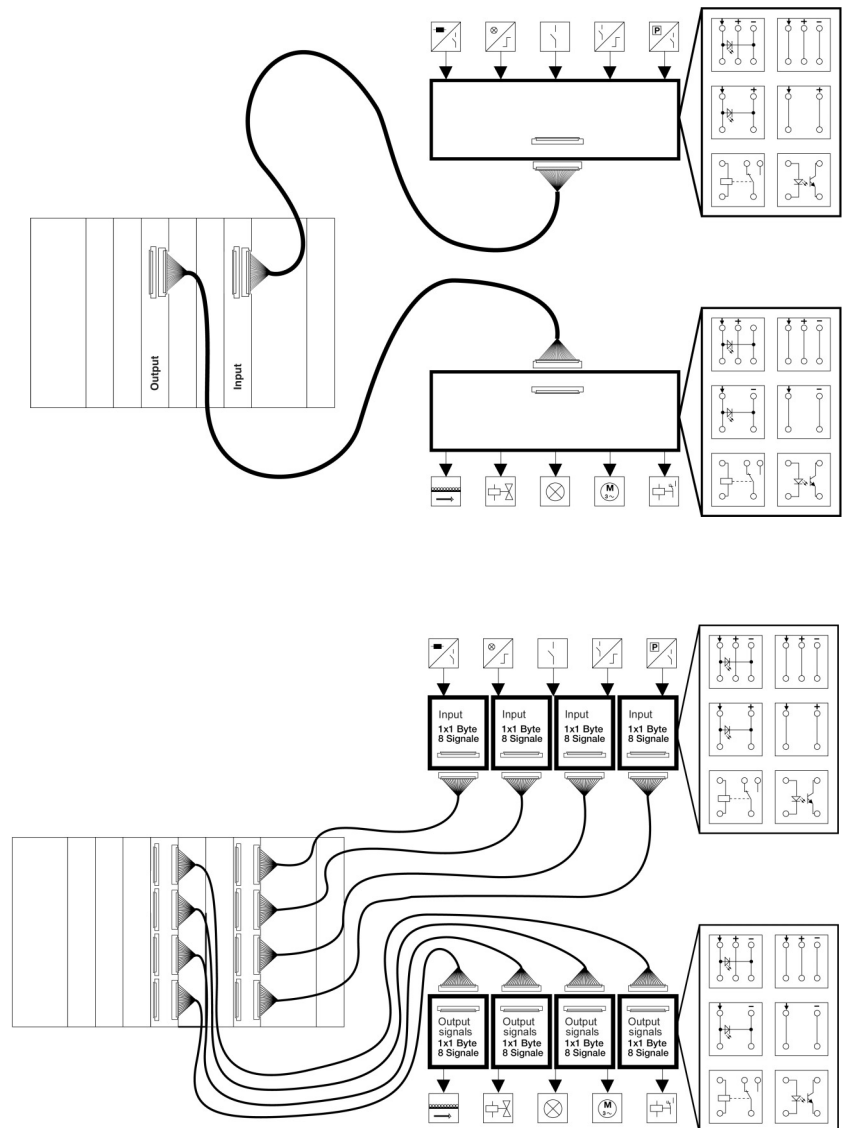
- Rules out the risk of wiring mistakes
- Clear organisation in the switchboard (system cable instead of individual wires)
- Marking corresponds with PLC
- Additional individual marking.

• Variable

- Multitude of 40 or so 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.



PLC Interface

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.

Preassembled control leads with 10 or 40 pole socket connector to IEC 603-1/ DIN 41 651 connect the PLC input/output groups to the passive and active interface elements of the PLC system interface.

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

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

As far as the power feed to PLC I/O cards is concerned, there are two options:

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

G

For the 32 bit PLC components, there is a choice of front adapters with four 10-pole <4x1 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 reduced.

Pole configuration

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

Front adapter for SIEMENS S7 300 E/A-modules

Digital input:

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

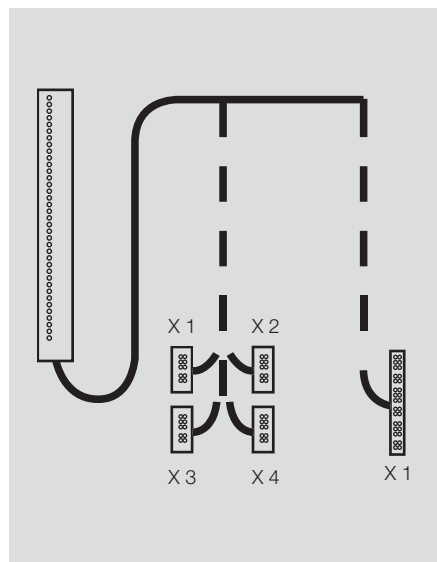
Digital output :

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

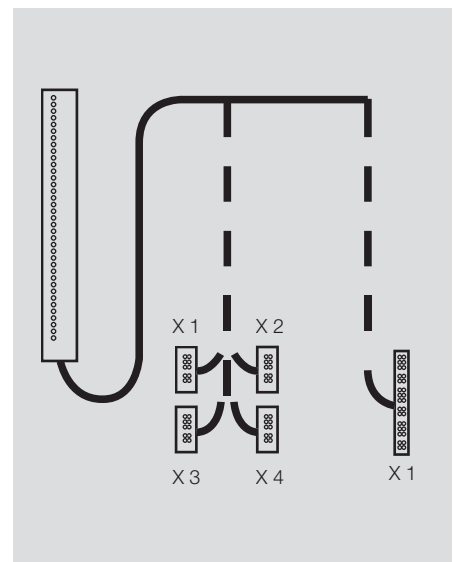
Digital input/output:

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

SIEMENS S7/300 1 x 4 Byte



SIEMENS S7/300 4 x 1 Byte



Technical data

Connection data

Connection with the process
Connection technology converted cable
Design
Design of single conductor
Connection technology supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Total current carrying capacity/ cable 10-pole/Ltg. 40 pol.
Volt. supply/Byte disconnect.
Total current feed, max.

Dimensions

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

Information

SIEMENS front panel housing
40-pole tattered cable with IEC603/1 plug connector
40-pole conv. cable with spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

32 4 byte
60 Vac/ 75 Vdc
1A
/26 A/ dT= 20K
Yes
16A

115.0 x 22.0 x 32.0

SIEMENS front panel housing
4x10-pole tattered cable with IEC603/1 plug connector
4x10-pole conv. cable with 10-pole spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

4x8 4 byte
60 Vac/ 75 Vdc
1A
11.5A/ dT= 20K/
Yes
16A

115.0 x 22.0 x 32.0

Ordering data

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

Information

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 FB4x10 2.0M	1	8433310200
SIM S7/300 FB4x10 2.5M	1	8433310250
SIM S7/300 FB4x10 3.0M	1	8433310300
SIM S7/300 FB4x10 5.0M	1	8433310500

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
- Potential separation with plug-in jumpers
- Versatile accessories
- Inexpensive coupling of the interface modules

Front adapter for SIEMENS S7 400

E/A-modules

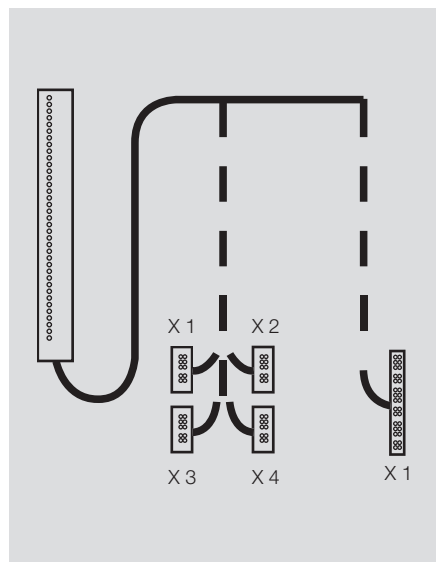
Digital input:

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

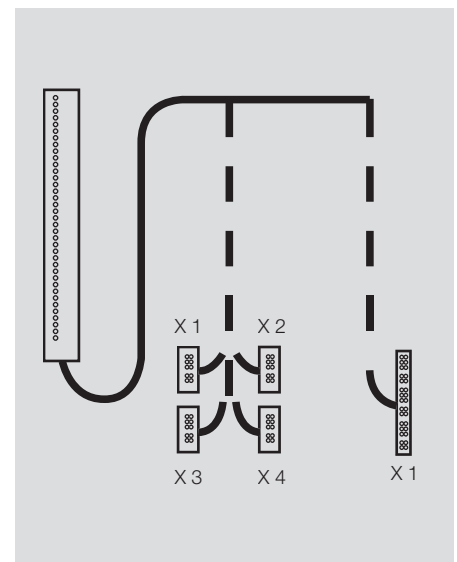
Digital output:

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

SIEMENS S7/400 1x 4 Byte



SIEMENS S7/400 4 x 1 Byte



Technical data

Connection data

Connection with the process
Connection technology converted cable
Design
Design of single conductor
Connection technology supply voltage/other connections

Rated data

Number of signals
Rated voltage
Rated current per connection
Total current carrying capacity/ cable 10-pole/Ltg. 40 pol.
Volt. supply/Byte disconnect.
Total current feed, max.

SIEMENS front panel housing
40-pole tattered cable with IEC603/1 plug connector
40-pole conv. cable with spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

32 4 byte
60 Vac/ 75 Vdc
1A
/26 A/ dT= 20K
Yes
16A

SIEMENS front panel housing
4x10-pole tattered cable with IEC603/1 plug connector
4x10-pole conv. cable with 10-pole spring connector
7 leads control wire AWG 26/7
LP-screw connection terminals

4x8 4 byte
60 Vac/ 75 Vdc
1A
11.5A/ dT= 20K/
Yes
16A

Dimensions

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

274.0 x 19.0 x 55.0

274.0 x 19.0 x 55.0

Information

Ordering data

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

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 FB4x10 2.0M	1	8335910200
SIM S7/400 FB4x10 2.5M	1	8335910250
SIM S7/400 FB4x10 3.0M	1	8335910300
SIM S7/400 FB4x10 5.0M	1	8335910500

Information

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Input/output modules

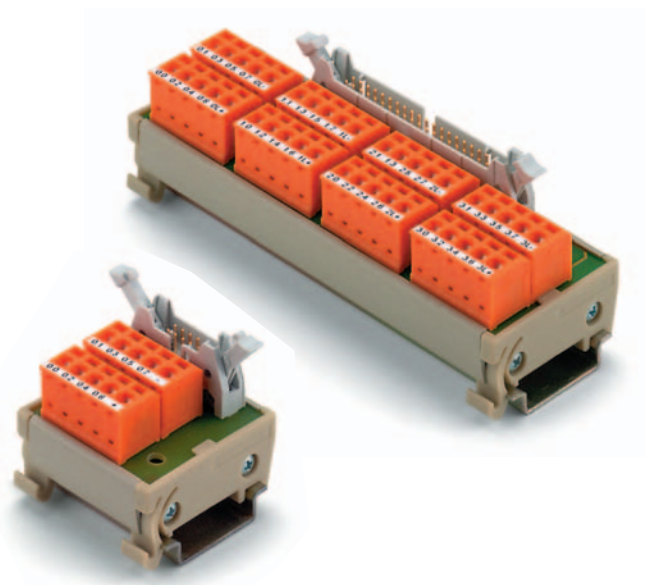
Passive components

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 preassembled 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 display (LED) indicates the switching state and the operating voltages.

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.

- Choice between screw or tension spring terminal
- RS45 modules with extremely narrow width of 45 mm
- 32x module via plug-in jumpers in sensor groups (1x32, 2x16 or 4x8 signals)
- Signals grouped by byte
- Test point on the board through connection element
- Clearly organised terminal marking
- Additional labelling field for group identification
- Clips onto TS35 (RS 45 profile) in 45 mm width and TS 32/35 in 87 mm width



X 1	
1	— .0
2	— .1
3	— .2
4	— .3
5	— .4
6	— .5
7	— .6
8	— .7
9	— .L+
10	— .L-

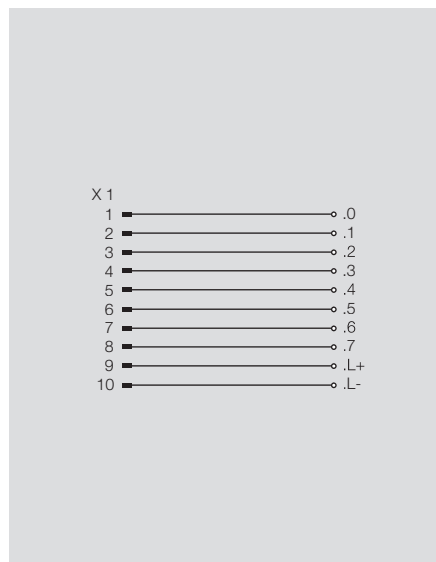
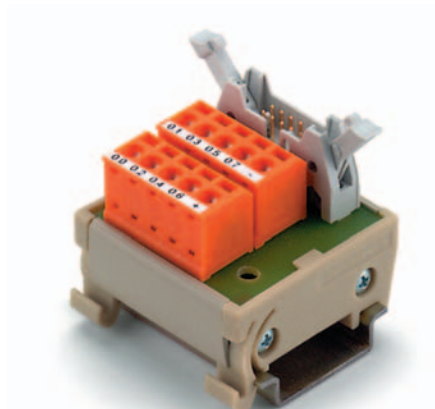
X 1	
40	— 0.0
39	— 0.1
38	— 0.2
37	— 0.3
36	— 0.4
35	— 0.5
34	— 0.6
33	— 0.7
32	— 0.L+
31	— 0.L-
30	— 1.0
29	— 1.1
28	— 1.2
27	— 1.3
26	— 1.4
25	— 1.5
24	— 1.6
23	— 1.7
22	— 1.L+
21	— 1.L-
20	— 2.0
19	— 2.1
18	— 2.2
17	— 2.3
16	— 2.4
15	— 2.5
14	— 2.6
13	— 2.7
12	— 2.L+
11	— 2.L-
10	— 3.0
9	— 3.1
8	— 3.2
7	— 3.3
6	— 3.4
5	— 3.5
4	— 3.6
3	— 3.7
2	— 3.L+
1	— 3.L-

PLC Input/output modules

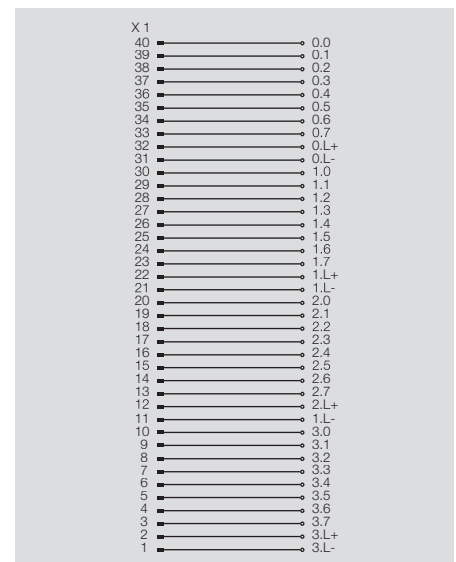
Input/output modules passive 1-conductor technology

- Compact design
- Tension clamp connection technology
- Clear connection labelling
- Mounting on TS35

RS F10 I/O8 LMZF



RS F40 I/O32 LMZF



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LMZF

7.0mm
tension clamp terminal
10-pole FB-socket IEC 603-1
/

8
60 Vac/ 75 Vdc
1A
/
0 °C...+55 °C/-40 °C...+70 °C
II/2
TS 35

1.50 / 0.50 / 2.50
45.0 x 43.0 x 54.0

PCB terminal LMZF

7.0mm
tension clamp terminal
40-pole FB-socket IEC 603-1/

32 4 byte
60 Vac/ 75 Vdc
1A
/No
0 °C...+55 °C/-40 °C...+70 °C
II/2
TS 35

1.50 / 0.50 / 2.50
45.0 x 125.0 x 54.0

Ordering data

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

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

Information

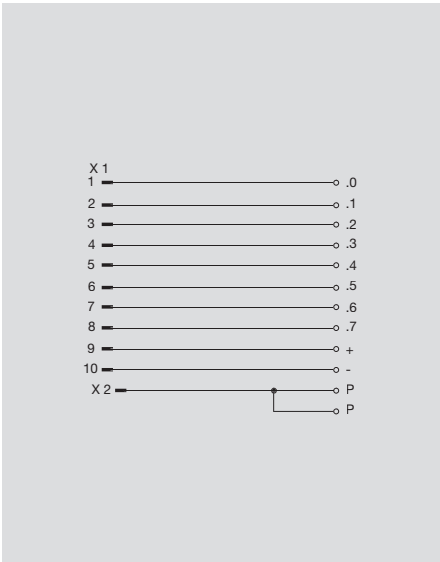
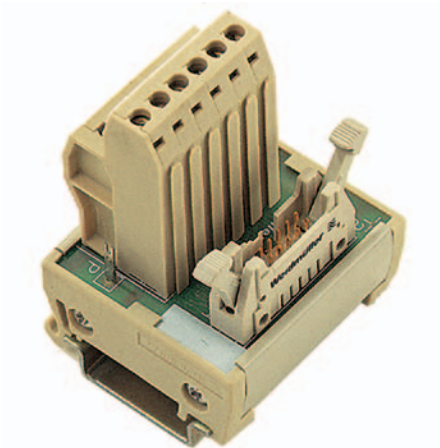
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Input/output modules

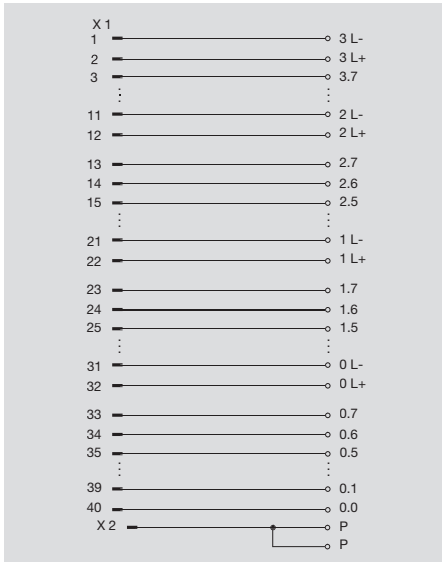
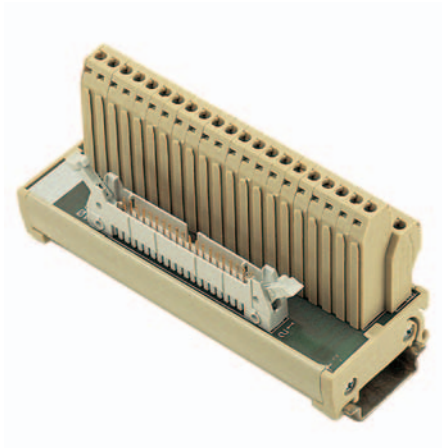
Input/output modules passive 1-conductor technology

- Compact design
- Screw connection technology
- Clear connection labelling
- Mounting on TS35

RS F10 LPK 2H/12



RS F40 LPK 2H/42



Technical data

Connection data		
Connection with the process		
Stripping length		
Connection technology supply voltage/other connections		
Coupling to the control side, 8- way module		
Coupling to the control side, 32- way module/		
Rated data		
Number of signals		
Rated voltage		
Rated current per connection		
LED current		
Common potential at terminal/Volt. supply/Byte disconnect.		
Ambient temp., fitted w/o distance/Storage temperature		
Overvoltage category/Pollution severity		
Mounting rail		
Dimensions		
Clamping range (rating- / min. / max.)	mm²	
Length x width x height	mm	
Information		

Connection data		
PCB terminal LPK 2 H		
Stripping length	7.0mm	
Connection technology	screw connection	
Coupling to the control side, 10- pole FB-socket IEC 603-1		
Coupling to the control side, 32- way module/	/	
Rated data		
Number of signals	8	
Rated voltage	60 Vac/ 75 Vdc	
Rated current per connection	1A	
LED current		
Common potential at terminal/Volt. supply/Byte disconnect.	/-	
Ambient temp., fitted w/o distance/Storage temperature	0 °C...+55 °C/-40 °C...+70 °C	
Overvoltage category/Pollution severity	II/2	
Mounting rail	TS 35	
Dimensions		
Clamping range (rating- / min. / max.)	mm²	1.50 / 0.50 / 2.50
Length x width x height	mm	45.0 x 49.0 x 65.5
Information		

Connection data		
PCB terminal LPK 2 H		
Stripping length	7.0mm	
Connection technology	screw connection	
Coupling to the control side, 40- pole FB-socket IEC 603-1/		
Coupling to the control side, 32- way module/		
Rated data		
Number of signals	32 4 byte	
Rated voltage	60 Vac/ 75 Vdc	
Rated current per connection	1A	
LED current		
Common potential at terminal/Volt. supply/Byte disconnect.	/No	
Ambient temp., fitted w/o distance/Storage temperature	0 °C...+55 °C/-40 °C...+70 °C	
Overvoltage category/Pollution severity	II/2	
Mounting rail	TS 35	
Dimensions		
Clamping range (rating- / min. / max.)	mm²	1.50 / 0.50 / 2.50
Length x width x height	mm	45.0 x 121.0 x 65.5
Information		

Ordering data

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

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

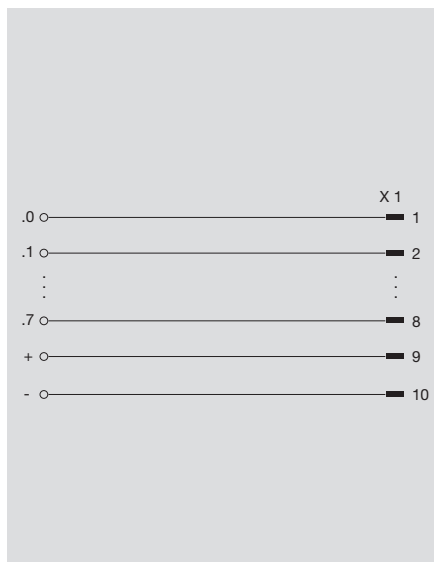
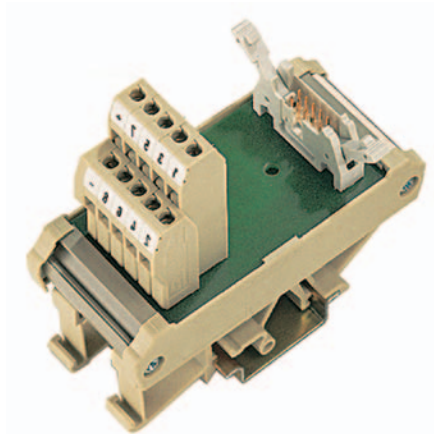
Type	Qty.	Order No.
RS F40 LPK 2H/42	1	8248060000
Information		

PLC Input/output modules

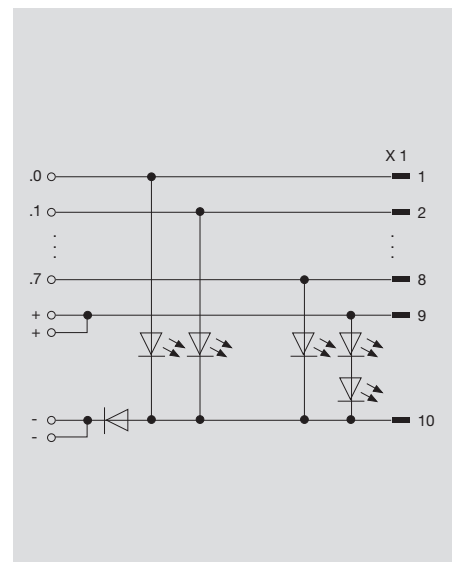
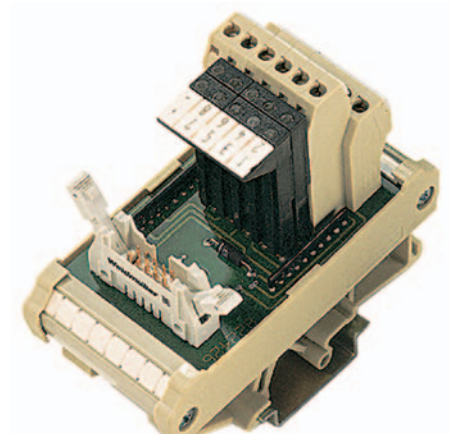
Input/output modules passive 1-conductor technology

- Screw connection technology
- Clear connection labelling
- Optional with status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F10 I/O8 LPK2



RS F10 I/O8 LD LPK2



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LPK 2 H

7.0mm

screw connection

10-pole FB-socket IEC 603-1

/

8

60 Vac/ 75 Vdc

1A

/

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 40.0 x 80.0

PCB terminal LPK 2 H

7.0mm

screw connection

10-pole FB-socket IEC 603-1

/

8

24 Vdc +/- 20 %

1A

< 5 mA

/

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 40.0 x 80.0

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

Information

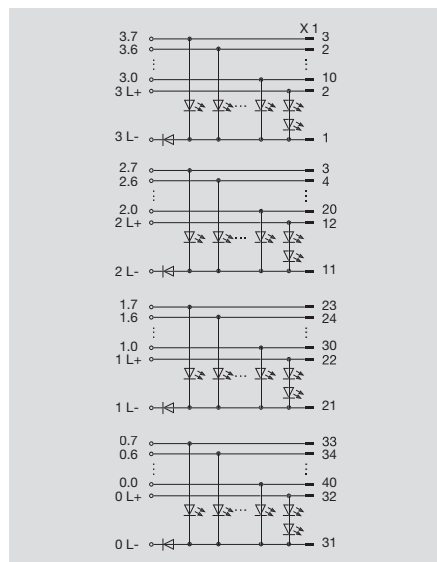
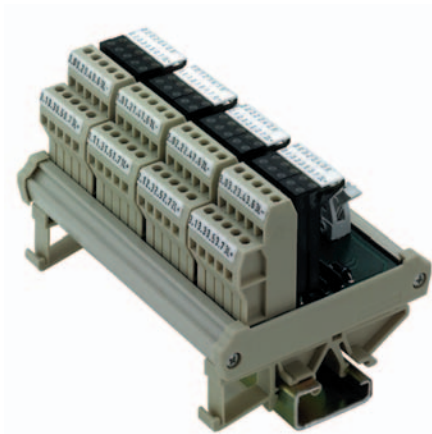
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Input/output modules

Input/output modules passive 1-conductor technology

- Screw connection technology
- Clear connection labelling
- Optional with status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F40 I/O32 LD LPK2H



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LPK 2 H

7.0mm

screw connection

40-pole FB-socket IEC 603-1/

32 4 byte

24 Vdc +/- 20 %

1A

< 5 mA

/No

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 165.0 x 80.0

Ordering data

Type	Qty.	Order No.
RS F40 I/O32 LD LPK2H	1	8269060000

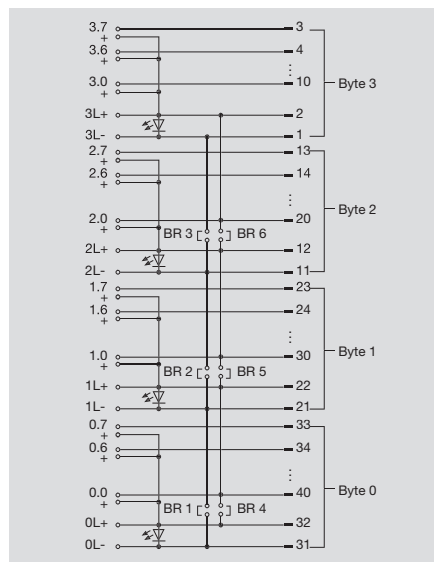
Information

PLC Input/output modules

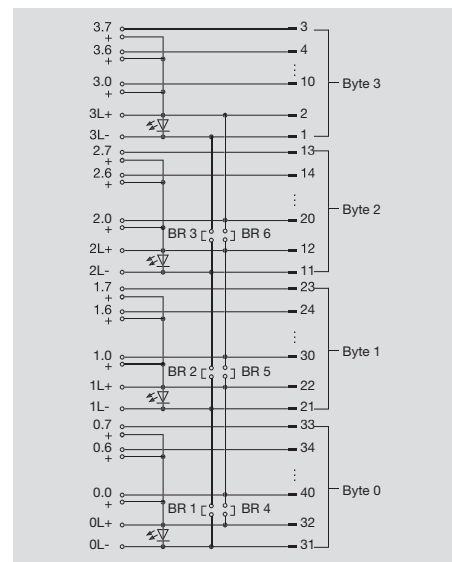
Input modules passive 2-conductor technology

- Screw connection technology
- Connection of 2 conductor sensors
- Plug-in jumpers allow a group partitioning of sensors in 1x32, 2x16 or 4x8 signals on the module
- Clear byte grouping of the signals
- Optional with status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F40 INIT32 LPK2



RS F40 INIT32 LD LPK2



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LPK 2 H

7.0mm

screw connection

40-pole FB-socket IEC 603-1/

32 4 byte

60 Vac/ 75 Vdc

1A

< 5 mA

+ potential/Yes

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 185.0 x 80.0

PCB terminal LPK 2 H

7.0mm

screw connection

40-pole FB-socket IEC 603-1/

32 4 byte

24 Vdc +/- 20 %

1A

< 5 mA

+ potential/Yes

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 185.0 x 80.0

Ordering data

Type	Qty.	Order No.
RS F40 INIT32 LPK2	1	8224510000

Type	Qty.	Order No.
RS F40 INIT32 LD LPK2	1	8224520000

Information

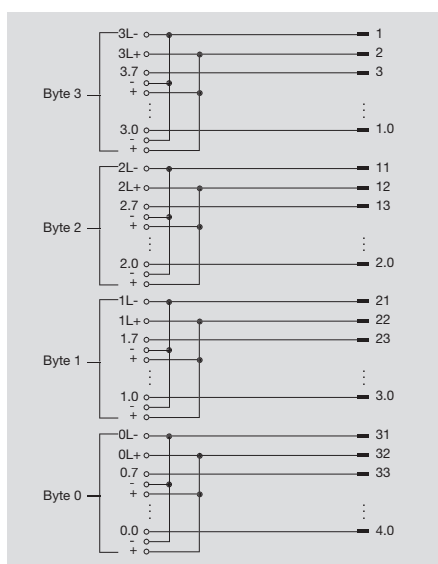
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Input/output modules

Input modules passive 3-conductor technology

- Screw connection technology
- Connection of 3-wire sensors/initiators
- Clear byte grouping of the signals
- Additional label for group designation
- Mounting on TS 32/35

RS F40 INIT32 LPK3



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LPK 3

7.0mm

screw connection

40-pole FB-socket IEC 603-1/

32 4 byte

60 Vac/ 75 Vdc

1A

+/- potential/Yes

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 185.0 x 80.0

Ordering data

Type	Qty.	Order No.
RS F40 INIT32 LPK3	1	8248040000

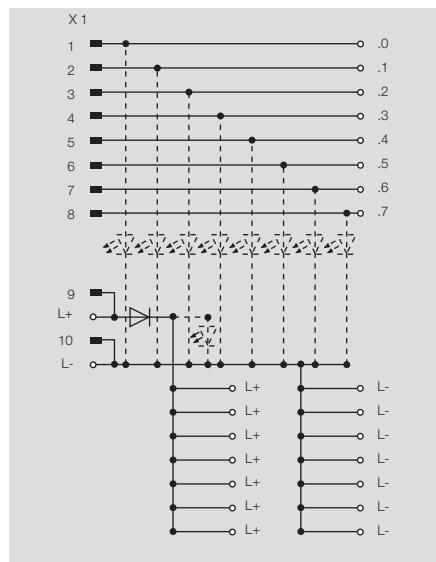
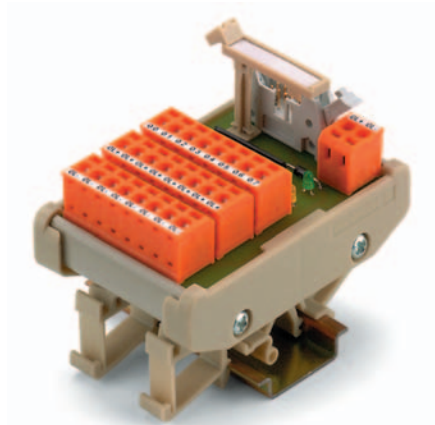
Information

PLC Input/output modules

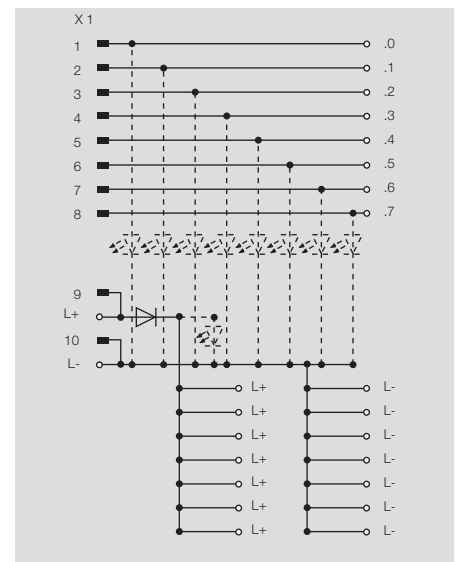
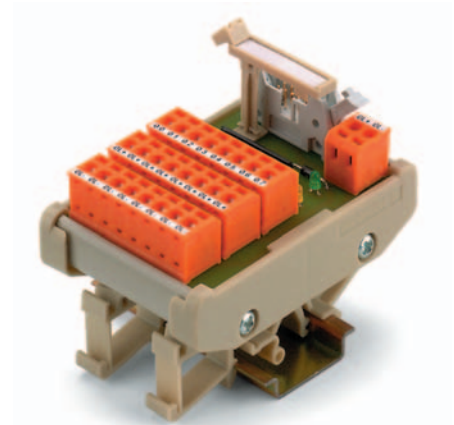
Input modules passive 3-conductor technology

- Tension clamp technology
- Connection of 3-wire initiators
- On the 32-way module wire jumper allow a group partitioning of the initiators to 1x32, 2x16 or 4x8 signals
- Clear byte grouping of the signals
- Optional with status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F10 INIT8 LMZF



RS F10 INIT8 LD LMZF



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LMZF

7.0mm

tension clamp terminal

10-pole FB-socket IEC 603-1

/

8

60 Vac/ 75 Vdc

1A

LED current

+/- potential/-

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 54.0 x 73.0

PCB terminal LMZF

7.0mm

tension clamp terminal

10-pole FB-socket IEC 603-1

/

8

24 Vdc +/- 20 %

1A

< 5 mA

+/- potential/-

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 54.0 x 73.0

Ordering data

Type	Qty.	Order No.
RS F10 INIT8 LMZF	1	8430970000

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

Information

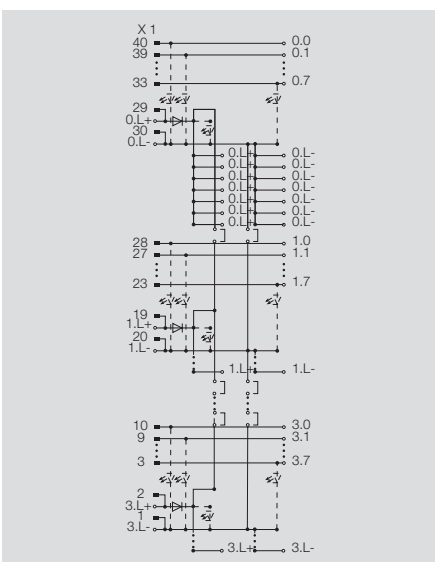
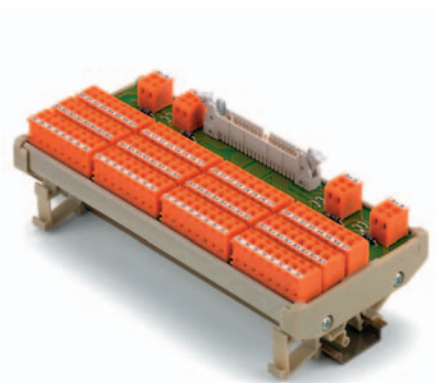
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

PLC Input/output modules

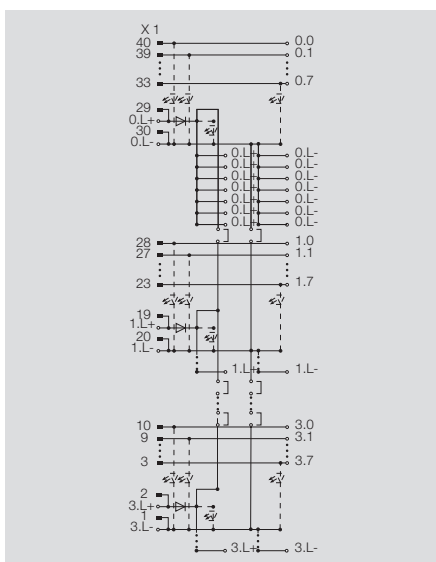
Input modules passive 3-conductor technology

- Tension clamp technology
- Connection of 3-wire initiators
- On the 32-way module wire jumpers allow a group partitioning of the initiators to 1x32, 2x16 or 4x8 signals
- Clear byte grouping of the signals
- Optional with status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F40 INIT32 LMZF



RS F40 INIT32 LD LMZF



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LMZF

7.0mm

tension clamp terminal

40-pole FB-socket IEC 603-1/

32 4 byte

60 Vac/ 75 Vdc

1A

+/- potential/Yes

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 185.0 x 73.0

PCB terminal LMZF

7.0mm

tension clamp terminal

40-pole FB-socket IEC 603-1/

32 4 byte

24 Vdc +/- 20 %

1A

< 5 mA

+/- potential/Yes

0 °C...+55 °C/-40 °C...+70 °C

II/2

TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50

87.0 x 185.0 x 73.0

Ordering data

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

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

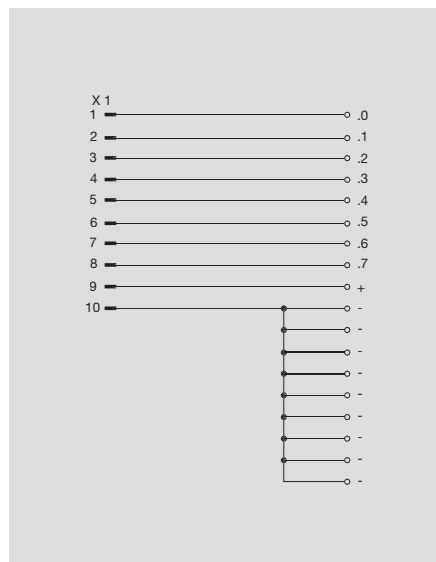
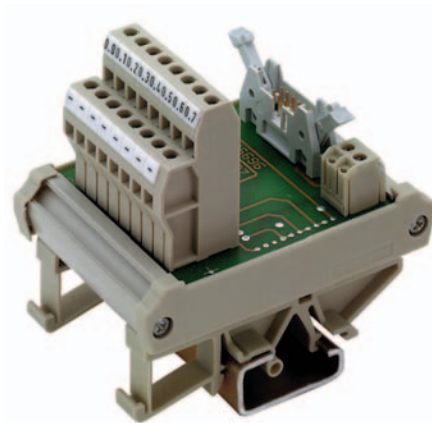
Information

PLC Input/output modules

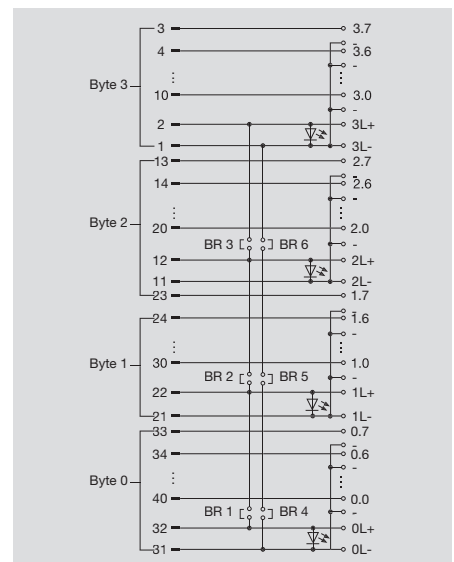
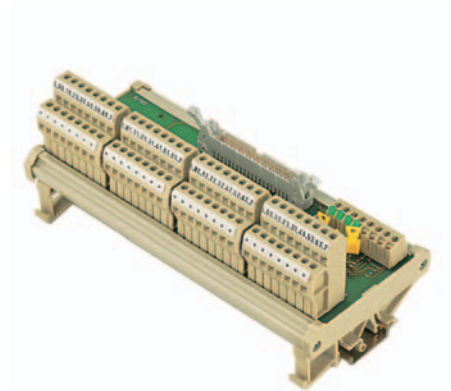
Output modules passive 2-conductor technology

- Screw connection technology
- On the 32-way module plug-in jumpers allow a group partitioning of the connected actuators to 1x32, 2x16 or 4x8 signals
- Clear byte grouping of the signals
- Optional LED-status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F10 OUT8 LD LPK2H



RS F40 OUT32 LPK2



Technical data

Connection data

Connection with the process
Stripping length
Connection technology supply voltage/other connections
Coupling to the control side, 8- way module
Coupling to the control side, 32- way module/

Rated data

Number of signals
Rated voltage
Rated current per connection
LED current
Common potential at terminal/Volt. supply/Byte disconnect.
Ambient temp., fitted w/o distance/Storage temperature
Overvoltage category/Pollution severity
Mounting rail

Dimensions

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

Information

PCB terminal LPK 2 H
7.0mm
screw connection
10-pole FB-socket IEC 603-1
/

8
24 Vdc +/- 20 %
1A
< 5 mA
- potential/
0 °C...+55 °C/-40 °C...+70 °C
II/2
TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50
87.0 x 65.0 x 80.0

PCB terminal LPK 2 H
7.0mm
screw connection
40-pole FB-socket IEC 603-1/

32 4 byte
60 Vac/ 75 Vdc
1A
< 5 mA
- potential/Yes
0 °C...+55 °C/-40 °C...+70 °C
II/2
TS 32, TS 35 x 7.5, TS 35 x 15

1.50 / 0.50 / 2.50
87.0 x 190.0 x 80.0

Ordering data

Type	Qty.	Order No.
RS F10 OUT8 LD LPK2H	1	8256970000

Type	Qty.	Order No.
RS F40 OUT32 LPK2	1	8224530000

Information

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

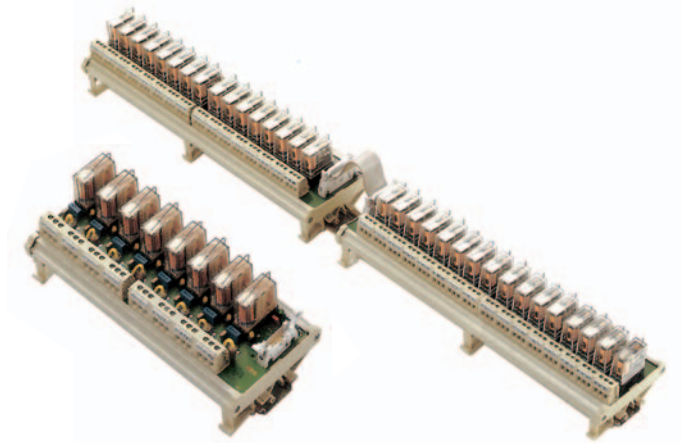
PLC Interface

Active components

Relay coupler output modules allow transmission of electric signals between PLC controller and the actuator level. Signal disconnecter guarantees transmission free of reference potential and decoupling of the electric signals.

Active interface components fulfil additional requirements:

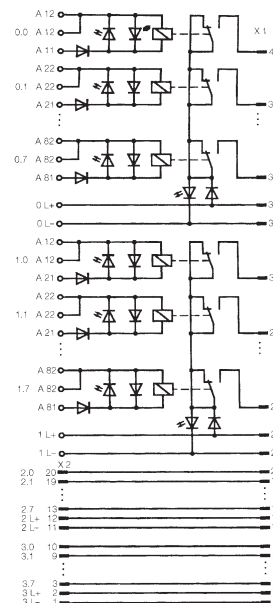
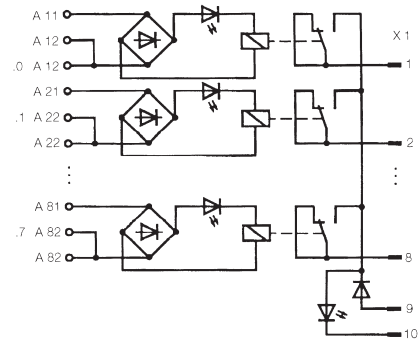
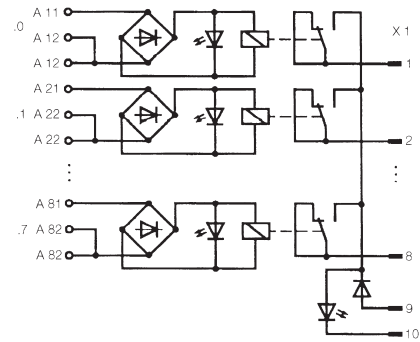
- signal transmission feedback-free and noise-free
- power amplification
- compact design
- wiring with preassembled leads to save time and costs.



Active output units

Relay coupler output modules for PLC triggering of actuators free of reference potential.

- RS F40 16 RS for output of 16 signals (with extension module max. 32 signals)
 - RS F40 LMZF 32 RS for output of 32 signals
 - RS F10 8RS for output of 8 signals
-
- Choice between screw or tension spring terminals
 - Low-cost adaptation to PLC via preassembled control wires
 - Electrical isolation of input and output circuits
 - Expansion module for extending the 16x module to 32x module
 - Pluggable relays
 - Integrated status indicator of switching state
 - Labelling field for group identification
 - Clips onto TS 32/35

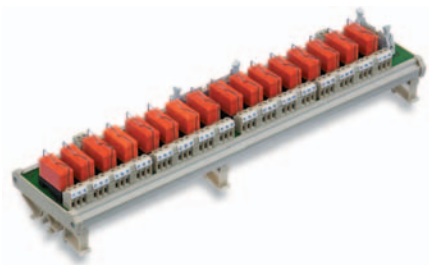


PLC Input/output modules

Output module relay coupler

- Screw connection technology
- Basic- and extension module are equipped with 16 relays
- Pluggable relays with change-over contact
- Coupling of the extension module via 20-pole flat-cable
- Galvanic separation of input and output circuit
- LED-status indicator
- Mounting on TS32/35

RS F40 16RS OUT



Technical data

Connection data

Type	
Number of signals	16
Connection with the process	screw connection
Connection technology converted cable	40-pole male connector IEC 603/1
Connection technology supply voltage/other connections	screw connection/ IEC 603-1 20-pole
Stripping length	7mm

Input

Rated voltage	24 Vdc +/- 10 %
Oper.-/drop-out volt. DC-coil	> 16 V / < 4 V
Rated current DC	30 mA
Pull-in curr./release curr. DC-coil	23 mA / 2 mA
Power rating	0.75 W
Status indicator/LED - current consumption	yellow/3mA
Response time / Release time	< 8 ms/ < 7 ms
Max. switching frequency at rated load	10Hz

Output

Max. switching voltage AC/Max. switching voltage DC	250V/250V
Continuous current/Switch-on current/Min. switching current	6A/8 A/100mA
Max. switching power	2000 VA / 200 W
Type of relay/Relay mounting	SIEMENS RT 1/pluggable
Type of contact/Contact base material	change-over contact/AgNi 90/10

Insulation coordinates (EN 50 178)

Ambient temp., fitted w/o distance	0 °C...+55 °C
Storage temperature	-40 °C...+70 °C
Rated voltage	300 V
Voltage strength, Input/Output	4 kVeff
Overvoltage category	II
Pollution severity	2
Mounting rail mountability	TS 32/35
Standards/Approvals	EN 50178/CE

Dimensions

Clamping range (rating- / min. / max.)	mm ²	2.50 / 0.50 / 4
Length x width x height	mm	87.0 x 350.0 x 76.0

Information

Ordering data

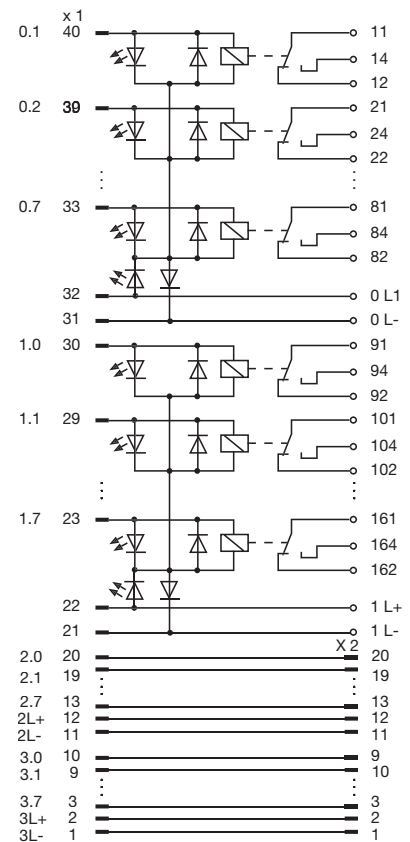
	Type	Qty.	Order No.
Basic module	RS F40 16RS OUT 24VDC	1	8224181001
Extension module	RS F40 16RS OUT 24VDC E	1	8224191001

Information

Accessories

Information

Spare relay RT314024 4058480000

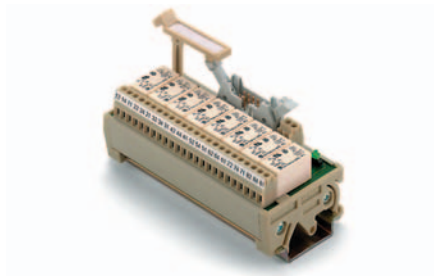


PLC Input/output modules

Output module relay coupler

- Screw connection technology
- Compact design
- Galvanic separation of input and output circuit
- Relay soldered with change-over contact
- LED-status indicator
- Mounting on TS 35

RS F10 8R OUT 24VDC



Technical data

Connection data

Type
Number of signals
Connection with the process
Connection technology converted cable
Connection technology supply voltage/other connections
Stripping length

IEC603-1 10-pol./ screw connection
8
screw connection
10-poles male connector IEC 603/1
screw connection LM 3.5
5mm

Input

Rated voltage
Oper.-/drop-out volt. DC-coil
Rated current DC
Pull-in curr./release curr. DC-coil
Power rating
Status indicator/LED - current consumption
Response time / Release time
Max. switching frequency at rated load

24 Vdc +/- 10 %
> 18 V/ < 4 V
20 mA
20 mA/ 2mA
0.5 W
yellow/5mA
< 8 ms/ < 4 ms

Output

Max. switching voltage AC/Max. switching voltage DC
Continuous current/Switch-on current/Min. switching current
Max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

250V/120V
3A/5 A/100mA
1250 VA/ 80 W
DOLD OW5691/soldered
change-over contact/Ag Ni

Insulation coordinates (EN 50 178)

Ambient temp., fitted w/o distance
Storage temperature
Rated voltage
Voltage strength, Input/Output
Overvoltage category
Pollution severity
Mounting rail mountability
Standards/Approvals

0 °C...+55 °C
-40 °C...+70 °C
250V
4 kVeff
II
2
TS35
EN 50178/CE

Dimensions

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

mm²
mm
1.50 / 0.50 / 1.50
45.0 x 93.0 x 51.0

Information

Ordering data

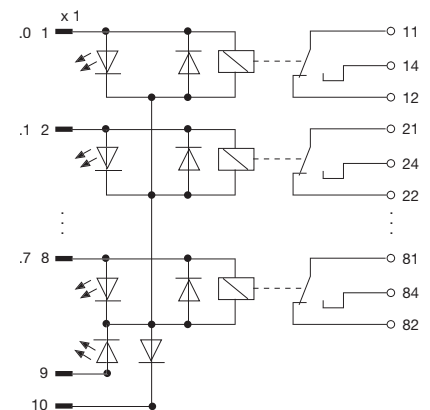
IEC603-1 10-pol./ screw connection

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

Information

Accessories

Information

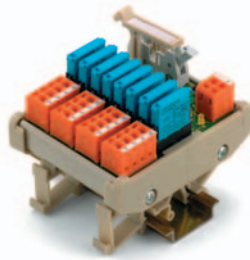


PLC Input/output modules

Output module relay coupler

- Tension clamp connection technology
- Compact design
- Galvanic separation of input and output circuit
- 8 relays pluggable
- NO contact executed
- LED-status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F10 8RS OUT LMZF



Technical data

Connection data

Type
Number of signals
Connection with the process
Connection technology converted cable
Connection technology supply voltage/other connections
Stripping length

IEC603-1 10-pol./ tension clamp con.
8
PCB terminal LMZF
10-poles male connector IEC 603/1
tension clamp connection
7mm

Input

Rated voltage
Oper.-/drop-out volt. DC-coil
Rated current DC
Pull-in curr./release curr. DC-coil
Power rating
Status indicator/LED - current consumption
Response time / Release time
Max. switching frequency at rated load

24 Vdc +/- 10 %
> 19 V/ < 7 V
30mA
20 mA/ 2mA
0.5 W
yellow/3mA
< 5 ms /< 15 ms

Output

Max. switching voltage AC/Max. switching voltage DC
Continuous current/Switch-on current/Min. switching current
Max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

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

Insulation coordinates (EN 50 178)

Ambient temp., fitted w/o distance
Storage temperature
Rated voltage
Voltage strength, Input/Output
Overvoltage category
Pollution severity
Mounting rail mountability
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.)
Length x width x height

mm²
mm
1.50 / 0.50 / 2.50
87.0 x 78.0 x 73.0

Information

Ordering data

IEC603-1 10-pol./ tension clamp con.

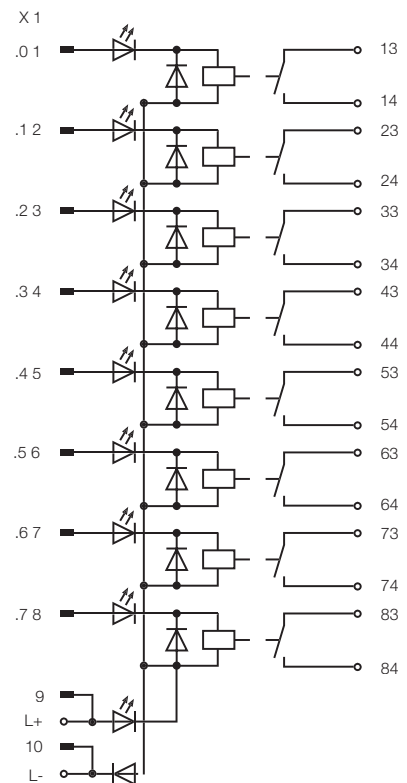
Type	Qty.	Order No.
RS F10 8RS OUT LMZF	1	8430990000

Information

Accessories

Information

Spare relay NYP-24 WK 4052510000



PLC Input/output modules

Output module relay coupler

- Tension clamp connection technology
- Compact design
- Galvanic separation of input and output circuit
- 32 relays pluggable
- No contact executed
- LED-status indicator
- Additional label for group designation
- Mounting on TS 32/35

RS F40 32RS OUT LMZF



Technical data

Connection data

Type
Number of signals
Connection with the process
Connection technology converted cable
Connection technology supply voltage/other connections
Stripping length

IEC603-1 40-pol./ tension clamp con.
32 4 byte
PCB terminal LMZF
10-pole male connector IEC 603/1
tension clamp connection
7mm

Input

Rated voltage
Oper.-/drop-out volt. DC-coil
Rated current DC
Pull-in curr./release curr. DC-coil
Power rating
Status indicator/LED - current consumption
Response time / Release time
Max. switching frequency at rated load

24 Vdc +/- 10 %
> 19 V/ < 7 V
30mA
20 mA/ 2mA
0.5 W
yellow/3mA
< 5 ms /< 15 ms

Output

Max. switching voltage AC/Max. switching voltage DC
Continuous current/Switch-on current/Min. switching current
Max. switching power
Type of relay/Relay mounting
Type of contact/Contact base material

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

Insulation coordinates (EN 50 178)

Ambient temp., fitted w/o distance
Storage temperature
Rated voltage
Voltage strength, Input/Output
Overvoltage category
Pollution severity
Mounting rail mountability
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.)
Length x width x height

1.50 / 0.50 / 2.50
87.0 x 263.0 x 73.0

Information

Ordering data

IEC603-1 40-pol./ tension clamp con.

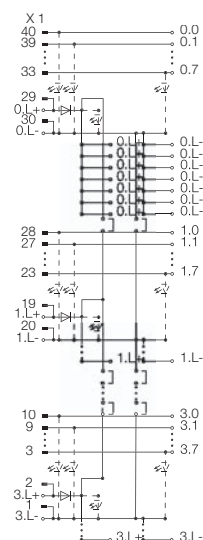
Type	Qty.	Order No.
RS F40 32RS OUT LMZF	1	8431000000

Information

Accessories

Information

Spare relay NYP-24 WK 4052510000



Control lead

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.

Preassembled control lead



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	300 V
Current carrying capacity	1 A
Total current load	
- 40-pole lead	26 A/ΔT = 20 K
- 10-pole lead	11,5 A/ΔT = 20 K
Rated cross-section of cores	0,14 mm ²
Resistance value	55 mΩ/m
Storage temperature	-10...+80 °C

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 10/150 RK	1.50 m	8235370000
FBK 10/200 RK	2.00 m	8235380000
FBK 10/250 RK	2.50 m	8235390000
FBK 10/300 RK	3.00 m	8235400000
FBK 10/350 RK	3.50 m	8235410000
FBK 10/400 RK	4.00 m	8235420000
FBK 10/450 RK	4.50 m	8235430000
FBK 10/500 RK	5.00 m	8235440000
FBK 10/550 RK	5.50 m	8288640000

* special lengths on request

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	0.50 m	8263960050
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 40/450 RK	4.50 m	8235340000
FBK 40/500 RK	5.00 m	8235350000

Accessories

Relay couplers



Order data	
Input voltage	24 Vdc
Switching voltage	250 V
Min. switching current	100 mA
Mechanical service life	>30 x 10 ⁶
Switching performance DC 13	1,25 A, L/R=80ms 2,3 x 10 ⁵

Contact material	AgNi 90/10 gold flashed
Replacement relay for	8224181001 8224191001

Type	Order no.
24 Vdc	4058480000 ¹⁾
RT 314024 pluggable relay	
24 Vdc	
250 V	
100 mA	
>30 x 10 ⁶	
1,25 A, L/R=80ms 2,3 x 10 ⁵	

Order data	
Input voltage	24 Vdc
Switching voltage	250 V
Min. switching current	10 mA
Contact material	Ag alloy, 5µ hard gold plated
Replacement relay for	8430990000 8431000000

Type	Order no.
24 Vdc	4052510000
NYP-24 WK pluggable relay	
24 Vdc ± 10 %	
250 V	
10 mA	
Ag alloy, 5µ hard gold plated	
8430990000	
8431000000	

¹⁾ Switching current, constant current: see technical data relay coupler modules.

Diagrams for order nos 4058480000

