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Configuration

Brief instruction to the configuration guide

For first time use

Tear the drawing pages along the perforated line.
The perforated line is indicated by the “scissors” symbol.

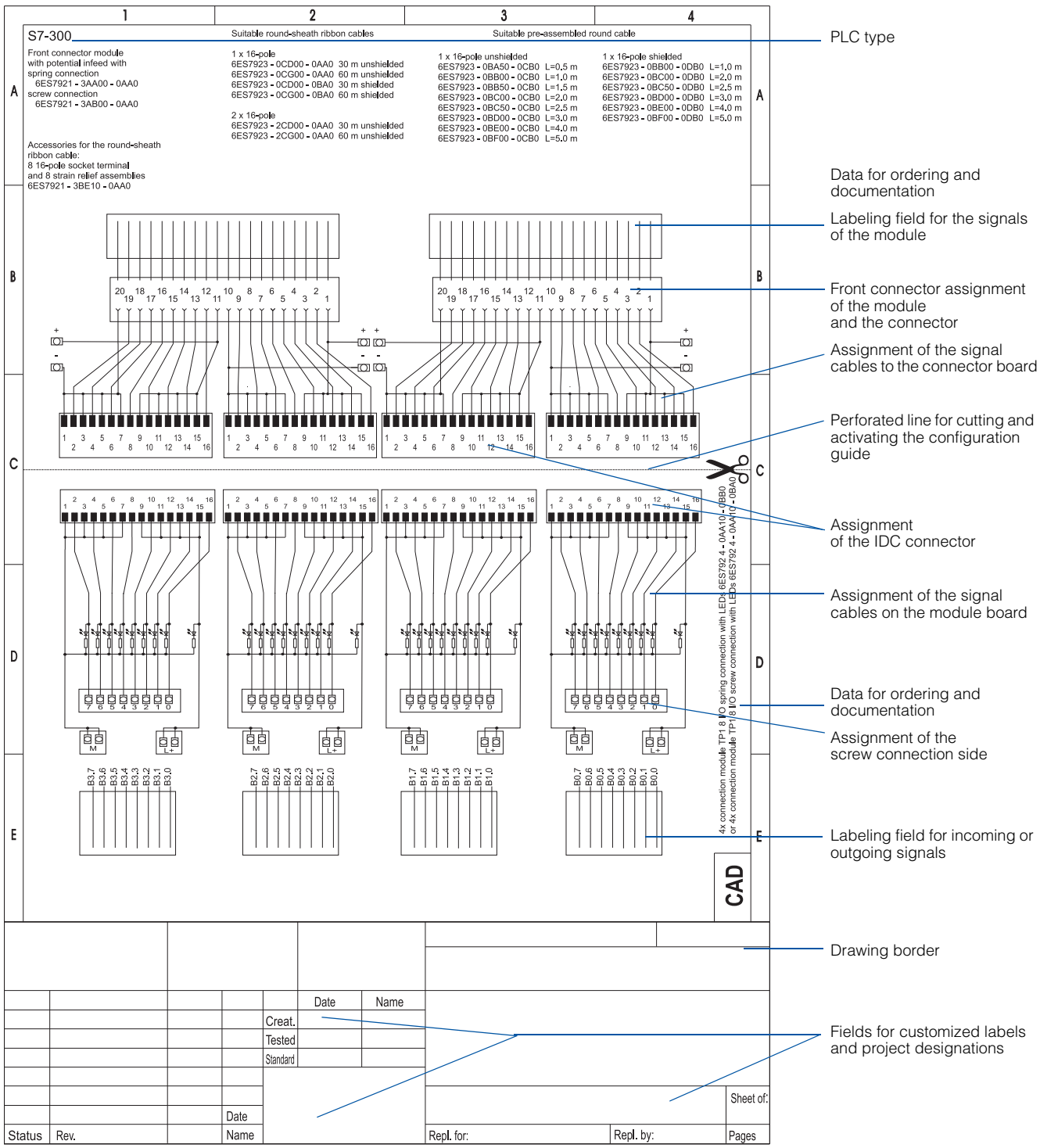
In daily use

1. In the upper part of the sheets, find the SIMATIC S7-300 or S7-400 with the relevant front connector module.
2. Find the connection module you intend to use by looking through the lower halves of the pages.

   You can find the valid assignment of front connector module to connection module in the selection overview on pages 2/6 to 2/13.
3. Copy the page that you have matched together.

Follow all the other steps on the copy.

4. Enter the signal assignment on the labeling field of the module.
5. Enter the incoming or outgoing signals in the labeling field of the connection module.
6. Fill out the customized labeling fields.



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S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AA00 - 0AA0
screw connection
6ES7921 - 3AB00 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

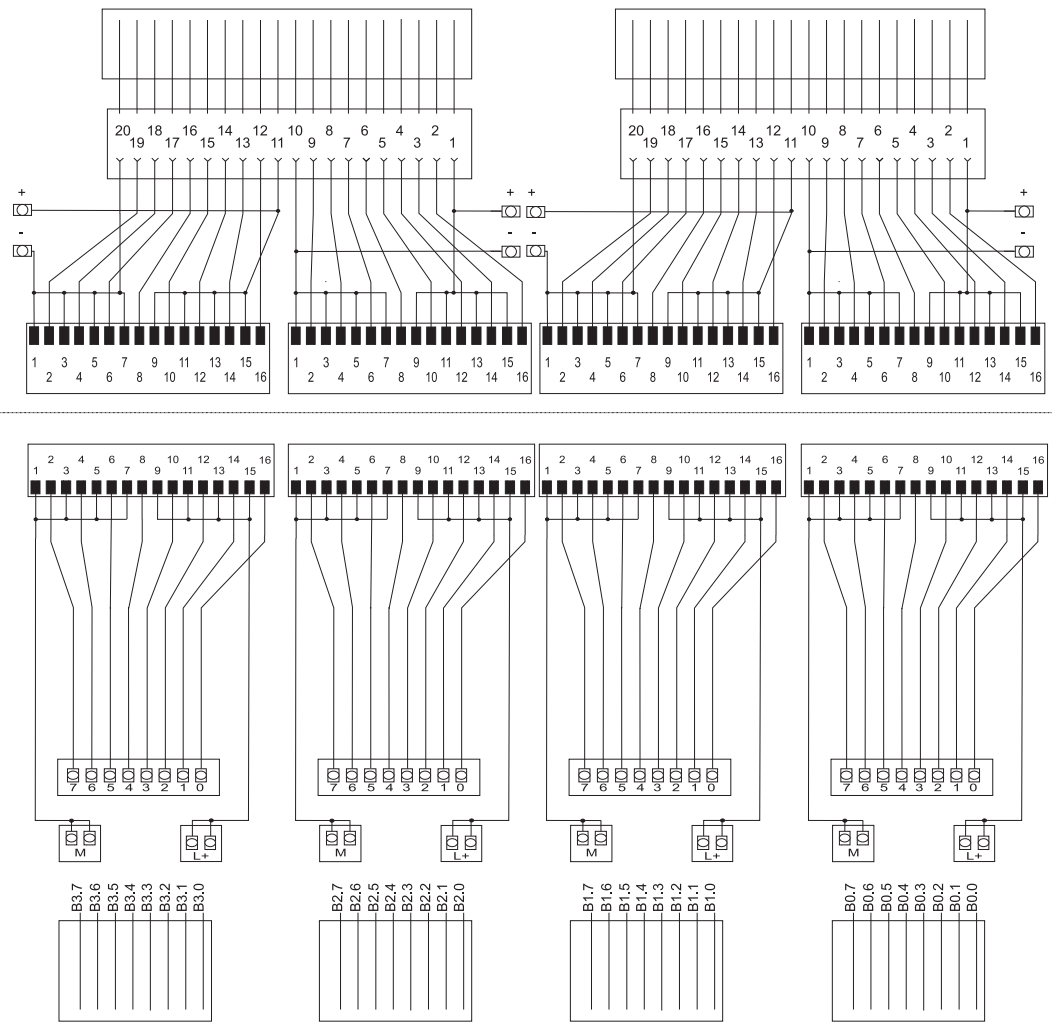
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m



4x connection module TP1 8 I/O spring connection 6ES792 4 - 0AA10 - 0AB0
or 4x connection module TP1 8 I/O screw connection 6ES792 4 - 0AA10 - 0AA0

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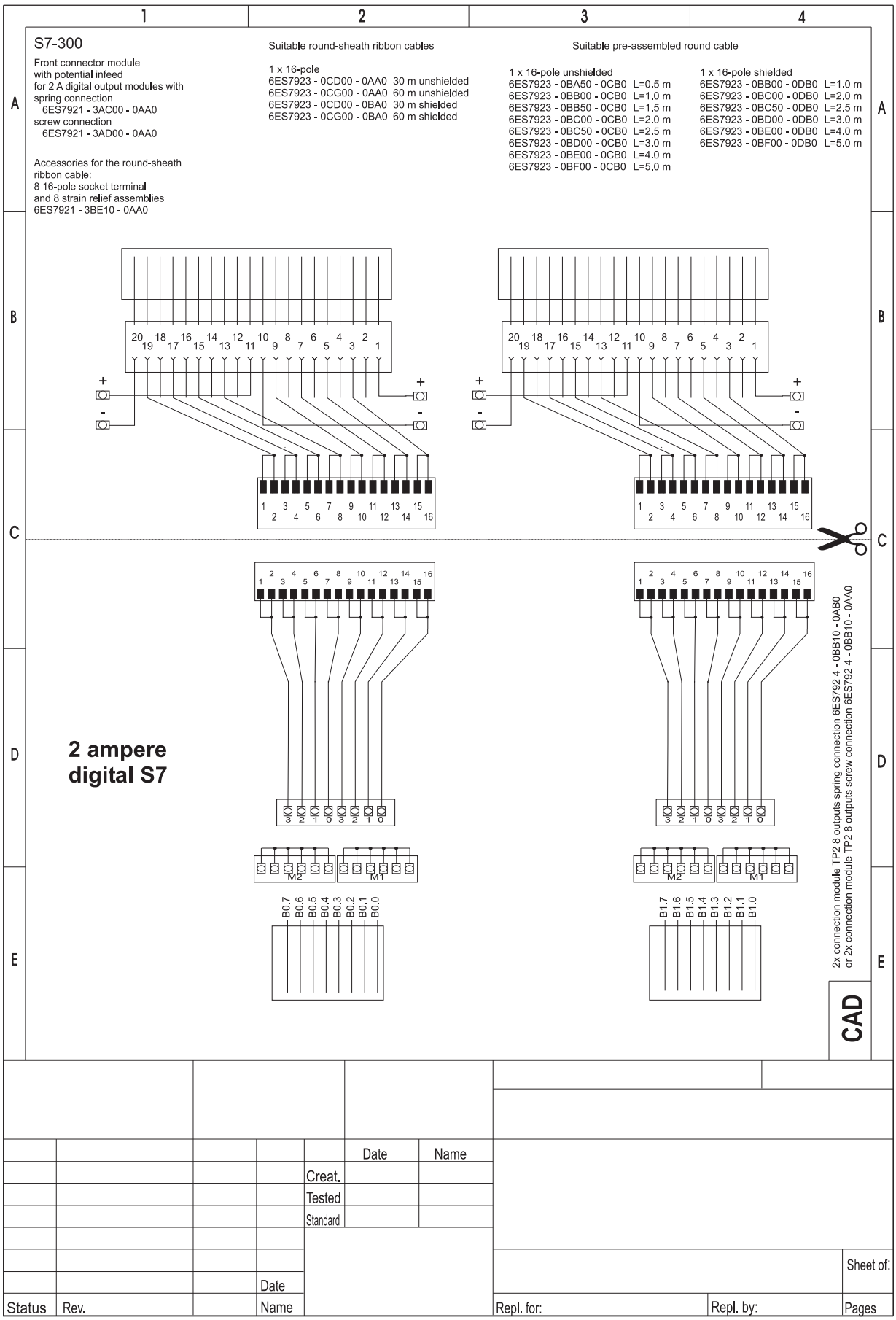
Configuration

Configuration guides



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S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AA00 - 0AA0
screw connection
6ES7921 - 3AB00 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

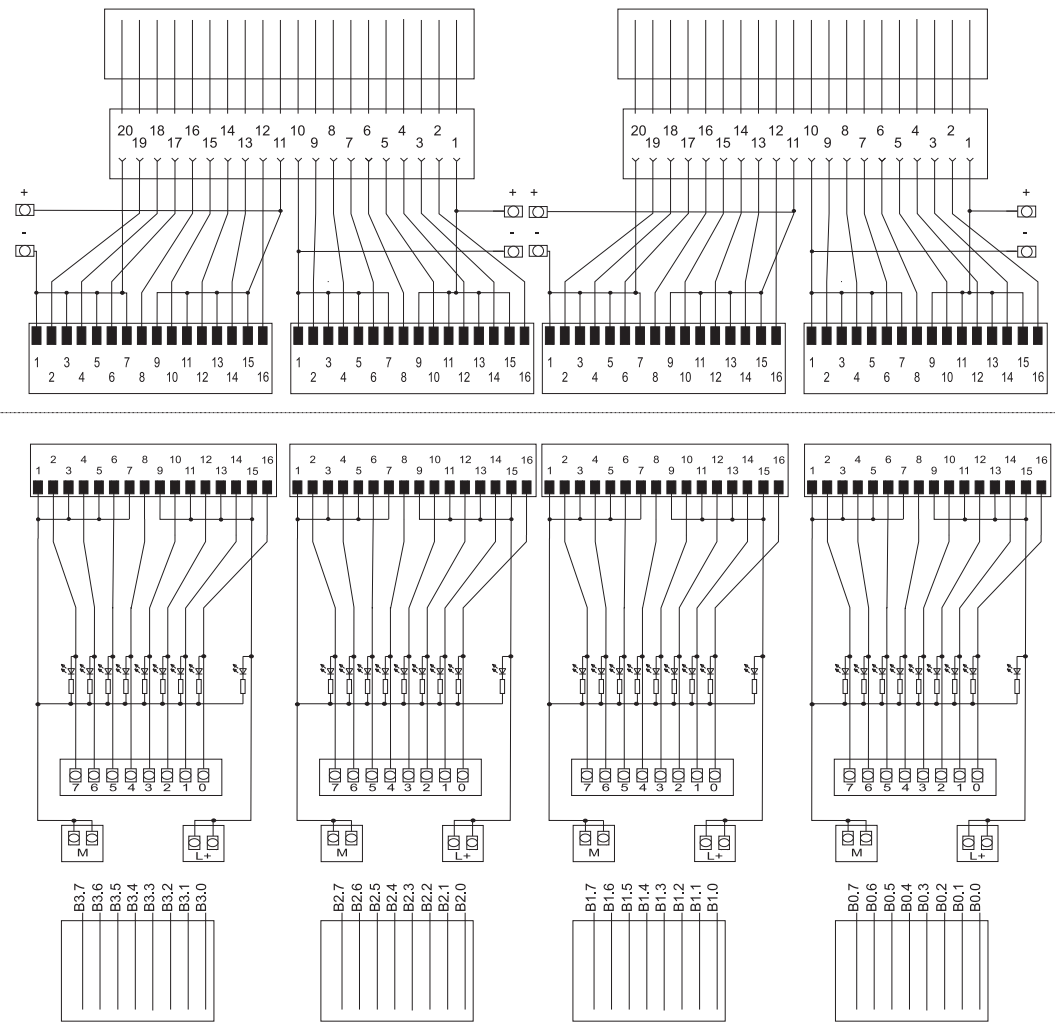
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2,0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m



4x connection module TP1 8 I/O spring connection with LEDs 6ES792 4 - 0AA10 - 0BB0
or 4x connection module TP1 8 I/O screw connection with LEDs 6ES792 4 - 0AA10 - 0BA0

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S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AA20 - 0AA0
screw connection
6ES7921 - 3AB20 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

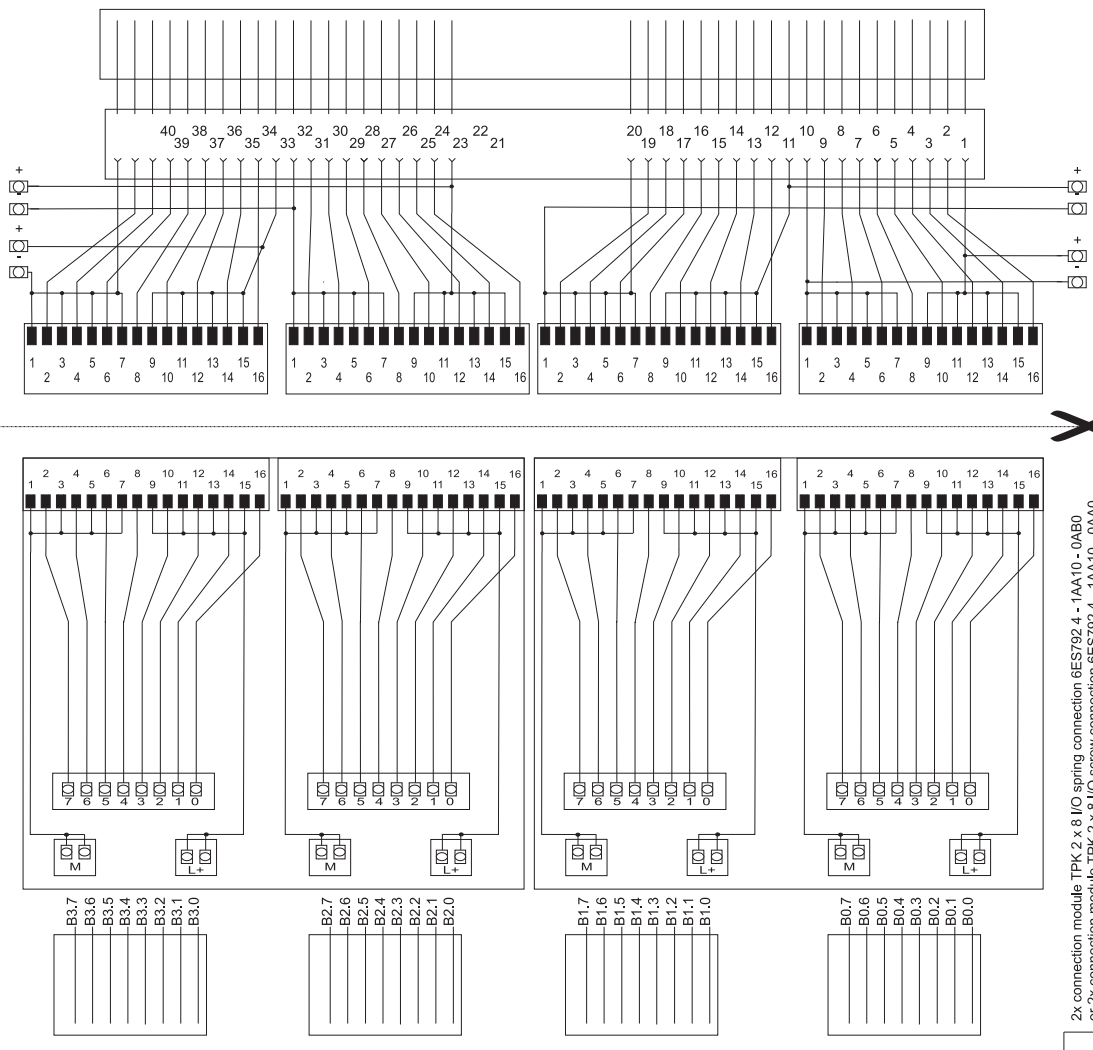
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m



2x connection module TPK 2 x 8 I/O spring connection 6ES792 4 - 1AA10 - 0AB0
or 2x connection module TPK 2 x 8 I/O screw connection 6ES792 4 - 1AA10 - 0AA0

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S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AA20 - 0AA0
screw connection
6ES7921 - 3AB20 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

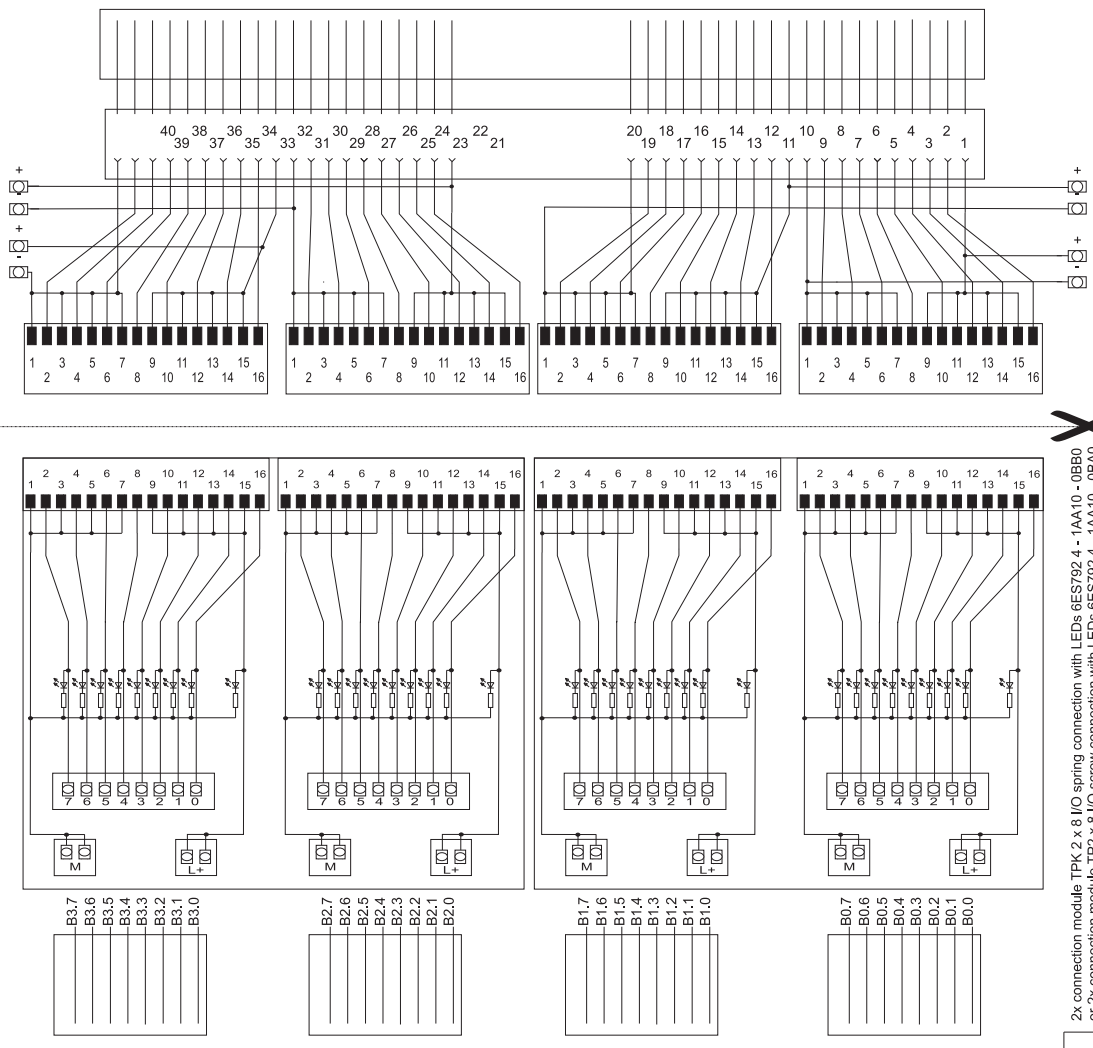
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m



2x connection module TPK 2 x 8 I/O spring connection with LEDs 6ES792 4 - 1AA10 - 0BB0
or 2x connection module TP2 x 8 I/O screw connection with LEDs 6ES792 4 - 1AA10 - 0BA0

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S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AA00 - 0AA0
screw connection
6ES7921 - 3AB00 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

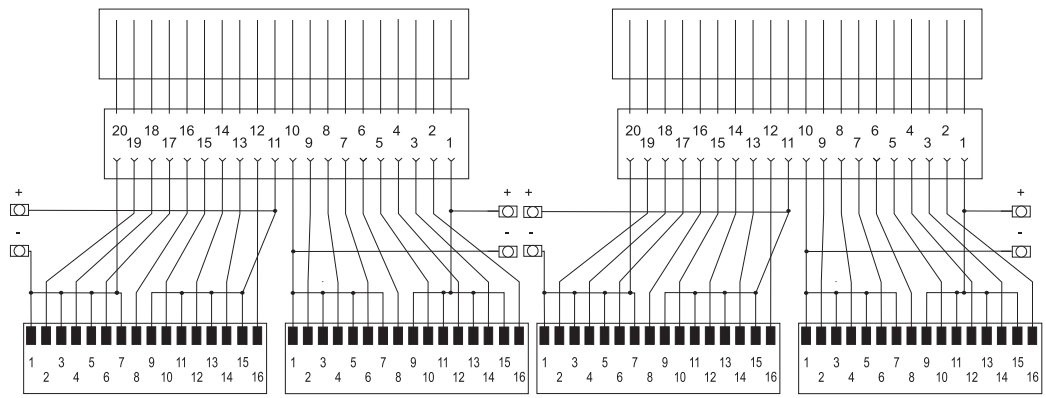
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

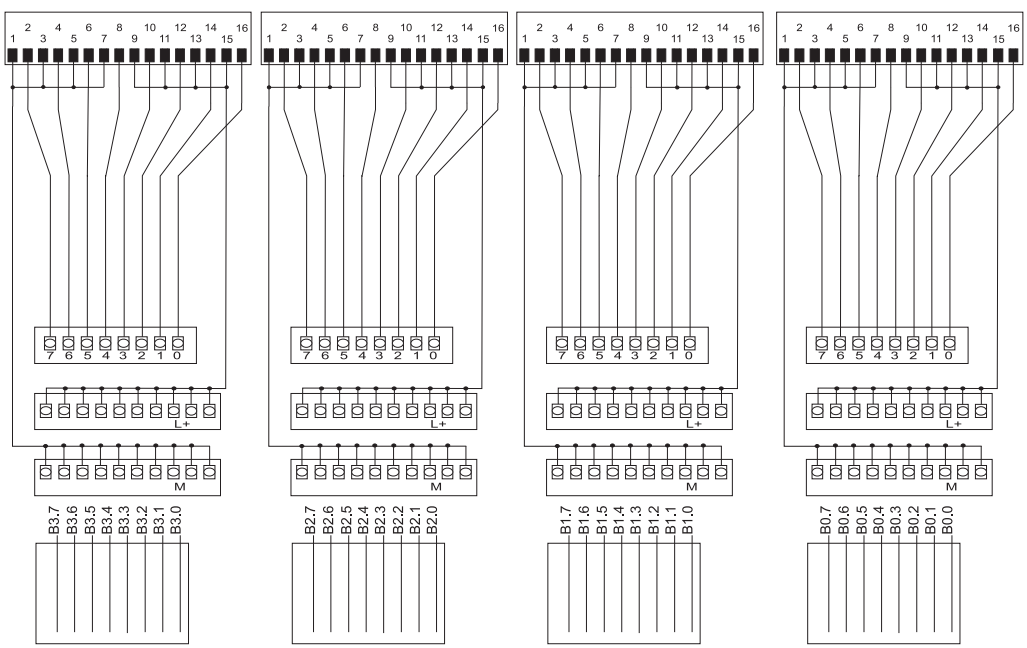
2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m





4x connection module TP3 8 I/O spring connection 6ES792 4 - 0CA10 - 0AB0
or 4x connection module TP3 8 I/O screw connection 6ES792 4 - 0CA10 - 0AA0

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S7-300 Compact CPU 312 C

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AJ20 - 0AA0
screw connection
6ES7921 - 3AK20 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

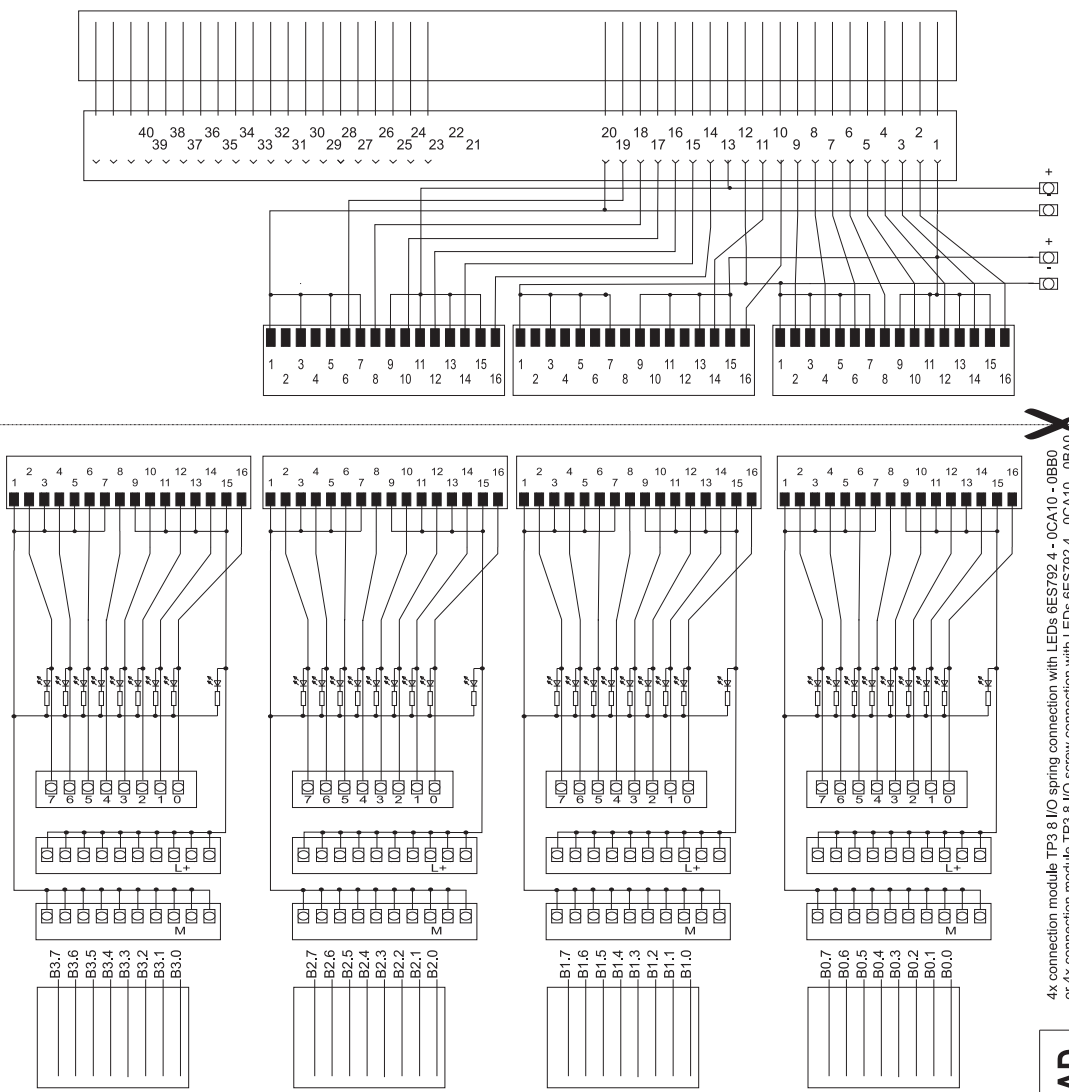
1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

2 x 16-pole
6ES7923 - 2CD00 - 0AA0 30 m unshielded
6ES7923 - 2CG00 - 0AA0 60 m unshielded

Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m



4x connection module TP3 8 I/O spring connection with LEDs 6ES792 4 - 0CA10 - 0BB0
or 4x connection module TP3 8 I/O screw connection with LEDs 6ES792 4 - 0CA10 - 0BA0

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Configuration

Configuration guides

S7-300

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AF00 - 0AA0
screw connection
6ES7921 - 3AG00 - 0AA0

Accessories for the round-sheath ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

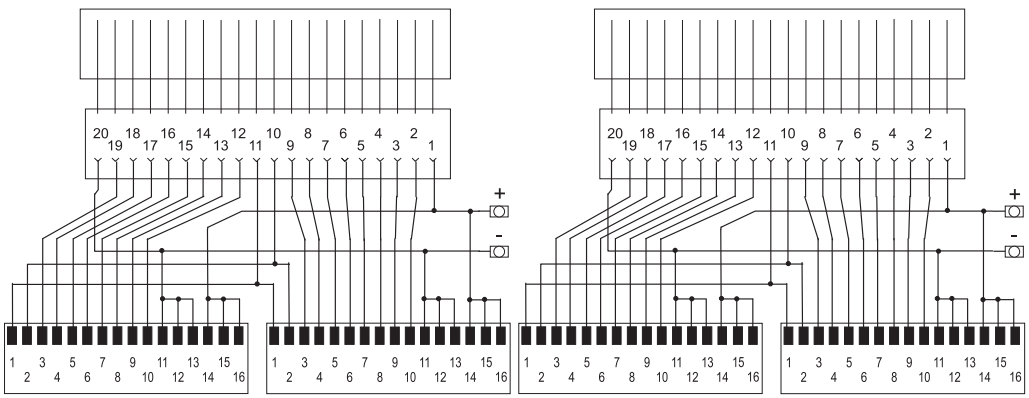
Suitable round-sheath ribbon cables

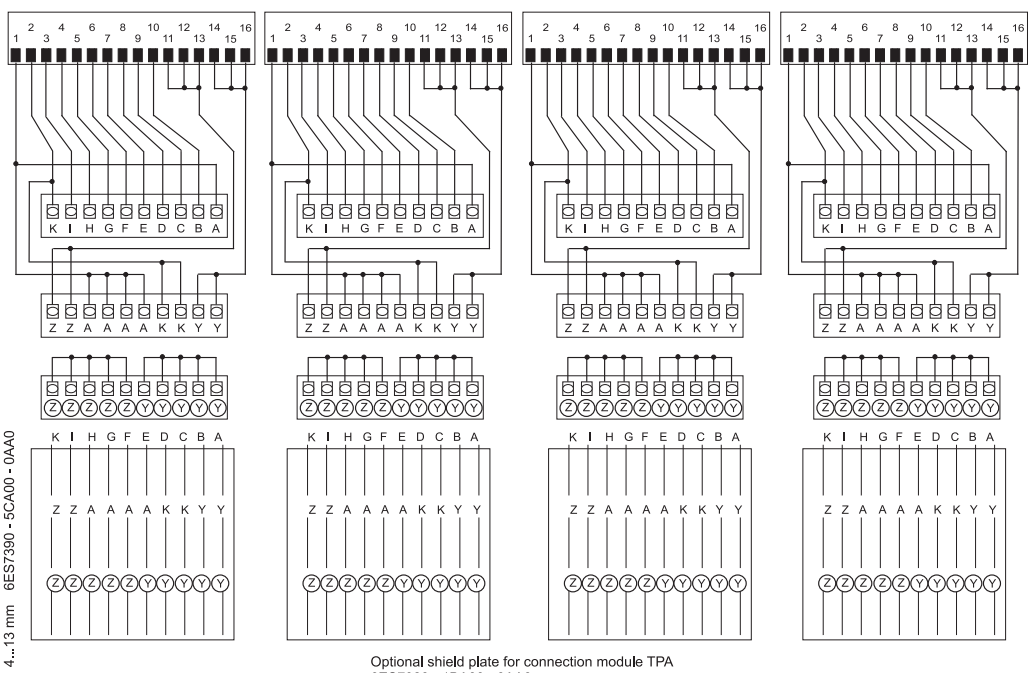
1 x 16-pole
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

Suitable pre-assembled round cable

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m

Analog S7





Optional shield plate for connection module TPA
6ES7928 - 1BA00 - 0AA0

4x connection module TPA analog I/O spring connection 6ES792 4 - 0CC10 - 0AB0
or 4x connection module TPA analog I/O screw connection 6ES792 4 - 0CC10 - 0AA0

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			Date			
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S7-300 Compact CPU 313C; 314C-2PtP; 314C-2DP

Front connector module
with potential infeed with
spring connection
6ES7921 - 3AL20 - 0AA0
screw connection
6ES7921 - 3AM20 - 0AA0

Accessories for the round-sheath
ribbon cable:
8 16-pole socket terminal
and 8 strain relief assemblies
6ES7921 - 3BE10 - 0AA0

Suitable round-sheath ribbon cables

1 x 16-pole
6ES7923 - 0CD00 - 0AA0 30 m unshielded
6ES7923 - 0CG00 - 0AA0 60 m unshielded
6ES7923 - 0CD00 - 0BA0 30 m shielded
6ES7923 - 0CG00 - 0BA0 60 m shielded

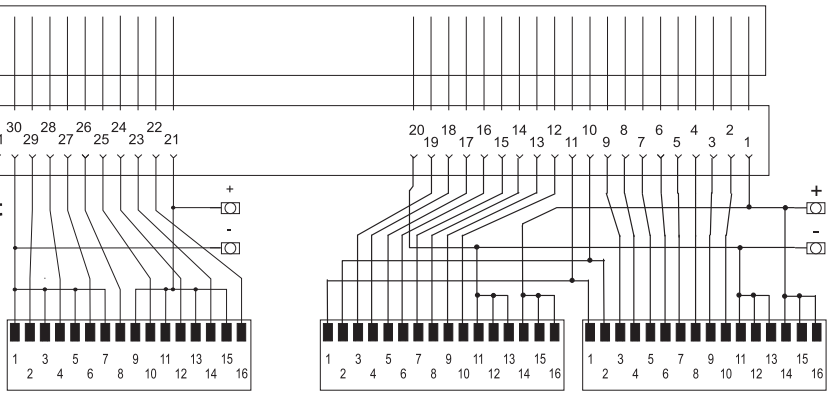
Suitable pre-assembled round cable

1 x 16-pole unshielded
6ES7923 - 0BA50 - 0CB0 L=0.5 m
6ES7923 - 0BB00 - 0CB0 L=1.0 m
6ES7923 - 0BB50 - 0CB0 L=1.5 m
6ES7923 - 0BC00 - 0CB0 L=2.0 m
6ES7923 - 0BC50 - 0CB0 L=2.5 m
6ES7923 - 0BD00 - 0CB0 L=3.0 m
6ES7923 - 0BE00 - 0CB0 L=4.0 m
6ES7923 - 0BF00 - 0CB0 L=5.0 m

1 x 16-pole shielded
6ES7923 - 0BB00 - 0DB0 L=1.0 m
6ES7923 - 0BC00 - 0DB0 L=2.0 m
6ES7923 - 0BC50 - 0DB0 L=2.5 m
6ES7923 - 0BD00 - 0DB0 L=3.0 m
6ES7923 - 0BE00 - 0DB0 L=4.0 m
6ES7923 - 0BF00 - 0DB0 L=5.0 m

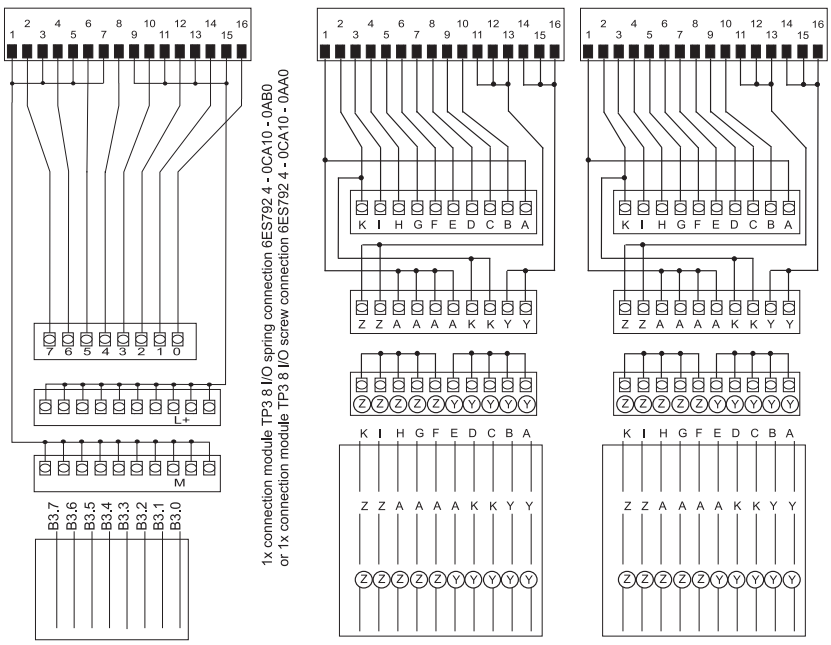
Digital section

Analog section



The relevant cross-list must be taken into account when selecting the connection modules

This sample arrangement of the connection modules only applies to the front connector module for the Compact with order number 6ES7921-3AL20-0AA0 or 6ES7921-3AM20-0AA0



1x connection module TP3 8 I/O spring connection 6ES792 4 - 0CA10 - 0AB0
or 1x connection module TP3 8 I/O screw connection 6ES792 4 - 0CA10 - 0AA0

2x connection module TPA analog I/O spring connection 6ES792 4 - 0CC10 - 0AB0
or 2x connection module TPA analog I/O screw connection 6ES792 4 - 0CC10 - 0AA0

Digital connection module

Analog connection module TPA

CAD

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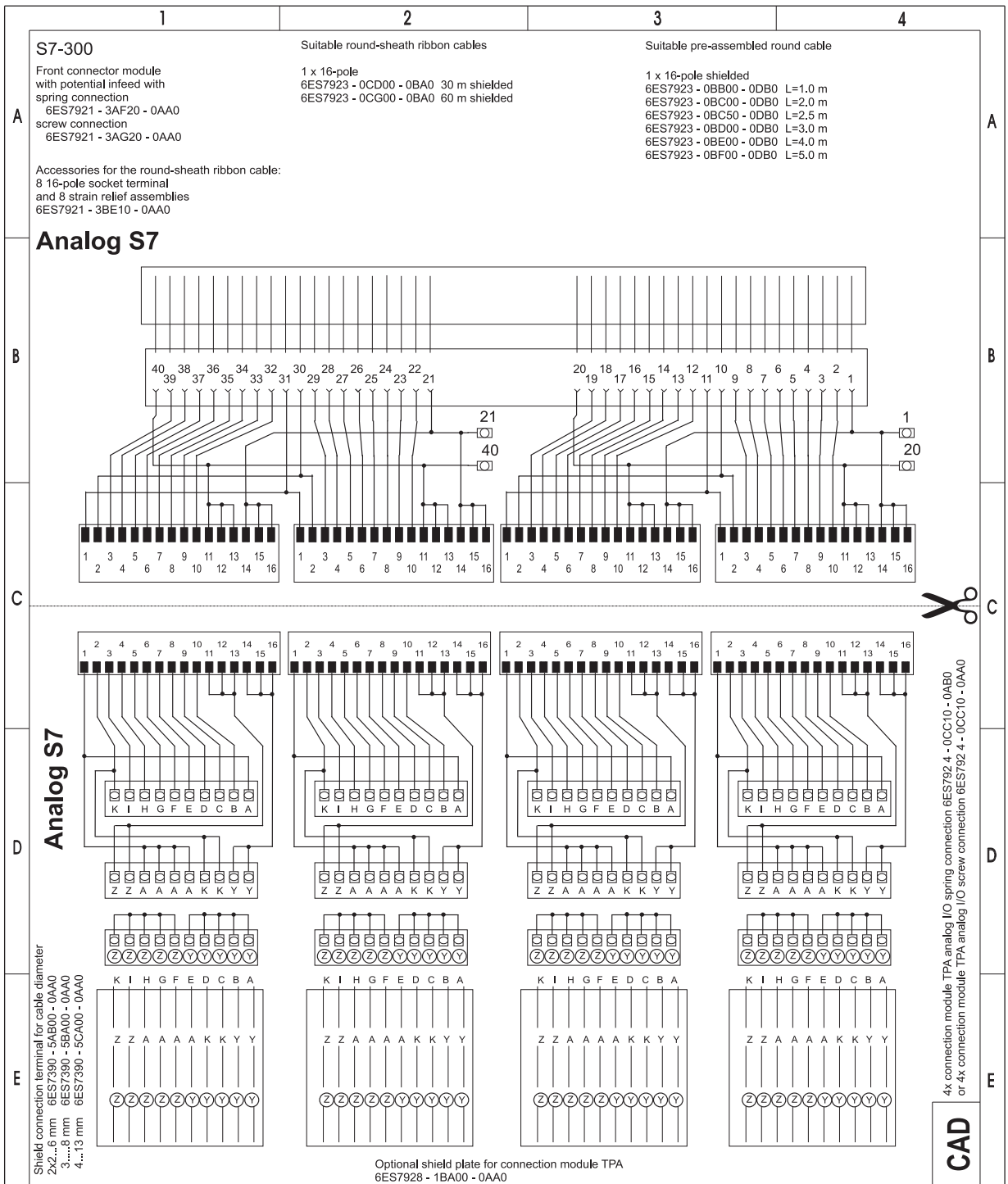
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