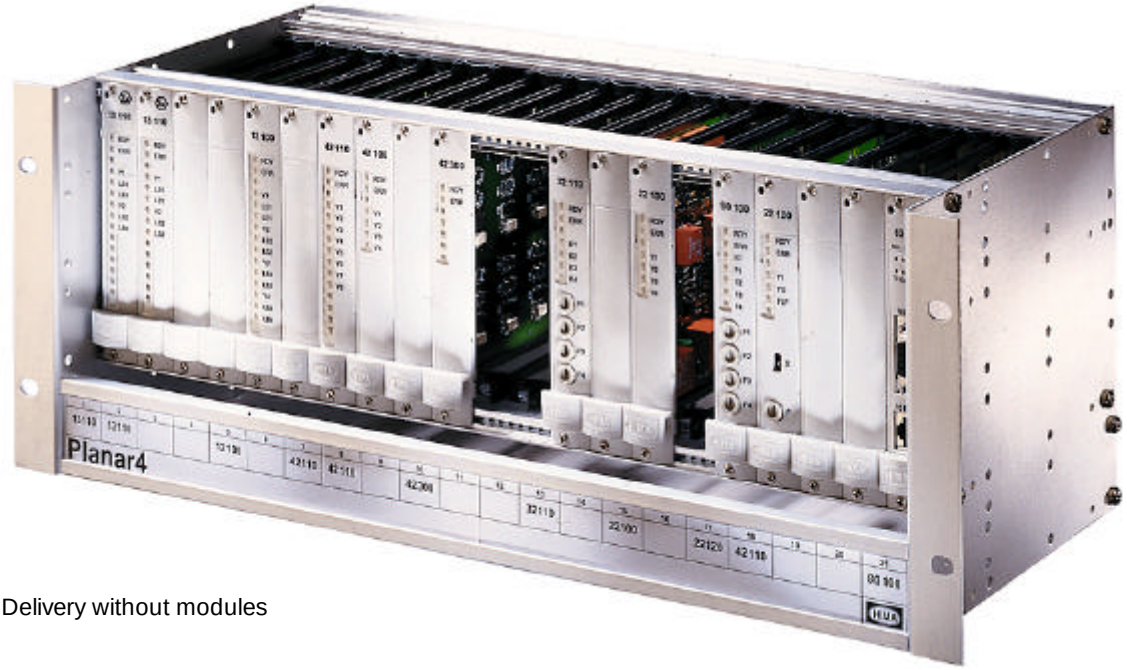
90 903

Subrack with bus PCB 90 903
for (Ex)i modules of the HIMA Planar4 System
Connection: pins for termi-point / wire-wrap



Delivery without modules

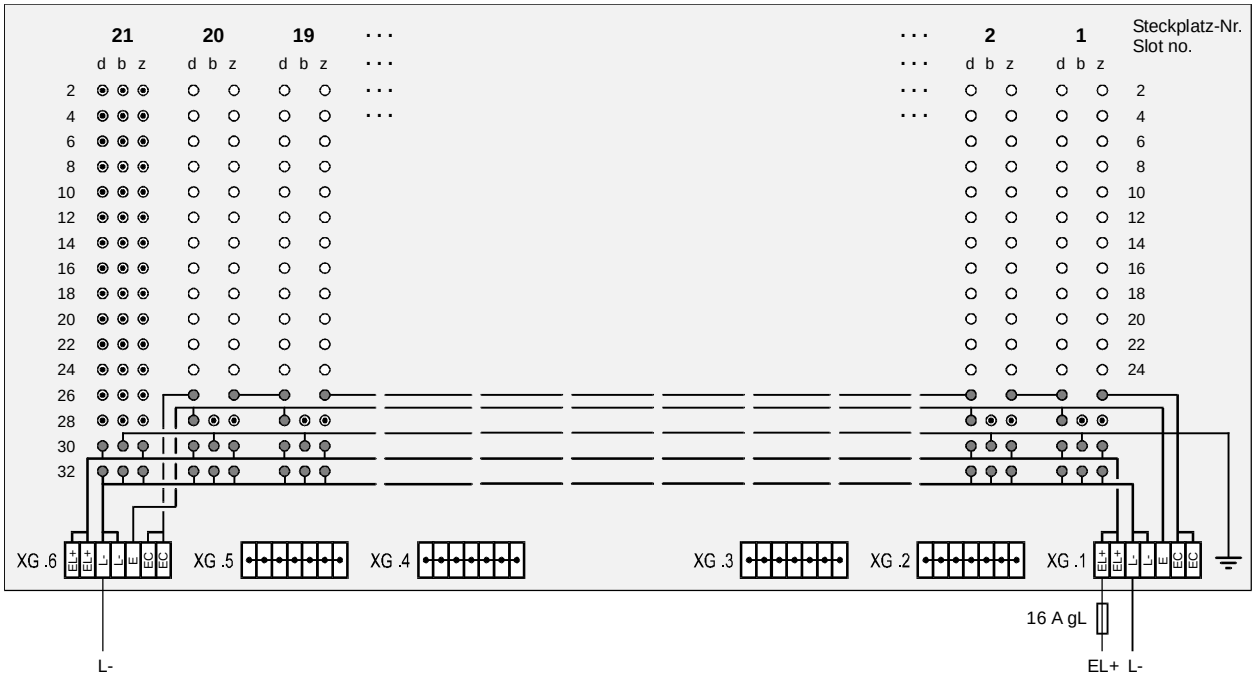
The subrack is used only for the HIMA Planar4 System. The module locations 1...20 are provided for (Ex)i modules of the Planar4 System, location 21 is reserved for the communication module.

The bus PCB at the rear side contains socket connectors, connection strips (termi-point/wire-wrap type) as well as the bus structure necessary for function: connections for the internal communication, operating voltage supply 24 VD C, common busbar and contact loop for the fault signals. For the data connecting cable of the communication module a penetration is provided to the wiring area at the rear.

The subrack is completely mounted including a labelling field at the front, wiring protective covers and two cable ducts at the rear side.

Material	Aluminium, chromated
Width	482.6 mm (19 inches)
Height	177 mm (4 Units)
Depth	270 mm
Spacing units	84 SU (1 SU = 5.08 mm)
Modules	according to DIN 41494, 4 SU each
Connectors	DIN 41612, design F, with rows z and d
Connection type	termi-point / wire-wrap, posts 0.8 x 1.6 mm

Principle of the bus PCB
Rear view



○ Pin for function wiring
● Connection on bus PCB
◉ used for communication

E Busbar for fault signal ERR
EC Contact loop for fault signal

The connection of the supply voltage EL+ is made without use of a fuse module directly via a fuse or circuit breaker of max. 16 A (wire cross-section 2.5 mm^2).

For safety reasons the reference pole L- must be connected from two separated terminals on the L- distribution bar to both plug terminal blocks XG.1 and XG.6 (ring feeder).

In order to avoid high total currents the second supply terminals for EL+ and L- on XG.1 and XG.6 should not be used for feeding more subracks.

The plug terminal blocks XG.2, XG.3, XG.4 and XG.5 are floating; the connection pins of one block are linked on the PCB. The blocks may be used depending on requirements.
For the feeding of power outputs via the plug terminal blocks XG.2 up to XG.5 separate supply lines with suitable wire cross-sections should be used for L+ and L- (cf. also chapter “Wiring of the Subracks” in the system manual). The current loading is limited to max. 16A.

In order to keep mechanical stress low to the soldering points at the connection pins, the plug terminal blocks should be pulled out from their sokkets before connecting or removing wires.

The earth connections b30 have electrically conductive bonding with the metal parts of the subrack. The pins z28, b28, d28, z30 ... d32 at the rear connection strips have no connection to the bus PCB.

When using the contact loop for the fault signal, on all not used module locations the pins z26-d26 must be linked or connected to one of the terminals EC.

The use of other modules of the Planar4 System is possible when the (Ex)i connection strips at the rear of the bus PCB are replaced by normal types.

Note
When the feature of the data communication to other systems is renounced, for the Planar4 System also standard subracks with 32-pole socket connectors may be used.

For your notes