Module Description

Procontrol P
Mechanical Components

Marshalling rack cubicle with single-sided MTP-Elements

1KGD 400 011 E, Edition 01/2010

Application
The marshalling rack cubicle has the dimensions of an Procontrol P cubicle and can be used as a sub-distribution cubicle. As an option the cubicle can be equipped with one or two marshalling rack units with 400 marshalling rack elements each (Order in plaintext).

Description

Cubicle

The marshalling rack cubicle is designed for stand-alone, single and multi-cubicle arrangement.

The cubicle is accessible from the front and rear sides for installation, maintenance and operation. The cubicle has doors on the front and rear sides. Side and partition walls must be added in case of multiple-cubicle arrangement or erection a single unit.

The marshalling rack has separate sides for cabling, connection and marshalling. This spatial separation provides more room for fixing the cables. The cables are fixed to the cable grid with plastic ties. The cables are laid up to the connection area in the cable compartment, the insulation is stripped and then they are stuck through the cable grid.

For process cables with foil screens, screen connection elements are provided which are connected directly to the cabinet frame. The tracing wires of the screens are to be connected to these elements in the shortest possible way (max. 5cm).

In the marshalling rack the cores of the cables and marshalling connections are connected to one side of the same terminal post. A connection element is used for this connection. This connection element is snapped on the mounting rail provided for this purpose. The connection element has eight Termi Point terminal posts 26mm long, to which usually 3 cores can be connected.
Mechanical design

Cubicle configuration

Erection of the cubicle

The cubicle is put on the base frame with cable entry from the bottom.

The cubicle is fixed on the floor with screws. As an alternative, the cubicle can also be welded to the floor (steel structure). In case of welding subsequent corrosion protection of the welded seams will be necessary.

Shielding and earthing

A separate connector for the PE conductor is provided in every basic cubicle.

There is no distinction between the screen connection elements and the PE conductor. The central ground is the cubicle frame. If several marshalling rack cubicles are placed in one or more rows all cubicle frames shall be connected with each other in a meshed way. The earth connections form a meshed network. In this case the cubicles are assumed to be erected on an electrically conducting base frame. These frames shall be connected in an electrically conductive way with the cubicles. The cubicle-to-cubicle terminal connection shall be a copper conductor of min. 35 mm². The cable shields must be fixed with a 360° connector according to EMC regulation 89/336 EEC. This connector should be located directly at the entry of the cables into the cubicle.

Adaptive parts

Cubicle cladding

The partition walls and side walls shall be ordered additionally.

Degree of protection

In the standard configuration the cubicle has the degree of protection IP40.

The roof plate is made of solid sheet steel (degree of protection IP40).

Figure 1: Floor mounting
Figure 2: Marshalling rack cubicle 89SV80/R1100
Figure 3: Marshalling rack unit with 4x100 MTP-Elements and marking plates
Connection element

Figure 4: Connection element 8-pole Maxi Termi Point (MTP)
# Technical data

## Mechanical characteristics

### Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>2200 mm</td>
</tr>
<tr>
<td>Width</td>
<td>900 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>400 mm</td>
</tr>
</tbody>
</table>

### Installation

Single cabinet or cabinet row installation with free access from the front and the rear

### Weight

Approx. 300 kg incl. equipment

### Degree of protection

IP40

### Colour

Steel sheets RAL 7032

### Surface protection

Profile sections galvanized

Sheets provided with powdered coating, dry coat thickness 60 ...90 µm for normal and dry climates

Special paints both in view of colour and thickness of the colour coat can be supplied on request

## Ambient conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Range</th>
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</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>-40 °C bis +70 °C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 °C bis +40 °C, DIN VDE 0160, IEC 68-2-2</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>DIN IEC 721-3-3, code letter 3K3, 5 °C to 40 °C</td>
</tr>
</tbody>
</table>
Ordering data

Marshalling rack cubicle 89SV80/R1100

With single-sided Maxi Termi Point Elements and Potential rails
(the cables are introduced from below)

Accessory parts

For terminating a cabinet row and for single-cabinet installation

Partition wall and fixing material

Side wall and fixing material

Special coats of paint (different shades and coat thickness)

Optional exchange parts

Rod type lock two-way key, 5 mm
Rod type lock, cath-type handle
Rod type lock, T- handle
Rod type lock for cylinder, 3mm two-way key
Rod type lock for cylinder, 5mm two-way key
Rod type lock for cylinder, cath-type handle
Rod type lock for cylinder, T- handle

Technical data are subject to change without notice!
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