

AEG

Power Solutions

External Manual Bypass Unit PROTECT C UPS/6 - 10 kVA and Protect 1.100

MBS 10000

AEG Power Solutions GmbH
Department: PS TED
Name: Schenit/Schneider
Revision: 00
Date: 28/08/2009

Table of Contents

| | | |
|----------|--|----------|
| 1 | General..... | 3 |
| 2 | Technical Data..... | 3 |
| 3 | Connection Cross Sections and Fuses | 4 |
| 4 | Description | 5 |
| 5 | Connection (Electrical)..... | 6 |
| 6 | Wiring Diagrams..... | 7 |

1 General

The external, manually operated bypass unit is an option for the Protect C. 6 – 10 kVA or Protect 1.100 (wall housing) UPS series. It is used for isolating the UPS - for maintenance purposes, for example - whilst the connected loads continue to be supplied without interruption. As well as bypass operation alone, an additional switch setting permits UPS test operation.

Scope of delivery:

- External manual bypass unit MBS 10000
- 1 set of wall mounting holders
- Operating instructions

Prerequisites:

- AEG UPS, Protect C. 6 kVA series
- AEG UPS, Protect C. 10 kVA series
- AEG UPS, Protect 1.100 series

2 Technical Data

| | |
|-------------------------------------|--|
| Type..... | Manual bypass, 1-phase, 10 kVA |
| Nominal voltage for rectifier | 400/230 V/3/N/PE 50 Hz |
| Nominal voltage for SBS | 230 V/N/PE 50 Hz |
| Ambient temperature | 0 to +40°C in accordance with VDE 0160 |
| Cooling type..... | S in accordance with DIN 41 751 |
| Operating mode | DB (continuous operation) in accordance with VDE 0558 Part 1 |
| Degree of protection | IP53 in accordance with DIN 40 050 Part 9 |
| Site altitude | Up to 1000 m above sea level in accordance with VDE 0160 |
| Dimensions..... | H = 500 mm, W = 400 mm, D = 210 mm |
| Housing colour..... | RAL 9011S |

3 Connection Cross Sections and Fuses

Sizing of cross sections in acc. with DIN 0298, Part 4, Table 3

| Laying type B1/B2 | | Type rating in kVA | |
|-------------------|---|--------------------|---------|
| | | 6 | 10 |
| 1 | Rectifier, input X1 Fuse protection for rectifier and SBS circuits in A | 32 | 50 |
| | Cross section in mm ² /pole | Min. Max. | 6 16 |
| 2 | Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |
| 3 | Rectifier, output to UPS X2 Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |

| | | | |
|---|--|--------------|---------|
| 4 | SBS nominal current | 26 | 43 |
| 5 | SBS circuit, input X4 Fuse protection for SBS in A | 32 | 50 |
| | Cross section in mm ² /pole | Min. Max. | 6 16 |
| 6 | Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |
| 7 | SBS circuit, output to UPS X6 Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |

| | | | |
|---|--|--------------|---------|
| 8 | Load output X3 Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |
| 9 | Load output from UPS X5 Cross section in mm ² /pole | Min. Max. | 6 16 |
| | | | |

4 Description

- **NORMAL** operation (default switch position), secure load supply with UPS back-up
- **TEST** operation (service position), load supply directly via the mains, additional mains supply to the UPS for service purposes
- **BYPASS** operation (bypass position), load supply directly via the mains, additional complete isolation of the UPS

(Attention! UPS output may still be live due to the internal voltage source!)

- If there is a mains failure during **TEST** and **BYPASS** operation, then the supply to the connected loads will be interrupted.

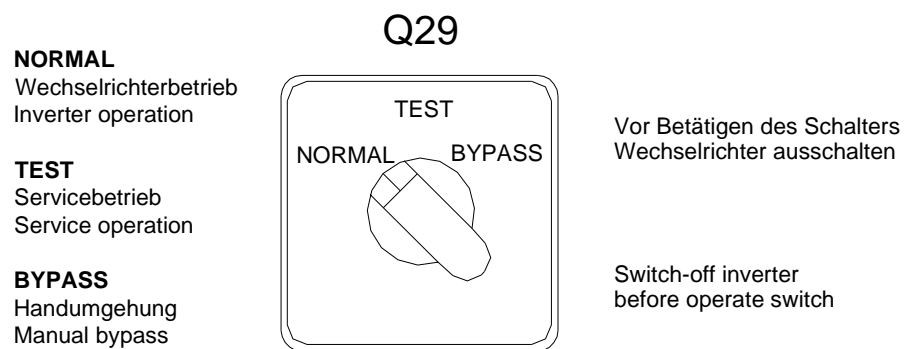


Figure 1 Switch Q29

5 Connection (Electrical)

If you have already put the UPS into operation, then switch it off as the first step. Now isolate the UPS from the mains.

Before you carry out the installation procedure described below, make sure that none of the cables are live.

Connect mains input X1, UPS input X2 for the rectifier, UPS output X5, and output X3 in the bypass switch.

For a UPS with separate bypass connection **(option)**, you can use a separate bypass mains. (In this case, please remove bridges "L" and "N" between mains input X1 and bypass mains input X4; see terminal strip below.)

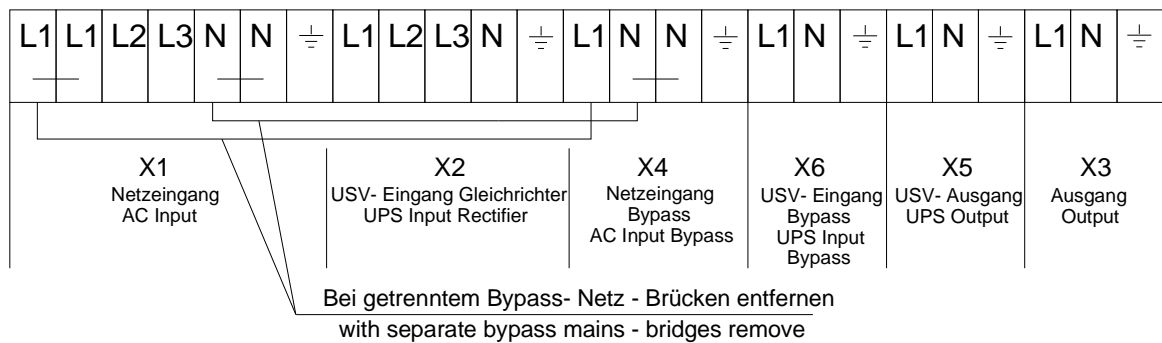


Figure 2 Assignment of terminals

6 Wiring Diagrams

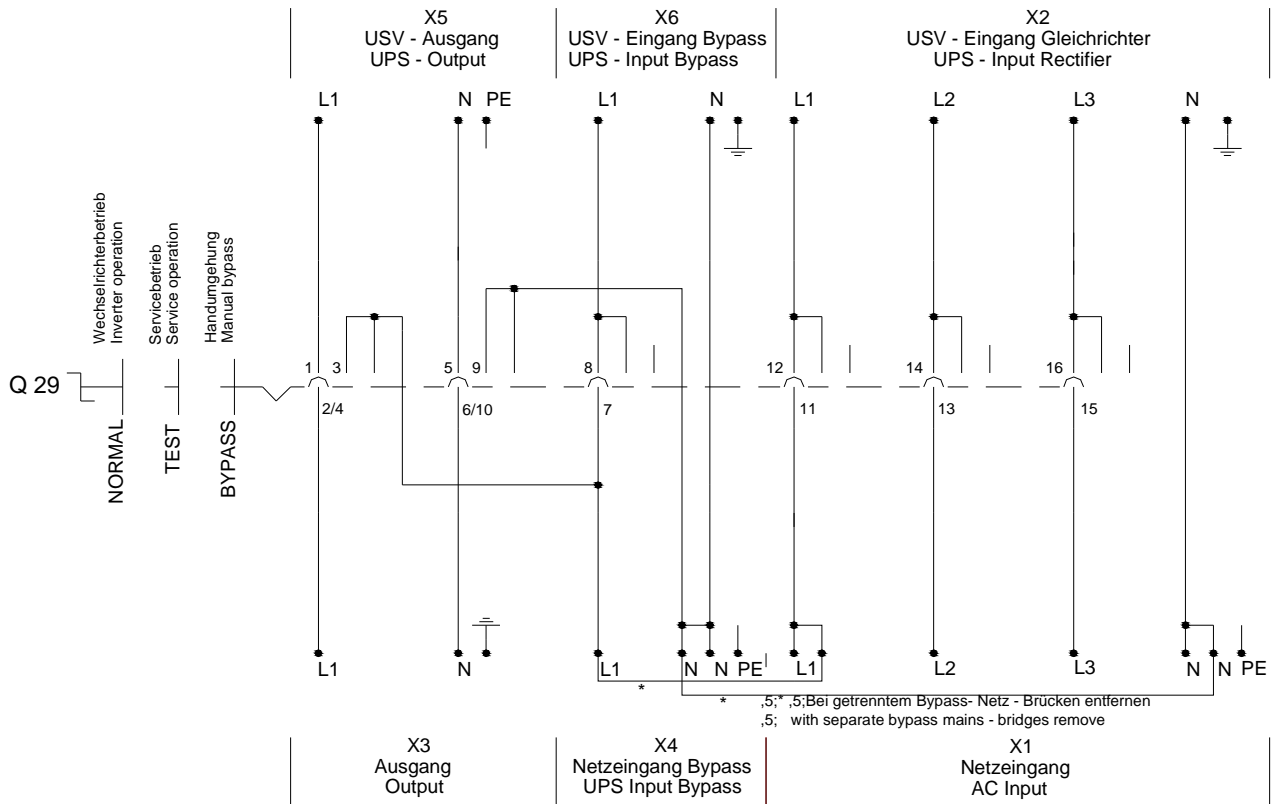


Figure 3 Circuit diagram

Guarantee Certificate

Type:

Unit number:

Date of purchase:

Dealer stamp/signature

Errors and changes excepted.



Power Solutions

AEG Power Solutions GmbH
Emil-Siepmann-Strasse 32
D-59581 Warstein-Belecke
Germany

Operating Instructions
8000028151 BAL EN