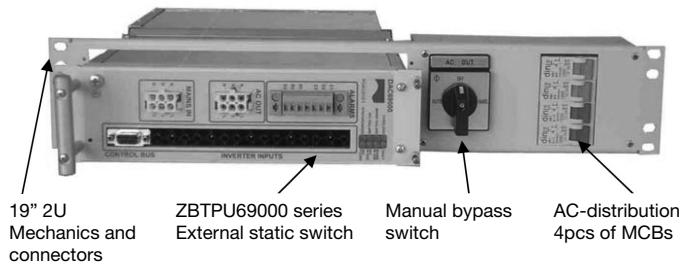


## ZMTBP68200 Series

### AC-distribution, Static Switch and Manual Bypass for ZDTAC60000 Inverters

#### Modular Construction

ZMTBP68200 system consists of separate modules, which can be included in the system based on customer's needs. It may include all features: static switch, manual bypass and AC-distribution or only one or two of these features.



#### Complete Inverter System

ZMTBP68200 fits ideally to be used with ZDTAC60000

horizontal 19" 2U model inverters.

Depending on the needed power in the system 1...5pcs of 600...1200VA inverters can be installed in parallel including external static switch, manual bypass and AC distribution.

ZMTBP68200 and inverters are installed on top of each other in 19" cabinet.

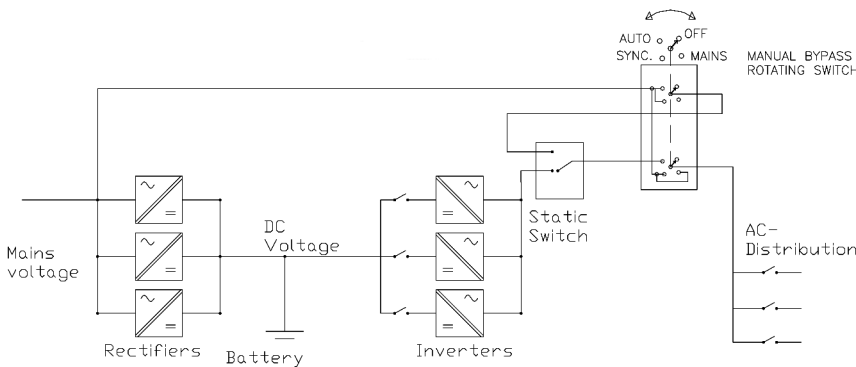


Voltage 100...240VAC

Power rating 6 kVA, max 30A

4 pole manual bypass rotating switch

6mm<sup>2</sup> or 10mm<sup>2</sup> screw terminals for mains in and load, 90cm cables for static switch, see details next page



Manual bypass switch positions:

- OFF  
No supply
- MAINS  
Mains supply  
No mains input for static switch
- SYNC  
Mains supply  
Mains input connected to static switch
- AUTO  
Inverter System supply

#### MANUAL BYPASS AND AC-DISTRIBUTION TYPE NUMBERS

Type	Description
ZMTBP68200	Manual bypass 6kVA, max 30A, 19"/2Ux182mm
ZATDU68230	AC Distribution unit for 4 pcs of output MCBs, 19"/2Ux182mm, select any combination of MCBs from table below
ZMTBP68260	Manual bypass 6kVA and AC Distribution unit for 4 pcs of output MCBs, 19"/2Ux182mm Select MCBs from table below, any combination is possible

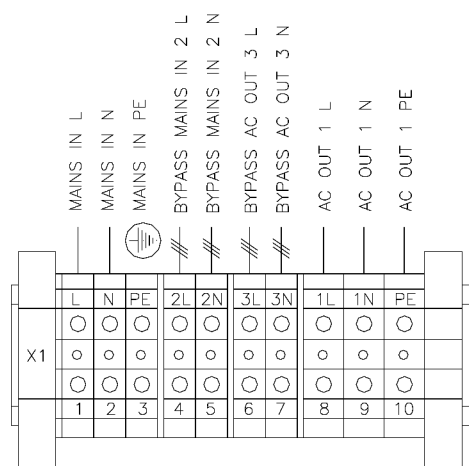
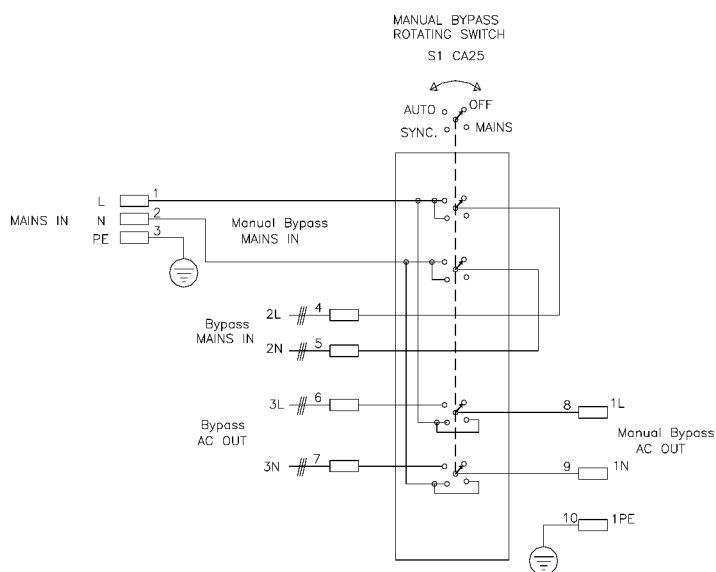
#### MCB ALTERNATIVES FOR ADU68030 OR MBP68060

Type	Description	Type	Description
Z5T4100200	2A C-curve output MCB	Z5T4101001	10A B-curve output MCB
Z5T4100400	4A C-curve output MCB	Z5T4101601	16A B-curve output MCB
Z5T4100601	6A B-curve output MCB	Z5T4102001	20A B-curve output MCB
Z5T4100600	6A C-curve output MCB	Z5T4102501	25A B-curve output MCB

#### STATIC SWITCH UNITS AND MECHANICAL PARTS

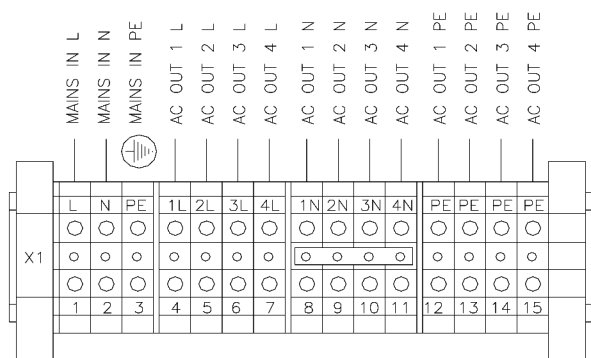
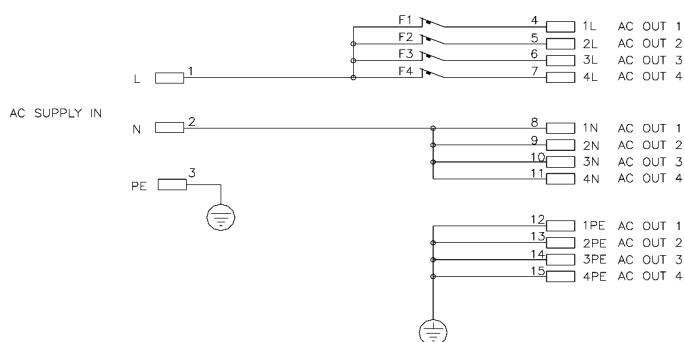
Type	Description
ZBTPU69130VF	External static switch, 6000VA 230VAC, 14TE x 6U x 372mm module
ZBTPU69010VF	External static switch, 3000VA 115VAC, 14TE x 6U x 372mm module
Z8T860000C	Coverplate set for empty static switch place in 19" 2U mechanics
ZMTSR7990	19" 2U mechanics to install 6U x 14TE static switch horizontally

## ZMTBP68200 CONNECTION CIRCUIT AND PIN CONFIGURATION



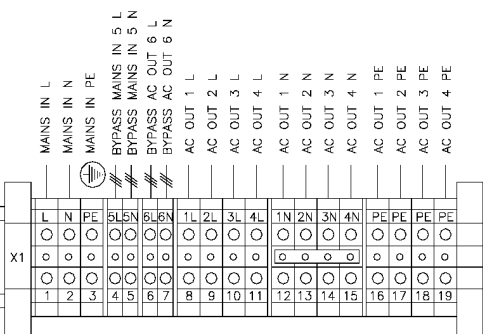
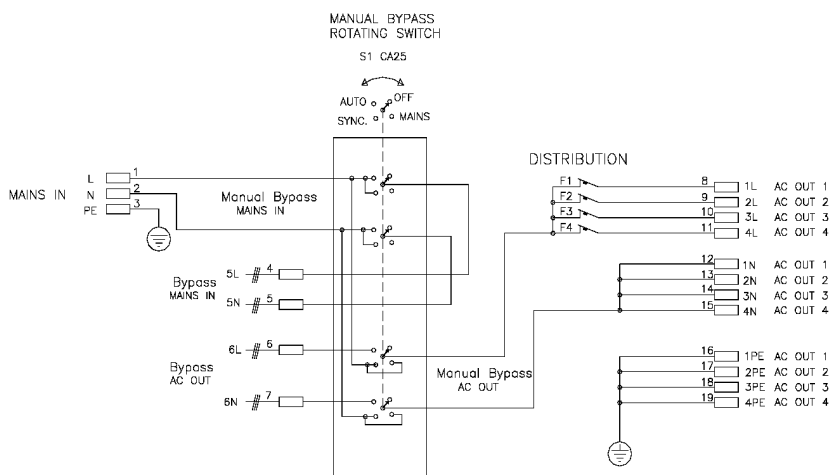
Mains In 6mm2 screw terminals  
Bypass Mains In 90cm cable set, 6mm2 screw terminals  
Bypass AC Out 90cm cable set, 6mm2 screw terminals  
AC Out 10mm2 screw terminals

## ZATDU68230 CONNECTION CIRCUIT AND PIN CONFIGURATION



Mains In 6mm2 screw terminals  
AC Out 4 x 6mm2 screw terminals

## ZMTBP68260 CONNECTION CIRCUIT AND PIN CONFIGURATION



Mains In 6mm2 screw terminals  
Bypass Mains In 90cm cable set, 4mm2 screw terminals  
Bypass AC Out 90cm cable set, 4mm2 screw terminals  
AC Out 4 x 6mm2 screw terminals

### MANUAL BYPASS SWITCH POSITIONS

OFF No supply  
MAINS Mains supply, no mains input for static switch  
SYNC Mains supply, mains input connected to static switch  
AUTO Inverter System supply

## Specification

### Connections:

Voltages $U_e$	98...132 VAC 196...264 VAC	3000VA/3000W 6000VA/6000W
Current $I_n$	Nominal current	30A
Frequency		45...65Hz
Safety		According to EN60950-1, Class I
Mains input connector	L N PE	3-pole 6mm <sup>2</sup> screw terminal
Inverter connectors	2L-3L 2N-3N or 5L-6L 5N-6N	2x2-pole 4-6mm <sup>2</sup> screw terminal
AC outputs connector	1L-4L 1N-4N 1PE-4PE All connectors are located on rear panel	3x3-pole 6mm <sup>2</sup> screw terminal
Mains supply fuse	max 32A	External
Wiring	4-6 mm <sup>2</sup>	Halogen-free, 105°C

### Controls:

Manual bypass switch	Rotating switch K&N CA25 , 4 positions	max current 32A, short circuit max 450A
Distribution	1-3pcs of ZMTCB ZMTCB safety switches	On front panel, 1A-25A B or C curve

### Mechanical:

Dimensions	Height Width Depth	2U (88mm) 19" (483mm) 180mm (+ switch 30mm)
Weight	Module	2.75 kg
Enclosure	hot galvanized steel	IP20
Front plate painted		RAL7035
Finger protection		Polycarbonate plate in front of screw terminals

### Environmental:

Temperature range	Operating Storage	-25°C...+50 °C -40°C...+70 °C
Grounding	6mm <sup>2</sup> screw terminal	1+4pcs on rear panel

### Operating and connecting the Manual bypass

#### General

ZMTBP68200 family series is manual bypass switch and/or AC-distribution unit for inverter systems. By manual bypass AC loads can be supplied directly from mains bypassing the inverter system. The inverter system can be also totally switched off by manual bypass switch.

In normal operation mode (AUTO) inverter supply is distributed to loads via manual bypass. Also 1...4pcs of AC-distribution fuses can be included to ZMTBP unit (ZMTBP=manual bypass).

Three different variants are available:

1. ZMTBP68200 Manual bypass switch without AC-distribution
2. ZATDU68230 AC-distribution unit without manual bypass
3. ZMTBP68260 Manual bypass and AC-distribution unit

#### Connecting the cables

Remove the finger protection polycarbonate plate by releasing two screws behind the module. Connect Mains in and AC load wires to screw terminals of ZMTBP. Make the strain relief by cable ties and fasten the finger protection plate to original position.

#### Mains connection

Connect the mains cable to the screw terminals 1-3 (L N PE) according to pin configuration on the ZMTBP's rear panel via the strain relief. Fasten the cable by cable tie to the holder located beside the screw terminal. Use 1-phase power cable cross-section 3 x 0.75 ...6,0mm<sup>2</sup>. The external maximum mains fuse is 32A. Make sure that both mains input and bypass output are switched off from sub-rack before connecting the ZMTBP.

#### Loads connection

Connect the load cable to the screw terminals 8-16 (L N PE) according to pin configuration on the ZMTBP's rear panel via the strain relief. Fasten the cable by cable tie to the holder located beside the screw terminal. Use 1-phase power cable cross-section 3 x 0.75 ...6,0mm<sup>2</sup>. The external maximum mains fuse is 32A. Make sure that both mains input and bypass output are switched off from sub-rack before connecting the ZMTBP.

#### Mounting the Static switch

Remove the front cover plate by releasing four screws front the ZMTBP module. Assembly the static switch inside the ZMTBP and mount 4pcs of M2,5 screws in the front panel of static switch. Connect pre-assembled "mains in" and "AC out" cables to static switch unit's mating connectors on front panel.

#### Mounting the ZMTBP units

The module is mounted to the 19" rack cabin by 4pcs of M5 screws from the front panel.