

## Static Bypass Switch



- Wide synchronisation range
- Flexible 19" system, „Hot-Plug-In“
- Complete system monitoring via CAN-bus
- Alphanumeric LCD display for measurement values and system parameters
- Optimised mains synchronisation
- For inverter systems up to 40 kVA

The UNB range of static bypass switches features the latest micro controller technology for monitoring, synchronisation and communication combined with a flexible 19"-compatible rack mounting.

These modular units are designed for systems consisting of UNV- or PWS-type inverters. Parallel connection up to 40 kVA is possible to increase output power or system reliability by (n+1)-redundancy. Typical applications are telecommunication, railroad signalling systems, and industrial UPS systems.

The micro processor controlled synchronisation unit guarantees mains synchronicity of single or paralleled inverters. The availability of all inverters in the system is continuously checked and monitored.

All monitoring functions and system parameters are indicated and adjusted comfortably by an alphanumeric display and control keys on the front panel. All system parameters can be read out by serial interface and PC software. (Optional)

### TYPE LISTING

Type	UNB5.0-x	UNB12.5-x	UNB23.0-x	UNB30.0-x	UNB40.0-x
Code nr. x = 24V	68-1001	68-1002	68-1003	68-1004	68-1005
Code nr. x = 48/60 V	68-1011	68-1012	68-1013	68-1014	68-1015
Code nr. x =108 V	68-1021	68-1022	68-1023	68-1024	68-1025
Code nr. x =216 V	68-1031	68-1032	68-1033	68-1034	68-1035
Category	Universal Bypass Switch Unit				

### AC INPUT (BYPASS)

Nominal voltage	220 / 230 / 240 V AC, programmable
Voltage tolerance	± 20 %
Frequency	48-52 resp. 58-62 Hz, switchable
Overall efficiency	≥ 99 %

### NOMINAL BATTERY VOLTAGE

Nominal voltage	24, 48/60, 108 und 216 V acc. to type list
Fusing	External; 2 A gL (24 / 48 V), 1 A gL (108 / 216 V)

### AC OUTPUT

Nominal voltage	220 / 230 / 240 V AC, programmable				
Switching thresholds	± 5 %... ± 20 % , programmable				
Nominal output power	5 kVA	12.5 kVA	23 kVA	30 kVA	40 kVA
Frequency	48-52 resp. 58-62 Hz, programmable				
Overload ability	1000 % for 10 ms				
Fusing	External with rated current, character gL				
Switch transfer time	≤ 3 ms				

### STANDARD FEATURES

LED indications	Standby, source 1, source 2, synchronisation, load on inverter, load on mains, common alarm
Monitoring	Source 1 and source 2 with load transfer, synchronisation, over temperature, fan failure
Alphanumeric Display	LCD, 16x4 characters, translucent
Signal contacts	Relay "common alarm"
Microprocessor control	Programmable monitoring functions for all system parameters; adjustment via control keys and LCD display in the front
Communication	CAN-bus interface for communication with inverters type UNV, PWS und PWS-T

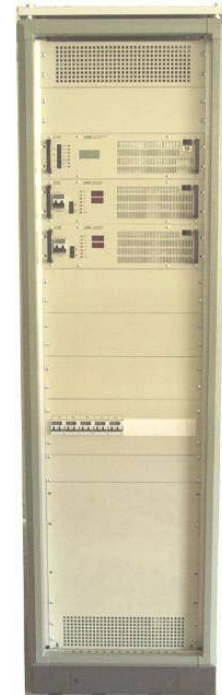
### ENVIRONMENT

Ambient temperature	Operation: -10°C to +40°C Storage: -30°C to +50°C
Climatic conditions	IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2
Humidity class	F
Dust	< 1 mg / m <sup>3</sup>
Altitude	≤ 1000 m a.s.l., extension possible on request
Audible noise	<30 dB (A) in 1m distance

## Static Bypass Switch

MECHANICAL CONSTRUCTION					
Construction	19" -compatible rack acc. DIN41 494, rear side connectors				
Dimensions [mm]					
W / H / D	483 / 133 / 360	483 / 133 / 360	483 / 133 / 360	483 / 177 / 460	483 / 177 / 460
W1	440	440	440	433	433
H1	125	125	125	157	157
Weight	10 kg	10.5 kg	12 kg	13,5 kg	15 kg
Cooling	Speed controlled fan cooling with fan monitoring				
Protection class	IP20 (mech.); 1 acc. to EN 60950 (electr.)				
Surface	Front panel: powder coating RAL 7032, constructive parts: anodised				

COMPLIANCES	
Conducted and radiated emissions EN 50081-1	EN 55011 / EN 55022 class B
Safety	EN 60950 ; VDE 0100 part 410; VDE 0110, EN 50178, EN 60146
Interference Immunity EN 50082-2	Case: Electrostatic discharge: EN 61000-4-2 (6 kV contact, 8 kV air discharge) Radiated radio frequency: EN 61000-4-3 (10V/m, 30 MHz - 1 GHz)
	Power line: EN 61000-4-4 ( 2 kV, other 2 kV) EN 61000-4-5 (4 kV unsymmetrical, 2 kV symmetrical, others: 2 kV unsymmetrical)
	Control line EN 61000-4-4 ( 2 kV ) EN 61000-4-5 (2 kV unsymmetrical)

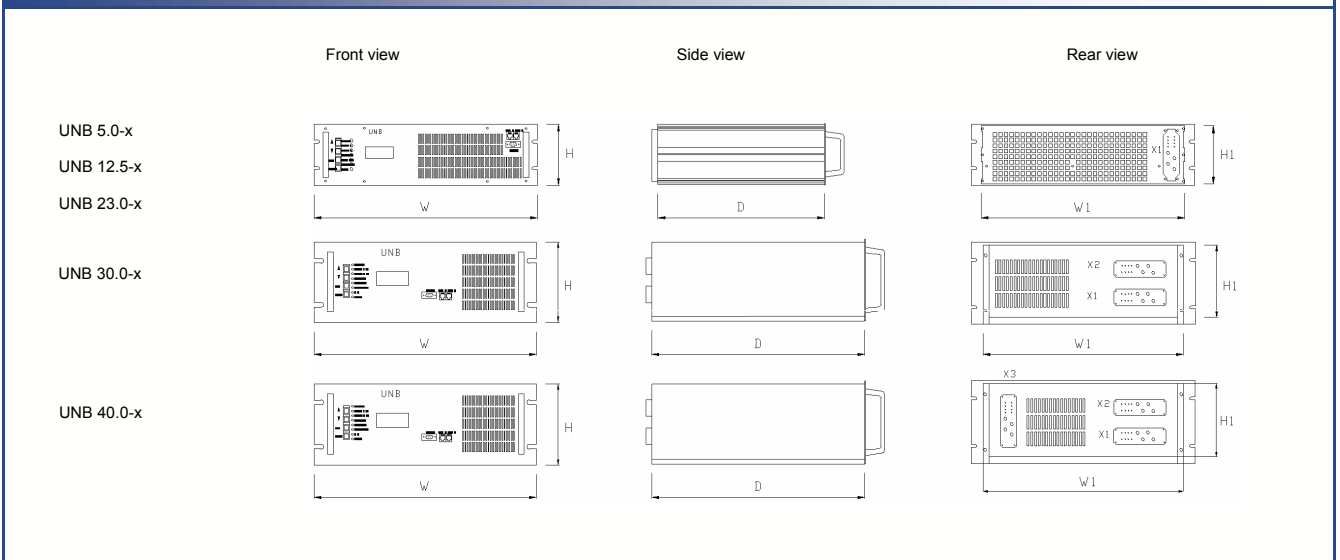


If more power is needed we offer inverter cabinets of the series TIPS, which are available in power ranges of 10 and 12.5 kVA. To increase the availability most of the time a static bypass switch type UNB is used and therefore integrated in the system.

### Options:

- Serial interface RS232
- Additional isolated DC supply input
- Three phase version

### MECHANICAL DIMENSIONS / CONNECTION VIEW



### Additional Information

Full information, drawings, manuals and application notes and advice to any of the wide range of CP Kontakt AB's products are available on request.

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