

INVERTER

UNV

- Input Voltage 48/60 and 108V DC
- Output Voltage 230V AC (220/240V AC)
- Rated Output Power 1.2 - 5.0kVA



The UNV inverter family represent latest DC to AC power conversion technology in 19" compatible mechanic. Suitable for any low to medium power UPS system these inverters are ideal for applications in telecommunication, industrial, and railroad power supplies.

Combining high frequency conversion with galvanic separation between input and output, UNV inverters are a flexible, efficient and reliable AC power source. The possibility of parallel connection offers highest flexibility in realising systems with increased output power and/or (n+1)-redundancy.

The UNV series is designed to operate together with the UNB series static switch and supervisory module. Remote control and communication is performed via CAN interface. Alternatively, the units can be operated in stand-alone mode.

- ➔ Wide DC input range
- ➔ Flexible 19"-system, "Hot-Plug-In"
- ➔ Outstanding efficiency and dynamic performance
- ➔ High power density and low weight
- ➔ Parallel and three-phase operation
- ➔ Very low audible noise
- ➔ Remote communication and control by CAN-bus interface



Type list

Type	Mat.No	Rated Input Voltage (VDC)	Rated Output Power (VA)	Dimensions W/H/D (mm)	Weight (kg)
UNV48-1.2C	65-1001	48/60	1200	141/262/285	8,5
UNV48-1.8C	65-1002	48/60	1800	141/262/405	12,5
UNV48-2.5C	65-1003	48/60	2500	141/262/405	13,0
UNV48-1.2F	65-1051	48/60	1200	483/133/360	10,0
UNV48-1.8F	65-1052	48/60	1800	483/133/360	18,0
UNV48-2.5F	65-1053	48/60	2500	483/133/360	22,0
UNV48-3.3F	65-1054	48/60	3300	483/133/360	27,0
UNV48-5.0F	65-1055	48/60	5000	483/133/360	38,0
UNV108-1.2C	65-1011	108	1200	141/262/285	8,5
UNV108-1.8C	65-1012	108	1800	141/262/405	12,5
UNV108-2.5C	65-1013	108	2500	141/262/405	13,0
UNV108-1.2F	65-1061	108	1200	483/133/360	10,0
UNV108-1.8F	65-1062	108	1800	483/133/360	18,0
UNV108-2.5F	65-1063	108	2500	483/133/360	22,0
UNV108-3.3F	65-1064	108	3300	483/133/360	27,0
UNV108-5.0F	65-1065	108	5000	483/133/360	38,0

Technical Specifications

DC Input

Nominal Voltage Range	48/60 and 108 V
Reflected Ripple	42-75 and 77-138 V, extension possible
Efficiency	<1.8 mV psophometric
Inrush Current	up to 91%
Fusing	< nominal current
	MCB 1pole (1.2-3.3kVA); externally (5.0kVA)

AC Output

Nominal Voltage Range	230 V
Regulation	200-252 V
Recovery Time	+/- 0.5% static
Frequency	<0.3 ms for load transient 10-90-10%
Synchronization Range	50 or 60 Hz, programmable
Total Harmonic Distortion	45-65 Hz
Load Crest Factor	<2% for linear load
Load Power Factor	<= 3
Permissible Overload	0.5ind-1-0.5cap, extension possible
Fusing	130% for 1 minute
Short circuit protection	MCB 1pole
	continuously short circuit proof; 3x Inom for appr. 2.5sec

Environment

Ambient Temperature	-10...45°C, extension possible
Altitude	<= 1000m, extension possible
Climatic Conditions	IEC 721-3-3
Humidity Class	F
Audible Noise	< 40 dB(a) in 1 m distance

Mechanical Construction

Construction	19"-compatible rack 4 HU, full width, rear side connectors alt.: 6 HU cassette, 1/3 19" width, front connectors
Dimensions, Weight	according to type list
Cooling	1.2 kVA: natural convection 1.8, 2.5, 3.3 and 5.0 kVA: speed controlled fan with monitoring
Protection Class	IP 20 (mech.) / 1 acc. EN 60950 (electr.)
Surfaces	front panel: powder coating RAL 7032 constructive parts: anodized metal

Compliances

Certification	CE-Mark
Safety	EN 60950, VDE 0110, EN 50178, EN60146
EMC	EN 55022 class B, EN 61000-4 sect.2-5

Standard Equipment

Protection	- mechanically coupled input and output MCB - input undervoltage shutdown - input overvoltage shutdown - overtemperature shutdown - overload/short circuit shutdown
LED Indicators	Standby, Output Voltage, Input Voltage >, Input Voltage <, Overload, Overtemperature, Coll. Alarm
Digital Display	2x 3 digits, Output Voltage, Output Current, Frequency, Input Voltage, Input Current, Temperature
Remote Signals	common alarm relay, photocoupler outputs, remote OFF input
External Synchronisation	parallel operation and three-phase systems without additional components or specified master
Microprocessor Control	programmable monitoring and protection for all system parameters
Communication	CAN-interface for communication with static bypass unit UNB