

## DC/AC Inverter system

The Industrial bulk feed (IBF) unit is designed for systems with 48, 60, 110, 125 & 220 VDC input. The Power Core is built around the INV 222 inverters, and designed for all type of applications where an uninterruptable AC power supply is needed, such as switchgear, telecom, emergency lighting and alarm systems.

Its compact design and simple installation make it a powerful 19" power supply package.

The IBF-INV can be fitted with an optional static switch, with uninterruptable switch between mains and inverter mode.



# IBF DC/AC-INV (Inverter)

48 V<sub>DC</sub>, 60 V<sub>DC</sub>, 110 V<sub>DC</sub>, 125 V<sub>DC</sub> & 220 VDC Input

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### INDUSTRY APPLICATIONS

#### Power Utilities

- Low & High Voltage switchgear
- Transformer & SUB Stations
- Power Generation & Distribution
- Control & protection
- SCADA
- Communications equipment

#### Offshore and process industry

- Safety and Automation Systems (SAS)

#### Marine

- Communication onboard ships

#### Railway infrastructure

- Control & protection
- Signaling

#### Telecom – Mobile - Fixed / Wireless

- Radio Base stations/ Cell Sites
- LTE / 4G / WiMAX
- Distributed Antenna Systems
- Microwave
- Broadband



INV 222 inverters

STS 207 Static Switch

### KEY FEATURES

- ✓ Compact design and simple installation
- ✓ 48, 60, 110, 125 & 220 VDC Input
- ✓ House up to 3 Inverter modules
- ✓ 2,25-6,75 kVA Output
- ✓ Built in manual bypass
- ✓ Option with static switch
- ✓ Input and output protections on each inverter by built in MCB
- ✓ Ethernet for remote or local monitoring and control via WEB Browser
- ✓ SNMP protocol with TRAP, SET and GET on Ethernet. Email of TRAP alarms
- ✓ 1 digital programmable relay output
- ✓ Option with 6 relay outputs

See reverse side for specifications

### 48V DC/AC Inverter

The INV 222 inverters, and designed for all type of applications where an uninterruptable AC power supply is needed, such as switchgear, telecom, emergency lighting and alarm systems.

#### Applications

- Alarm systems
- PABX systems
- Emergency lighting
- Industrial control systems

#### 48V DC INPUT

#### AVAILABLE 48V DC INPUT CONVERTERS

Part Number	Description	Input Voltage Range	Efficiency	Max Output Power			Output protection
				1 Module	2 Module	3 Module	
501-022-515.00	INV222-48/230-50	40,8-67,5 VDC	> 90%	2,25 kVA	4,5 kVA	6,75 kVA	In IBF DC/AC

### 60V DC/AC Inverter

The INV 222 inverters, and designed for all type of applications where an uninterruptable AC power supply is needed, such as switchgear, telecom, emergency lighting and alarm systems.

#### Applications

- Telecommunication systems; SCADA, GSM-R
- PABX systems
- Emergency lighting
- Industrial control systems

#### 60V DC INPUT

#### AVAILABLE 60V DC INPUT CONVERTERS

Part Number	Description	Input Voltage Range	Efficiency	Max Output Power			Output protection
				1 Module	2 Module	3 Module	
501-022-615.00	INV222-60/230-50	52-76 VDC	> 90%	2,25 kVA	4,5 kVA	6,75 kVA	In IBF DC/AC

### 110/125 V DC/AC Inverter

The INV 222 inverters, and designed for all type of applications where an uninterruptable AC power supply is needed, such as switchgear, telecom, emergency lighting and alarm systems.

#### Applications

- Low & High Voltage switchgear
- Transformer & SUB Stations
- Power Generation & Distribution

#### 110V/125 V DC INPUT

#### AVAILABLE 110V/125 V DC INPUT CONVERTERS

Part Number	Description	Input Voltage Range	Efficiency	Max Output Power			Output protection
				1 Module	2 Module	3 Module	
501-022-715.10	INV222-110/230-50 WIR	91,8-145 VDC	> 90%	2,25 kVA	4,5 kVA	6,75 kVA	In IBF DC/AC

### 220 V DC/AC Inverter

The INV 222 inverters, and designed for all type of applications where an uninterruptable AC power supply is needed, such as switchgear, telecom, emergency lighting and alarm systems.

#### Applications

- Low & High Voltage switchgear
- Transformer & SUB Stations
- Power Generation & Distribution

#### 220V DC INPUT

#### AVAILABLE 220V DC INPUT CONVERTERS

Part Number	Description	Output Voltage Range	Efficiency	Max Output Power			Output protection
				1 Module	2 Module	3 Module	
501-022-815.00	INV222-220/230-50	183,6-270 VDC	> 90%	2,25 kVA	4,5 kVA	6,75 kVA	In IBF DC/AC

# IBF DC/AC-INV (Inverter)

## TECHNICAL SPECIFICATIONS

Model	IBF-DC/AC-48 VDC Input	IBF-DC/AC-60 VDC Input	IBF-DC/AC-110/125 VDC Input	IBF-DC/AC-220 VDC Input
Part number	CINV0306.xxx	CINV0306.xxx	CINV0306.xxx	CINV0306.xxx

### INPUT DATA

Voltage (range)	40,8-67,5 VDC	52-76 VDC	91,8-145 VDC	183,6-270 VDC
Nominal Input voltage	48 VDC	60 VDC	108 VDC	216 VDC
Nominal Input current (on each Inverter)	41,6 ADC @ 48VDC	33,3ADC @ 60VDC	18,4 ADC @ 108VDC	9,2 ADC @ 216 VDC
DC Input Protection (on each Inverter)	63 A MCB	63 A MCB	25 A MCB	16 A MCB
AC Input Protection	32 A MCB			
Connection AC Input	Individual screw terminal 6 mm2 PE screw terminal, max 6 mm2 and M5 cable lug directly to chassis			
Connection bulk DC input	M8 bolt			

### OUTPUT DATA

Voltage (default)	230 VAC
Power (maximum)	5400 W/6750 VA @cos phi=0,8
Current (maximum)	29,4 AAC @cos phi=0,8, 23,4 AAC @ cos phi=1 (resistive power)
Frequency	50 Hz
Output protection (on each Inverter)	10 A MCB
AC Output protection	32 A MCB
Connection AC Output	screw terminals 6mm2, PE screw terminal max 6 mm2

### CONTROL AND MONITORING

Monitoring Unit	In STS 207
Local Operation	Display and keys, WEB interface via standard browser
Remote Operation	WebPower (WEB Interface & SNMP protocol)
Alarm Relays (Connection: clamp $\leq 1.5 \text{ mm}^2$ )	1 x Potential free contacts (NO, NC, C)
<i>Option: Relayboard DCC-RB6-ST5</i>	6 x Potential free contacts (NO, NC, C), 12-300 VDC, 0,1 A
Monitoring functions	Voltage, Frequency, Synchronization, Over temperature, etc
Alarms (from Web Interface or RB6 board)	Over temperature, STS outputcurrent too high, Source 1 & 2 failure, Collective failure STS, Load on Inverter etc

### OTHER SPECIFICATIONS

Protection class	IP 20
Operating temperature	-20 to +55°C, humidity 5 - 95% RH non-condensing
Storage temperature	-40 to +85°C, humidity 0 - 99% RH non-condensing
Dimensions[WxDxH]	482*432*267mm (6U)
Weight (excluding Inverters & static switch)	17 kg

### DESIGN STANDARDS

Electrical safety	EN 60950-1
EMC	EN55011/22 class "B" EN 61000-4 T2-5