

BECAFZAR INDUSTRIAL INVERTER SPECIFICATION

Mechanical Characteristics

- Protection : IP 21,31,42
(other degrees of protection are option)
- Sheet steel metal cabinet
- Identification plate outside of charger
- Painting : RAL 7035 light gray, RAL7032
(electro-static powder coated painting)
- Cable entry : bottom (top entry is option)
- Standard wiring numbering
- Component labeling (engraved PVC labels)

Electrical characteristics:

- Nominal input voltage: 24VDC, 48VDC, 110VDC ,220VDC, 330VDC
- Nominal output voltage: 110VAC ,220VAC, 230VAC
- Nominal capacity: 3KVA~70KVA
- Nominal frequency: 50Hz

Voltage regulation:

Static: 2%

Dynamic:

- load variation with 10% steps : output variation 2%
- load variation with 50%(50 to 100%) steps : output variation 5%
- output voltage will be stable within 100msec.
- Long term stability of Un
- Efficiency: 3KVA~5KVA > 80% , 10KVA~70KVA > 88%
- Output power factor : 0.80

Frequency Variation:

- 50 Hz +,- 0.1%

THD:

- With linear load < 3%
- With non linear load (Crest factor up to 3) : < 5%
- Single H.D : < 3%

Over load:

- 150% for 2 min
- 125% for 15 min (Other requests are available)
- In case of over load , load will transfer to bypass line automatically .

Protections

- Polarity reversal of input DC voltage
- DC soft rise in the input of Inverter automatically
- Short circuit (fast fuse protistor) and electronic cut out
- Over load protection on inverter line and bypass line
- Fast fuses for power modules protection
- MCCB (moulded case circuit breaker) for DC IN/bypass IN/manual bypass IN/output (Option)
- Low DC input
- DC input high
- Low /high inverter output voltage
- Inverter output frequency out of range.
- Low /high bypass line voltage
- Bypass line frequency out of range.
- Over temperature alarm
- Inverter over temperature shutdown
(load will transfer to bypass line)

Environmental

Ambient Temperature:

- Operating: 0 to +45 degree centigrade
(higher ambient temp. optional)
- Storage :-25 to 70 c

Relative humidity:

- Operation: from 20%to 80% no condensation
- Storage from 15% to 90% (in original packaging)
- Acoustic noise 55 db

System status indicators and alarms:

- LED for inverter output High voltage.
- LED for inverter output Low voltage.
- LED for inverter freq. fail
- LED for inverter not sync.
- LED for inverter Over load .
- LED for DC input low voltage.
- LED for DC input High voltage.
- LED for over temperature.
- LED for bypass line low
- LED for bypass line high
- LED for bypass frequency fail
- LED for bypass line overload

LEDs located on mimic panel:

- LED for DC OK
- LED for INV OK
- LED for bypass OK
- LED for SSI ON
- LED for SSB ON
- LED for manual bypass switch ON
- LED for output switch ON
- LED for general fault

Switches located on front panel:

- ON/OFF Switch
- Reset switch for buzzer-
- Lamp test

Remote alarms

- Inverter fail
- Bypass fail
- DC fail
(separate dry type contact for each of them)
(Other Contacts are available on request)

Static switch system

- Transfer time : less than 4 mSec
- Manual/change over between inverter and bypass
- Automatic/change over between inverter and bypass

Manual bypass switch for maintenance purpose

Operator can transfer the load to bypass line and switch off the inverter without any interruption

Double System:

- Hot Standby System
- Cascade System
- Parallel Load Share System