



1 phase

SD SERIES

RECTIFIER

GENERAL SPECIFICATIONS

- Internal isolation transformer at input
- Full controlled conventional rectifier
- Smart control and high reliability with DSP (Digital Signal Processor)
- Float charge, equalizing charge and boost charge modes
- Automatic and manual charge modes
- Low output voltage ripple and high reliability
- 2x16 character LCD display, showing measurements, status and alarm messages
- Soft start
- Led displays for easy observation of rectifier status
- Audible alarm
- Programmable current limitation
- Operation as voltage source or current source
- Calibration of measurements from front panel
- Language selection from front panel (English / German / Turkish / Dutch / Portuguese)
- DC Low / High, Line Failure, Over Temperature, Short Circuit protections
- Ability to program all operation parameters (Password protected)
- Programmable alarm relay contact outputs (4 standard, up to 16 relays as option)
- Possibility of monitor and control over RS232-RS485
- Modbus communication
- Log records with date and time stamp up to 200 events.
- 24V / 48V / 110V / 125V / 220V output options

OPTIONS

- Battery temperature compensation
- Ability to monitor batteries and battery low alarm, even when the AC input fails
- Active parallel (current sharing) operation up to 4 devices
- Easy observation via analog gauges
- Battery test with adjustable voltage and duration
- Transducers for input / output voltage(s) / current(s) (4-20mA and 0-10V)
- 12 pulse option to limit input current distortion
- Earth leakage monitoring
- Input Power / kVA / kW measurement
- Internal cabinet light / anticondensation heater
- Touch screen





TECHNICAL SPECIFICATIONS

| MODEL | 1 PHASE INPUT |
|--|---|
| INPUT | |
| Nominal voltage | 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC |
| Input voltage tolerance | ± 15% |
| Nominal frequency | 50Hz / 60Hz |
| Transformer | Galvanically isolated |
| ITHD | < 45-50% Standard |
| Input protection | Thermic Magnetic Overcurrent protection MCB, Overvoltage protection |
| OUTPUT | |
| Output voltage | 24 VDC / 48 VDC / 110 VDC / 220 VDC |
| Output voltage adjustment | 100% - 120% of Nominal Output Voltage |
| Output current adjustment | 10% - 100% of Nominal Output Current |
| Battery charging current adjustment | 10% - 100 % of Nominal Output Current |
| Boost charger voltage | 100% - 120% of Floating Output Current |
| Boost voltage(V/C) | 2,4 Lead Acid Battery 1,60 NiCd Battery |
| Float voltage(V/C) | 2,23 Lead Acid Battery 1,40 NiCd Battery |
| Nominal output current | 10A to 10000A |
| Maximum output current | 100 % of Nominal Output Current |
| Filtering | L-C Filtre |
| GENERAL PROPERTIES | |
| Boost timer | 0-600 hours adjustable |
| Cooling | Fan forced cooling (Standard), Natural cooling (Optional) |
| Isolation voltage | 1500 or 3000VAC input/chassis and output/chassis |
| Efficiency at full load | > 80% |
| Protection level | IP20 (Standard); IP21 - IP54 (Optional), (Consult for IP54 to IP65) |
| Cable entry | Front bottom (Top entry, optional) |
| Access to batteries | Batteries and rectifier in the same cabinet with front access (Optional) |
| Circuit breakers | Thermic-magnetic circuit breakers for input, output and battery |
| Reset button | Auto start |
| Measurements | Load output voltage and current / Batt.. output voltage and current / Utility voltage / Line voltage / Frequency / Power factor (Optional) / Batt. ambient temperature (Optional) |
| ENVIRONMENT | |
| Acoustic noise | 45 - 55 dB (according to power rating) |
| Storage temperature | (-20°C) - (+70°C) |
| Operating temperature | (-5°C) - (+50°C) |
| Humidity | 0 - 95% Non-condensing |
| Altitude | 1000m (-1% Power for every 100m after 1000m) Max. 4000m |
| Color | RAL7035, RAL7032 (Standard), others (Optional) |
| COMMUNICATION & PARALLELING | |
| Communication | RS232 (Standard), Dry Contacts (Standard), RS485 (Optional), Modbus TCP (Optional), SNMP (Optional), GSM (Optional) |
| Paralleling | Parallel Redundant (No need for extra kit for paralleling) |
| STANDARDS | |
| Standards | IEC62040-1, IEC62040-2, ISO9001, ISO14001 |