



TEC 9000-T1040
Online UPS , Transformer base

**Smart energy
Solutions**

10-40 kVA
three-phase / single-phase
three-phase / three-phase



Products

Uninterruptible power systems

TEC 9000-A series online double conversion Uninterruptible Power System

6-pulse thyristor rectifier full bridge

Battery voltage: 384Vdc

three-phase input: 400Vac / single-phase output: 230Vac

three-phase input: 400Vac / three-phase output: 400Vac

Software for remote monitoring and supervision

TEC 9000-A is available with a power range from 10 to 40kVA, three-phase input/single-phase output and three-phase input /three-phase output, using double conversion online technology (VFI) with an inverter transformer for output galvanic isolation. The load is powered continuously by the inverter with a filtered ,stabilized and regulated sinewave supply. The input and output EMI filters considerably increase the immunity of the load to mains disturbances and surges.

TEC 9000-A guarantees the maximum protection for critical loads networks, security applications and industrial application thanks to its outstanding mechanical and electrical design .

Applications

ATSYS leading company in the design and manufacturing of power systems specialising in the

- transportation
- Data centres
- Medical devices
- Emergency devices
- Industrial application
- Telecommunications devices



TEC 9000-T1040

Uninterruptible Power Systems

10 to 40kVA

| | Single phase output | | | | | Three phase output | | | | |
|---|--|--|-------------------|-----|-----|------------------------|------|--------|-----|--------|
| | 10 ^(B) | 15 ^(B) | 20 ^(B) | 30 | 40 | 10 | 15 | 20 | 30 | 40 |
| Apparent power (kVA) | 10 ^(B) | 15 ^(B) | 20 ^(B) | 30 | 40 | 10 | 15 | 20 | 30 | 40 |
| Active power (kW) | 9 | 13.5 | 18 | 27 | 36 | 9 | 13.5 | 18 | 27 | 36 |
| Input | | | | | | | | | | |
| Nominal voltage | 380-400-415Vac 3-phase | | | | | | | | | |
| Voltage tolerance | 300~480 Vac | | | | | | | | | |
| Frequency | 45~65 Hz | | | | | | | | | |
| Power walk-in | 0~100% in 30sec. (selectable) | | | | | | | | | |
| Frequency tolerance | ±2% (selectable from 1% to 5%) | | | | | | | | | |
| Standard features | Back feed protection and splitted bypass line | | | | | | | | | |
| Output | | | | | | | | | | |
| Power factor | 0.9 | | | | | | | | | |
| Nominal voltage | 220-230-240Vac 1-phase | | | | | 380-400-415Vac 3-phase | | | | |
| Static stability | ±1% | | | | | | | | | |
| Dynamic stability | ±5% in 10msec | | | | | | | | | |
| Frequency | 50-60 Hz (selectable) | | | | | | | | | |
| Frequency stability (on battery mode) | ±0.05% | | | | | | | | | |
| Voltage distortion | >1% at linear load / <3% at non-linear load | | | | | | | | | |
| Crest factor | 3:1 | | | | | | | | | |
| Overload control | 110% for 60min; 125% for 10min; 150% for 1min | | | | | | | | | |
| Batteries | | | | | | | | | | |
| Type | Pb selead acid, Wet, Ni-Cd | | | | | | | | | |
| Ripple | >1% | | | | | | | | | |
| Temperature compens | -500mV x °C | | | | | | | | | |
| Typical charging current | 0.2 x C10 | | | | | | | | | |
| N. cells for Pb batteries | 192 | | | | | | | | | |
| DC voltage | 384Vdc | | | | | | | | | |
| System and environmental | | | | | | | | | | |
| Efficiency | <93% in AC/AC; up to 98% in smart active mode | | | | | | | | | |
| Dimension WxDxH | 555x740x1400 | | | | | | | | | |
| Weight (kg) | 200 | 220 | 230 | 290 | 340 | 210 | 220 | 230 | 280 | 330 |
| Cooling | Forced ventilation | | | | | | | | | |
| Colour | RAL 7035 | | | | | | | | | |
| Protection degree | IP20 (higher levels of protection on request), IEC 60529 | | | | | | | | | |
| Room temperature | 0°C ~ +40°C | | | | | | | | | |
| Storage temperature | -20°C ~ +70°C | | | | | | | | | |
| Humidity | >95% (non-condensing) | | | | | | | | | |
| Noise (dB at 1 meter) | >54 dB | | >62 dB | | | >54 dB | | >60 dB | | >62 dB |
| Compliance | Standards LV 2006/95/EC - 2004/108/EC - Safety IEC EN 62040-1 ; EMC IEC EN 62040-2 Performanc IEC EN 62040-3 ; VFI-SS-111 Classified as IEC 62040-3 | | | | | | | | | |
| User interface and communication | | | | | | | | | | |
| Front panel | LCD display (HMI), mimic | | | | | | | | | |
| Connectivity | (standard) | Double RS323 ports with monitoring software; Dry contacts; 2 interface intelligent slots | | | | | | | | |
| | (optional) | SNMP card; JBUS/ModBus converter RS485 port; to ProfiBUS converter; Multi Licence | | | | | | | | |
| Remote commands | EPO and INV. OFF | | | | | | | | | |

Isolating transformer on the inverter

Extremely high short-circuit current

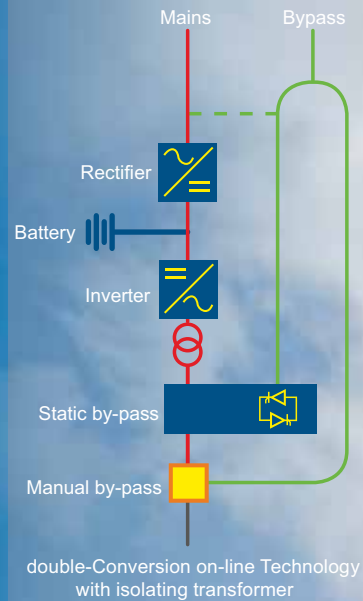
(B) Available also with internal batteries.

Note: product specifications are subject to change without further notice.

TEC 9000-T1040

Main features

- + Reliable, filtered, stabilised and regulated sinewave output (double conversion on-line technology VFI according to EN50091-3 specifications with filters for atmospheric disturbance suppression)
- + High reliability: IGBT technology, full microprocessor control with no break – in static and manual transferring, high short-circuit current to ensure compatibility with the most difficult application (lighting, drives and industrial processes) and an isolating transformer on the inverter output
- + High level diagnostics: event log, states, measurements and alarms, available from the built-in LCD in several languages
- + Selectable power walk-in allows to limit the input rushing current
- + Maximum reliability and power availability (parallel up to 8 units for redundant (N+1) or parallel operation)
- + EPO (Emergency Power Off) input for UPS shut-down using remote emergency button
- + Front access
- + Smart battery system suitable for use with Sealed, Wet, Ni-Cd battery type
- + Back-feed protection fitted as standard



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