

UPS 3Ph/3Ph for Industrial applications

Main Features

- ◆ Industrial layout
- ◆ Easy maintenance
- ◆ Front access
- ◆ LCD Multifunctional Control Panel
- ◆ Mimic Panel
- ◆ SCR 6 pulse Technology (Rectifier)
- ◆ IGBT Technology (PWM) (Inverter)
- ◆ Remote Signalization via SPDT contacts
- ◆ Temperature compensation of battery voltage

Technology: Double Conversion on-line
Power rating: 5kVA to 80kVA
Input: 400V 3Ph
Output: 400V 3Ph
Battery Volatge: 110Vdc/220Vdc

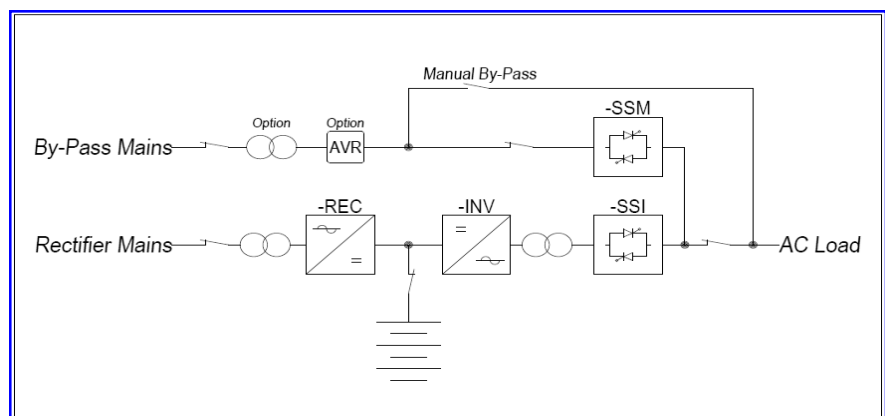


Main Options

- ◆ 12 Pulse rectifier
- ◆ AC & DC Distribution panel
- ◆ Internal lighting
- ◆ Internal heater
- ◆ Bypass line isolator transformer
- ◆ AC/AC voltage regulator
- ◆ Redundant ventilation
- ◆ Dual Parallel Operation
- ◆ Communication Port: USB or RS485 or Ethernet TCP/IP with MODBUS Protocol



System configuration example



Single Line Diagram

INDUSTRIAL UPS 3Ph/3Ph

Size (kVA) $\cos\phi=0.8$

5

10

20

30

40

10

20

30

40

50

60

80

AC Input

Rated Voltage Vac 380/400/415Vac +/-10% 3Ph 50/60Hz (other as option)

PF 0,8 @ full load

THD $\leq 30\%$ typ.

AC Output

Output Voltage Vac 400Vac 3Ph+N, 50-60Hz +/- 0.001 free running (other as option)

By pass input voltage 380/400/415Vac +/-10% 3Ph +N (other as option)

Harmonic Distortion $<2\%$ with linear load

$<5\%$ with non linear load

Crest factor 3:1 without derating

Overload 105% permanent - 125 % for 10 min. - 150 % for 1min. - 200 % for 100ms

Static Stability +/- 1%

Dynamic Stability +/-5 % (80% load step) with recovery to 2 % in 40ms

DC Link

DC Voltage 110Vdc (90 - 150 Vdc) 220Vdc (180 - 300)

Battery voltage Floating: 2.27 (VRLA), 2.2÷2.3 (VLA), 1.4÷1.5 (Ni-Cd) V/cell
Boost: 2.4÷2.45 (VLA), 1.5÷1.65 (Ni-Cd) V/cell
Equalizing: up to 2.35 (VRLA), up to 2.7 (VLA), up to 1.7 (Ni-Cd) V/cell

Chargin current 4 8 12 16 20 4 8 12 16 20 24 30

Control & Signalisation

Microprocessor High Performance 8-Bit Microcontroller with Advanced RISC Architecture

LCD Panel Backlit graphic LCD for Meters, Alarm/Status messages, History events & Parameters Settings (password protected)

Signalling LED Inverter normal (green), Inverter fault (red), Rectifier normal (green), Rectifier fault (red)

Acoustic Signal Buzzer

MIMIC Panel Principle block diagram of the UPS with 9 integrated LED

Volt free signalling contacts AC input supply failure, Rectifier failure, DC voltage LOW/HI, Battery discharging, Battery disconnected, Inverter failure, Inverter overload, Inverter over temperature, AC output voltage LOW/HI, Ventilation failure, DC hearth fault (option)

Environmental conditions

Installation Indoor

Ambient Temperature Operation: 0°C to +40°C, Storage: -20°C to +70°C

Relative Humidity $\leq 95\%$ @ 40°C non condensing

Max Installation Altitude 1000 m without derating

Audible Noise $< 65 - 70$ dB (A) at 1 m

Mechanical Characteristics

Cabinet Free standing, floor mounting, Steel sheet Enclosure - Front door with handle (double rods)

Steel thickness Frame 2mm, Door & Sides 1.5mm, Rear & Roof 1.2mm

Cooling method Cabinet: Natural - Semiconductor heat sink: Fan assisted (temperature-controlled)

Access Front door

Cable entry From bottom

Degree of protection IP20

Painting / Colour Epoxy-polyester thermosetting powder coating / RAL 7035

Dimensions (mm)	W	800	1000	1600	1600	1800	800	1200	1400	1600	1800	1800	2000
D	800	800	800	800	800	800	800	800	800	800	800	800	800
H	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900

Standards

Quality and management system	ISO 9001 – 2008 ISO 14001 – 2004
Safety	IEC EN 50178 IEC EN 62040 – 2 BS OHSAS 18001-2007
CE Conformity	Yes
EMC	IEC EN 61000-6-2, 61000-6-4, 62040-1
Semiconductor Convertors	IEC EN 60146-1-1, 60146-1-3, 60146-2

Teletecnica s.r.l.

Loc. Ponte Romano, 6
06028 Sigillo (PG) – Italia
Tel. +39 (0)75 9178005
Fax +39 (0)75 9178006
Email: info@teletecnicaweb.it
Web: www.teletecnicaweb.it



Building. A-7, Room No.002, Ground Floor,
Shwe Kabar Housing, Mindama Road,
Mayangone Township, 11062, Yangon
Myanmar
Tel: +95 1 655260, Fax: +95 1 655263
E-mail: mkk@mmprimeunity.com