

# Technical Specifications

ALP ( True Galvanic Isolation:10K-400KVA )

| PHASE | 3 Phase Input / 3 Phase Output |    |    |    |    |    |    |     |     |     |     |     |     |
|-------|--------------------------------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| KVA   | 10                             | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 120 | 160 | 240 | 320 | 400 |

## INPUT (RECTIFIER)

|                    |                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|---------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Input Voltage      | 190V / 208V / 380V / 400V / 415V / 440V / 480V / 600V, 3P4W or 3P3W |  |  |  |  |  |  |  |  |  |  |  |  |
| Input Range        | + / -20% ( > +/-20% is available upon request)                      |  |  |  |  |  |  |  |  |  |  |  |  |
| Input Frequency    | 50 / 60 Hz + / - 5Hz                                                |  |  |  |  |  |  |  |  |  |  |  |  |
| Power Walk In      | 0% -100% : 20 sec                                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Efficiency         | >98%                                                                |  |  |  |  |  |  |  |  |  |  |  |  |
| Voltage Regulation | + / -1%                                                             |  |  |  |  |  |  |  |  |  |  |  |  |

## BATTERY

|                                         |                                                    |    |    |    |    |    |    |    |    |    |     |     |     |
|-----------------------------------------|----------------------------------------------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|
| Battery Type / Pcs                      | Maintenance free lead acid batteries / 12V x 29pcs |    |    |    |    |    |    |    |    |    |     |     |     |
| Maximum Charge Current Adc (Selectable) | 5                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 120 | 160 | 200 |
| Battery Start                           | Yes, UPS can be started without AC source.         |    |    |    |    |    |    |    |    |    |     |     |     |

## INVERTER

|                                       |                                                                              |  |            |  |     |  |       |  |     |  |  |  |  |
|---------------------------------------|------------------------------------------------------------------------------|--|------------|--|-----|--|-------|--|-----|--|--|--|--|
| Output Voltage, Regulation            | 190V / 208V / 380V / 400V / 415V / 440V / 480V / 600V, 3P4W or 3P3W + / - 1% |  |            |  |     |  |       |  |     |  |  |  |  |
| Wave Form                             | Sine Wave                                                                    |  |            |  |     |  |       |  |     |  |  |  |  |
| Output Power Factor                   | 0.8                                                                          |  |            |  |     |  |       |  |     |  |  |  |  |
| Frequency Lock Range                  | 50 / 60 Hz + / - 3Hz                                                         |  |            |  |     |  |       |  |     |  |  |  |  |
| Output Frequency (Free Running)       | 50 / 60 Hz + / - 0.1 Hz                                                      |  |            |  |     |  |       |  |     |  |  |  |  |
| Phase Shift Under 100% Unbalance Load | < 0.5°                                                                       |  |            |  |     |  |       |  |     |  |  |  |  |
| THD (Linear Load)                     | < 2 %                                                                        |  |            |  |     |  |       |  |     |  |  |  |  |
| Overload                              | <110%                                                                        |  | Continuous |  |     |  |       |  |     |  |  |  |  |
|                                       | 110 – 125%                                                                   |  | 15 minutes |  |     |  |       |  |     |  |  |  |  |
|                                       | 125 – 150%                                                                   |  | 10 minutes |  |     |  |       |  |     |  |  |  |  |
|                                       | > 150%                                                                       |  | 30 seconds |  |     |  |       |  |     |  |  |  |  |
| Efficiency (100% Load)                | 93%                                                                          |  | 93.5%      |  | 94% |  | 94.5% |  | 95% |  |  |  |  |

## STATIC SWITCH

|                  |                   |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Voltage Range    | 173-277 VAC (L-N) |  |  |  |  |  |  |  |  |  |  |  |  |
| Mains ↔ Inverter | 0 ms              |  |  |  |  |  |  |  |  |  |  |  |  |

## OVERALL CHARACTERISTICS

|                                          |                                                                |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
|------------------------------------------|----------------------------------------------------------------|-----|-----|-------|-----|-----|-------------------|-------|------|------|----------------------------------------------|------|------|--|--|
| Overall Efficiency                       | 91%                                                            |     |     | 91.5% |     | 92% |                   | 92.5% |      |      | 93%                                          |      |      |  |  |
| Maximum Heat Dissipation (Kw)            | 1.1                                                            | 1.3 | 1.9 | 2.6   | 3   | 3.5 | 4.6               | 5.4   | 6.5  | 8.7  | 13                                           | 17.4 | 21.7 |  |  |
| Width x Height x Depth (mm)              | 550 x1600 x 800                                                |     |     |       |     |     | 1100 x1600 x 800  |       |      |      | 2200 x 1600 x 800<br>3300 x 1600 x 800(400K) |      |      |  |  |
| Weight (Kg, without battery)             | 270                                                            | 300 | 400 | 480   | 550 | 680 | 820               | 950   | 1180 | 1450 | 2900                                         | 3100 | 3500 |  |  |
| Audible Noise                            | < 65 dBA (At 1 M)                                              |     |     |       |     |     | < 67 dBA (At 1 M) |       |      |      | < 70 dBA (At 1 M)                            |      |      |  |  |
| Temperature / Humidity                   | 0-40 degree C ; 32-104degree F ; 0% - 90% (Non -Condensing)    |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Altitude                                 | <1500 M Above Sea Level                                        |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| FCC CLASS A, EN50091-1,-2                | YES                                                            |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Short Circuit Protection                 | Rectifier, Reserve, and Bypass                                 |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Lightning / EMC Filter                   | MOV / Input & Output                                           |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Galvanic Isolation                       | Input & Output true Galvanic isolation                         |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Indicator & Alarm                        | LCD, LED, Mimic Display, Buzzer                                |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |
| Remote Control / Communication Interface | Monitoring 1~99 UPS simultaneously / Dry contact, RS232, RS485 |     |     |       |     |     |                   |       |      |      |                                              |      |      |  |  |

\* Different specifications required are available

\* All specifications mentioned above are subject to change without prior notice.