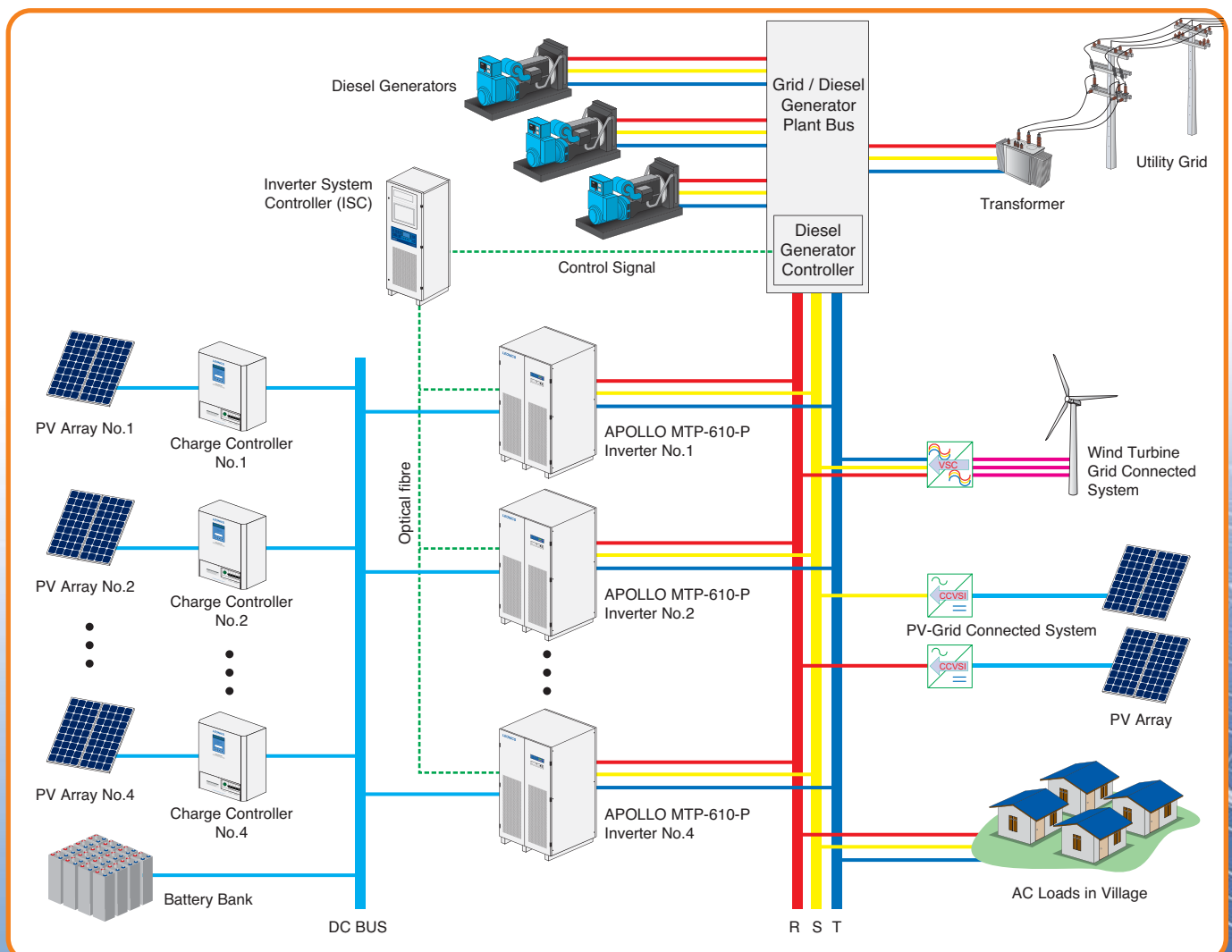


APOLLO MTP-610-P

Three Phase Bidirectional Parallel Inverter for Stand-alone Hybrid Mini-Grid and Micro Grid System



- Three phase inverter with built-in output transformer
- Power rating from 120 to 300 kW for each inverter
- Can parallel operation of inverters for total inverter power up to 1,200 kW
- Design for operate in Micro grid operation with utility line or operate as stand-alone PV-DG Hybrid System
- Parallel configuration up to 4 units of inverter with the Inverter System Controller (ISC)
- Power sharing control of each parallel-connected inverter by ISC
- Optical fiber communication with ISC
- Operates with Hybrid Control Command Unit (HCCU)
- ISO 9001 and ISO 14001 certified factory



APOLLO MTP-610-P series Three Phase Bidirectional Parallel Inverter for Stand-alone Hybrid Mini-Grid and Micro Grid System

| MODEL | | MTP-614F-P | MTP-615F-P | MTP-617F-P | MTP-6110F-P | MTP-6110H-P | MTP-6111H-P | MTP-6113H-P | MTP-6115H-P | MTP-6117H-P | |
|--------------------------------------|---------------------------|--|------------|-------------------------------|-----------------|-------------|-----------------|-------------|-------------------|-------------------|-----------------|
| RATED POWER | | 30 kW | 45 kW | 75 kW | 120 kW | 120 kW | 150 kW | 200 kW | 250 kW | 300 kW | |
| BATTERY | Nominal voltage | 240 Vdc | | | | | 480 Vdc | | | | |
| | Maximum current | 170 A | 255 A | 425 A | 680 A | 340 A | 425 A | 570 A | 710 A | 850 A | |
| AC INPUT FROM GRID LINE OR GENERATOR | Voltage | 380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) ± 10% | | | | | | | | | |
| | Phase | Three phase four wires | | | | | | | | | |
| | Frequency | 50 / 60 Hz ± 3 Hz | | | | | | | | | |
| AC OUTPUT (BATTERY MODE) | Voltage | 380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) | | | | | | | | | |
| | Voltage regulation | ± 5% (steady load), < 4% at 100% step load within 0.1 sec. | | | | | | | | | |
| | Phase | Three phase four wires | | | | | | | | | |
| | Frequency | 50 / 60 Hz ± 0.1% | | | | | | | | | |
| | Wave form | Pure sine wave | | | | | | | | | |
| | Total harmonic distortion | total < 4%, each < 3% | | | | | | | | | |
| | Maximum surge current | 200% at 2 sec. | | | | | | | | | |
| | Maximum AC current | 45.4 A | 68.2 A | 113.6 A | 181.8 A | 181.8 A | 227.3 A | 303 A | 378.8 A | 454.5 A | |
| ISOLATION | Galvanic isolation | yes | | | | | | | | | |
| EFFICIENCY | Inverter peak efficiency | > 95% | | | | | > 96% | | | | |
| PROTECTION | | Over current, Over load, Short circuit, Over temperature, Over voltage, Under voltage | | | | | | | | | |
| INDICATOR | LED | External Charging, Bypass, Generator Running, Generator Failure, Stand by/Run, Inverter, Charging, Load on Inverter, Overload, Low Battery, High temperature, Fault | | | | | | | | | |
| | LCD | Inverter (voltage, current, frequency, power, reactive power), Generator (voltage, current, frequency, power, reactive power), Battery (voltage, current, state of charge(%), charging current), Heat sink temperature, Battery temperature (option), Equalization date, Today DC Inverter Energy (Input, output), Today AC Inverter Energy (input, output), Accumulated DC energy (input, output), Accumulated AC Energy (input, output), System status, Time, Date, Data Log | | | | | | | | | |
| AUDIABLE ALARM | | Low battery, Inverter fault, High temperature | | | | | | | | | |
| COOLING | | Automatic cooling fan | | | | | | | | | |
| ENVIRONMENT | Temperature | 0 - 45°C | | | | | | | | | |
| | Relative humidity | 0 - 95 % (Non - condensing) | | | | | | | | | |
| DESIGN STANDARD | | AS/NZ 3100:2002 | | | | | | | | | |
| DIMENSION (W x H x D (cm)) | Control unit | 60 x 188 x 105 | | ⁽¹⁾ 90 x 188 x 105 | 120 x 205 x 105 | | 80 x 205 x 105 | | 110 x 205 x 105 | | |
| | Transformer unit | - | | - | - | | 120 x 205 x 105 | | ⁽²⁾ D1 | ⁽³⁾ D2 | 110 x 205 x 105 |
| WEIGHT (Approximate in kg) | Control unit | 520 | 540 | 860 | 1,170 | 1,170 | 500 | 530 | 775 | 775 | 775 |
| | Transformer unit | - | - | - | - | - | 1,200 | 1,240 | 1,200 | 1,355 | 1,455 |

(1) The dimension of control unit on the above table are the dimension of the bottom entry cabinet. All inverter model, the control unit cabinet can be either top or bottom cable entry depending on the system configuration. But only 75kW model, the top-cable entry cabinet sizing is 90 x 205 x 105 cm.

(2) D1 = 80 x 205 x 105 cm for control unit and 120 x 205 x 105 for transformer unit. (3) D2 = 110 x 205 x 105 cm for control unit and transformer unit. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

Authorized Distributor

LEO ELECTRONICS CO.,LTD.

27, 29 Soi Bangna-Trad Rd 34, Bangna, Bangkok 10260 THAILAND Tel. 0-2746-9500, 0-27468708 Fax. 0-2746-8712 e-mail : RNE@leonics.com

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