

Renewable hybrid Telecom site solution RenE-InD 8700-48

Description

Delta's new RenE series InD RenE-InD 8700-48 renewable-hybrid solution provides the network site power with any combination of AC grid and diesel generator power with renewable solar or wind energy sources. The InD RenE-InD 8700-48 is based on Delta InD cabinet.

The system includes automatic transfer switch (ATS) for AC-grid/Genset input, rectifiers (option), solar converters, power distribution unit for solar and wind power, load and battery connections. Depending on the power, backup and battery life time requirement the system is expandable with battery cabinets.

The PSC 3 controller is responsible for the energy and site infrastructure management and supervision.

The fully integrated solution and careful energy management minimize the waste of energy during the day / night energy cycling process.

RenE secures reliable power supply even in remote and rural areas. It is energy efficient and OPEX optimized solution ensures lower CO₂ emissions.

Main features

- Power up to 8.7 kW, high power density
- Renewable green energy by wind and solar power
- Cyclic battery discharge for genset fuel efficiency
- PSC 3 controller for ultimate energy management and site control

Applications

- Wireless applications, network base stations
- Remote areas with difficult site access



Delta RenE is a site solution where energy is produced utilizing renewable energy sources. Hybrid design also enables a combination of renewable and traditional power utilities. In addition to minimization of environmental footprint, improved total cost of ownership and network expansion possibilities to remote areas add to the advantages of the concept.



Technical specifications

1. Input Grid Section

AC connection	3L + N + PE
Nominal voltage	3 x 230 V _{RMS} (L-N)
Voltage range	88 - 300 V _{RMS}
Frequency range	45 - 66 Hz
Current nominal / phase	25 A _{RMS}
Mains terminal	Terminal blocks, or Main breaker
Input protection	Optional
Transient OVP	Optional

2. Input Generator Section

AC connection	3L + N + PE
Nominal voltage	3 x 230 V _{RMS} (L-N)
Current nominal / phase	16 A _{RMS}
Automatic transfer switch	Voltage relay monitoring Mechanical interlocking
Mains terminal	Terminal blocks, or Main breaker
Input protection	Optional

3. Input Renewable Power Section

Renewable DC connection	3 feeds 50A
Voltage range	60-150 V _{DC}
Current max / pole	48 A _{DC}
Input terminal	Circuit breakers
Input protection	3 x 50 A 2P
Transient protection	1000 DC/2+V optional

4. Output Power Section

Rectifier power	8,7 kW max
Solar power	3 x 4,3 kW _{peak}
Voltage range	42 - 58 V _{DC} ; 53.5 V _{DC nom}
Battery MCB	1 - 7 x 80 - 120 A
LVD 300A	Option
Batt-capacity basic cabinet	380 Ah
Batt-capacity expansion cab.	760 Ah
Max. batt expansion cab.	760 Ah
MCB	18 pcs / 1 - 63 A
PLD 150A	Option

5. Energy management section

Control and monitoring	PSC 3
Energy management	Configurable, depending on the OPEX saving targets
Heat management options	N/A
AC & Genset management	Automatic, configurable
Energy meter	AC and DC power

6. General

Ambient temperature	-45 - +45 °C
Safety	IEC/EN 60950
EMC	EN 300 386
Protection	ETS 300 019 Part 1-4

Ordering information

Product line number	3791428600
Description	RenE-InD 8700-48

Subject to change without notice.



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