

- Full Line of Paralleling Switchgear with Multiple Modes of Operation
- Single GenSet Open Transition to Multiple GenSet Extended Utility Paralleling
- Low and Medium Voltage up to 38 kV
- Open / Closed / Soft Loading Transition Modes
- Built-in Web-Enabledgear™ Remote Monitoring System

PSSI designs, manufactures, and provides PSSIgear™ power generation systems for On-site power applications from simple single GenSet standby to multi GenSet, multi utility paralleling for load management.

Models for Single GenSet Application

OTTP - Open Transition Transfer Pair

The OTTP operates as a standard transfer switch utilizing two circuit breakers to perform the transfer function ideally suited for standby / emergency backup power applications of a single GenSet.

The significant advantage of using the OTTP in place of conventional ATS is that the OTTP performs the transfer function as well as the overcurrent protection all within the same equipment. With traditional ATS you require additional circuit breakers for overcurrent protection.

SLIM - Soft Loading Isolated Mode

The SLIM is a close transition soft loading paralleling switchgear that provides seamless transfer of power between two good sources. It is used for applications where a closed transition transfer is allowed by the utility company but without an extended paralleling of the two sources.

The controls in the SLIM perform active synchronization of the generator output with the utility power during the power transfer process. The typical parallel time between the generator and the utility during power transfer is 10 seconds to 2 minutes (adjustable).

The SLIM is a good choice for reliable emergency backup capabilities with bumpless transfer back to a good utility source. Additionally, it can also be used for load curtailment / load management applications.

SLIE - Soft Loading Import / Export

The SLIE is similar to the SLIM model in providing closed transition soft loading switchgear that parallels a single generator to a single utility power grid. But unlike the SLIM model, SLIE is capable of utility source connection for an extended period



Low Voltage SLIE Model

(as authorized by the utility company).

In addition to emergency backup and load curtailment (isolated) modes, the SLIE can be configured to operate in Import or Export modes based on the total facility kW loads and the generating capacity.

- In the Import mode the controls continuously monitor the utility net import level and adjust the output of the generator so that a pre-defined kW is always imported into the customer's facility from the utility.
- In the Export mode the controls continuously monitor the utility net export setpoint and adjust the output of the generator so that a pre-defined kW is always exported to the utility power grid.

SLBL - Soft Loading Base Load

The SLBL parallels a single GenSet to a single utility for an extended period utilizing soft loading transfer.

The controls in the SLBL model perform active synchronization and load control to maintain the generator output at its base load level (typically 80% of standby rating). In this mode, any generated power exceeding the facility load consumption will be exported to the utility source.

Also, as a standard feature, the SLBL model comes factory-equipped with emergency backup and load curtailment modes of operation.

Multiple GenSet and/or Utility Application

MGIM - Multi Generator Isolated Mode

The MGIM is a standard multiple generator paralleling system for emergency standby with open transition transfer operation. The system may consist of 2 or up to 8 generators paralleled to a common bus.

The PLC based system master control provides many features including the following:

- Enabling all of the generators to start simultaneously and parallel on a first-up-first-on basis (a.k.a. random access paralleling).
- Proportional, real and reactive (kW & kVAR) load sharing between generators.
- Automatic load shedding in the event of a generator failure to prevent the entire system from being overloaded.
- Load demand mode - Automatically shutting off generators that are not required if the total load on the emergency bus is less than the total generated capacity.

The MGIM is configured in a modular fashion for ease of upgrade with additional generators in the future.

MGUP - Multiple Generator Utility Paralleling

The MGUP is a standard multiple generator emergency standby system with extended utility paralleling capabilities. The system may consist of 2 or up to 8 generators paralleled to a common bus and then paralleled to a single or multiple utility sources. The MGUP provides following modes of operation:

- Emergency Standby
- Isolated
- Peak Shaving
- Import / Export
- Base Load

MGUP's master control also provides following features:

- Soft load transition
- First-up-first-on paralleling
- Proportional real and reactive load sharing
- Automatic load shedding
- Load demand

Similarly to MGIM, the MGUP is also configured in a modular design for ease of future upgrades with adding generators.



Master Control Section Interior

Standard Features:

- Large 10.4" Color Touchscreen HMI
- Intuitive Interactive Controls
- Full Utility & Generator Metering
- System Annunciation + NFPA-110
- Utility Grade Protective Relaying for Utility Paralleling Models
- Web-Enabledgear™ Remote Monitoring (excluding OTTP Model)
- Isolated, Base Load, & Import/Export Modes of Operation

Specifications Low Voltage:

- Voltage up to 600V
- Ampacity up to 6000A
- Interrupting Capacity up to 200k
- 60 Hz, 3 Phase, 3 or 4 Wire
- UL508A (also certified for Canada)
- UL891, UL1558, CSA
- Applicable ANSI Standards
- NEMA SG3 & SG5 Standards
- NEMA 1 and NEMA 3R Enclosures
- Service Entrance Rated & Labeled
- Walkin and Non Walkin Outdoor Enclosure Options

Specifications Medium Voltage:

- Voltage 5, 15, 27, & 38 kV
- Ampacity up to 3000A
- Up to 1000 MVA
- 60 Hz, 3 Phase, 3 or 4 Wire
- Applicable ANSI, NEMA, & IEEE Standards
- NEMA 1 and NEMA 3R
- Optional CSA and UL
- Walkin and Non Walkin Outdoor Enclosure Options

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