Si-125 & Si-125-PST

125 Watt Pure Sine Wave Self Testing Emergency Lighting Inverter with Optional Power Share Technology PST™ Power Share Technology

Assurance Emergency Lighting
a division of Assurance Engineering LLC

Compatible with LED loads

Specifiers reference:

Project: _____

Type: _____

Model #: _____

Comments: _____

Product Summary

Approvals.....UL Listed to UL924
NEMA 410 load tested up to 375W

BAA.....Buy American Compliant

Input Voltage.....Field Select-able 120 or 277 Vac input/Output

Input Current..... 1.45A (120 Vac), 0.65 A (277Vac)

Input Frequency.....60 Hz

Output Voltage ..... 120-277 Vac, 60 Hz

Output Current..... 1.05 A (120 Vac), 0.5A (277 Vac)

Output Power.....**125 W**

Output voltage regulation in emergency ..... +/- 5%

Output..... Dimmed, Switched, Normally On, & Normally Off
All models have 3 switchable command zones and 1 normally ON circuit.

Optional Power Share Technology
Field adjustable 0-10 Vdc emergency dim feature
Max. connected normal 0-10 Vdc load of **375 W**

Operating Time.....90 Minutes @ 25℃

Self-Testing & Self-Diagnostic
Monthly reported via visual user interface panel

Load Power Factor ..... 0.5 leading to 0.5 lagging

Transfer Time ..... 50mS / 1S / 2S User Selectable

Recharge Time ..... 24 Hours

Battery over voltage and under voltage protection

Sealed long-life, valve-regulated, lead calcium batteries

Dimensions ..... 12.0"H x 15.4" W x 4.25"D

Weight.....33 lbs.

Operating Temperature .....68°F to 86° F (20°C to 30° C

Storage Temperature ..... -4° F to 158 °F (-20°C to 70°C)

Warranty ..... 2 years full on electronics,
4 years pro-rata on batteries,
See website for warranty details

Options

- PST 3 Independent Adjustable (20-100%) Dimming Zones, 0-10Vdc, Dali, & Fire Alarm Interface (Max. Normal Power Load of 375W when using Power Share Technology PST)
- AA Audible Alarm
- TBAR (T-Bar Mounting)

Examples: Si-125 & Si-125-PST
Si-125-AA

BAA BUY AMERICAN ACT COMPLIANT

UL LISTED

All Specifications subject to change without prior notification.

Description

The Assurance Emergency Lighting Si-125 & Si-125-PST are Pure sine wave output self-test/self diagnostic inverters designed for designated emergency lighting fixtures. In the event of a power failure, the inverter will automatically supply up to 125 watts of emergency power to LED, fluorescent and incandescent luminaires for ninety (90)minutes. It will operate with multiple switched, switched and emergency only luminaires. It can operate as a standalone 125 watt inverter. It has optional features such as Power Share Technology (PST) for dimming in emergency, audible alarm and Seismic Restraints.
When the PST option is selected,it can be used with 0-10 Vdc controlled dimmable luminaires (up to 375W) and the 0-10 Vdc dimming voltage is adjusted to the AC drivers for rated emergency output.

Specifications

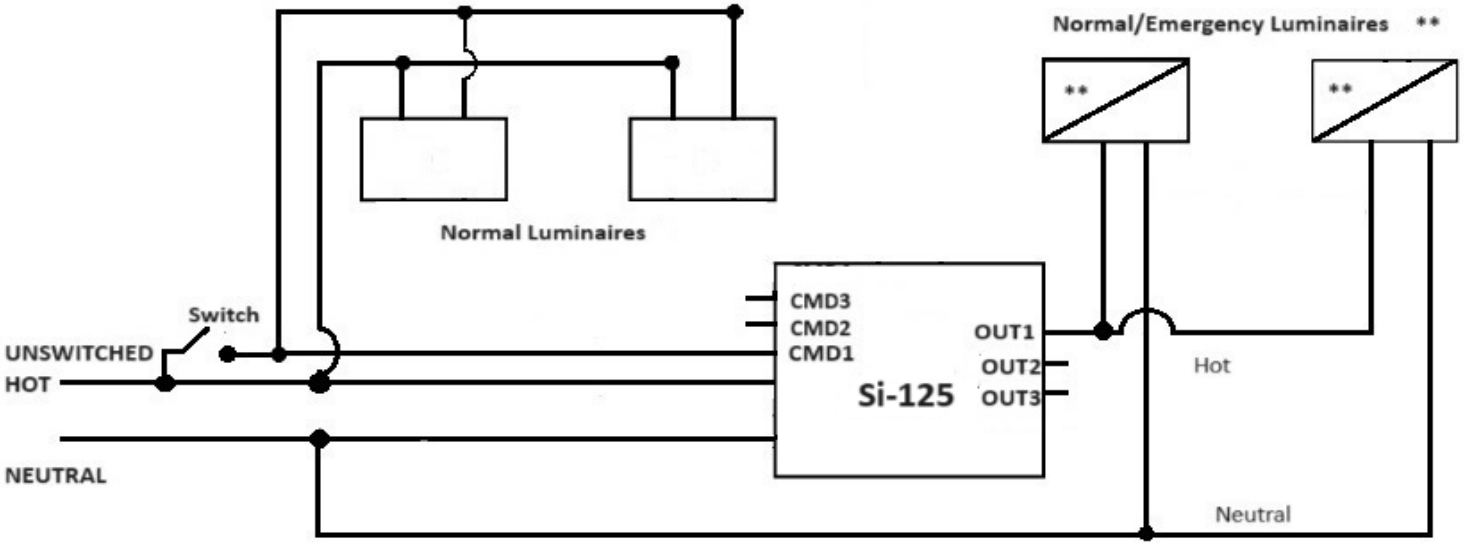
Emergency lighting shall be provided by the Assurance Si-125 inverter unit equipment designed to operate designated LED and fluorescent fixtures on emergency power either at rated power or reduced luminaire power using the optional Power Share Technology during the 90 minute emergency discharge regardless of the wall switch position. The inverter shall allow for connected emergency fixtures to be normally on, normally off dimmed/switched without affecting lamp operation during a power failure. The unit shall include a self-contained inverter circuitry with an automatic, variable-rate battery charger, low voltage battery disconnect, short circuit, brown out protection and 10X crest factor for high in rush currents. The unit shall utilize a valve regulated sealed lead calcium battery with a 10 year design life expectancy. The inverter shall be self testing and self diagnostic and perform monthly self diagnostic test and report failures via user interface panel. The Si-125 (up to 125W) shall have the option of Power Share Technology- which dims the (normal load 375W max.) load in emergency via the 0-10 vdc luminaire inputs to pre-selected values (20, 40, 60, 80 & 100%) for 3 independent zones. The inverter shall be UL Listed. It shall meet or exceed the requirements of UL924, NFPA 101 Life Safety Code, NFPA 70 National Electrical Code, OSHA, State and Local Codes. Warranty: Two (2) years full on electronics and four (4) years pro rata on batteries. Per the California Energy Commission, Regulatory Advisory dated Oct. 31, 2018, Backup Battery Charger Systems, the Si-125 is applicable and accepted for use in California. Buy American Act Compliant
Contact Tech Support for details regarding extended run time applications.

For 2 hour FEMA emergency operation, the Si-125 can power up to 94 W (max.) of emergency loads.

DIAGRAM 1

Typical Wiring Diagram for Switched applications
3 Zones available- only one shown

Max. Connnected Load: 125W

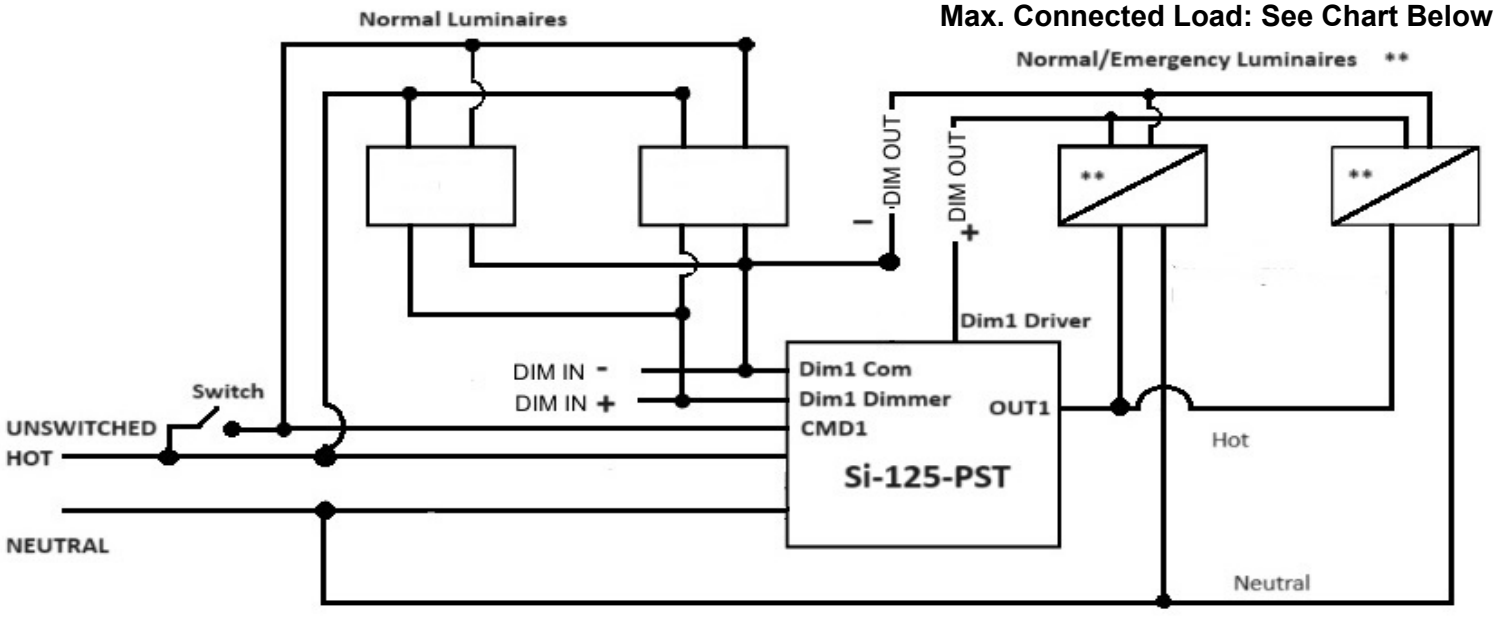


Note: Multiple zone wiring can be duplicated - Only One zone is shown.

DIAGRAM 2

Typical Wiring Diagram for 0-10 Vdc and Power Share Technology
3 Zones are available - only one shown.

Max. Connected Load: See Chart Below



Note: Multiple zone wiring can be duplicated - Only One zone is shown.

Additional CMDs, DIM, and OUTs not shown.

TABLE 1

Output of all (3) dimming circuits	2.0 V		4.0 V		6.0V		8.0 V		10.0 V	
Model	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
Si-125-PST	375W Max.	125W Max.	312W Max.	125W Max	200W Max.	125W Max.	156W Max.	125W Max.	125W Max.	125W Max.