

MODEL NO: _____

TYPE: _____

PROJECT: _____

COMMENTS: _____

LOAD CAPABILITY
1.0KVA - 2.8KVA

LOAD TYPES
LED, Fluorescent, Incandescent
and HID Loads

Product Advantages

- **Single-phase emergency system with exceptional 98% power efficiency**
- **Fast transfer speed for compatibility with all lighting load types**
- **Provides full light output in the emergency mode**
- **Conducts required monthly and annual tests for operational readiness and logs test, event, and alarm data**

DESCRIPTION

IOTA IISC Series 1.0KVA to 2.8KVA Inverter Systems are UL Listed single-phase sine wave output inverters designed to provide power to designated emergency lighting fixtures in the event of a loss of normal power. In a power loss situation, the IOTA IISC Series will supply 1.0KVA to 2.8KVA of emergency power from the battery supply at 2ms transfer time. The IOTA IISC Series works in conjunction with any lighting load type and is capable of operating normally-on or normally-off designated fixtures in the emergency mode. The IISC Series is ideal for providing emergency power to extensive 120V, 208V, 240V, or 277V lighting arrangements that utilize multiple lamp and fixture types. The IISC Series conducts monthly and annual tests for operation readiness and logs the test results for reference as needed. The IISC Series features a durable front-access steel compact cabinet designed for increased space savings. Covered by IOTA's standard one-year warranty.

SPECIFICATIONS

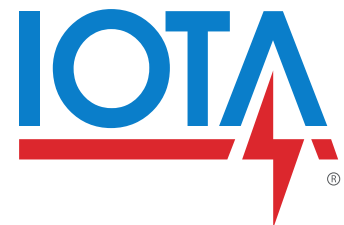
Input Voltage	Single phase 120V, 208V, 240V, or 277V
Output Voltage	Single phase 120V, 208V, 240V, or 277V
Frequency	60Hz*
Output Power	1.0KVA - 2.8KVA
Transfer Time	2 ms
Emergency Operation	90 minutes
Input Line Power Factor Range5 lagging to .5 leading
THD (input/output)	<10% / <3%
Input Power Walk-in	Limiting inrush current to <125%, 10 times for 1 line cycle
Synchronizing Slew Rate	1Hz per second nominal
System Short Circuit	65 KAIC
Static Voltage	+/- 2% (Load current change), +/- 12.5% (Battery discharge)
Dynamic Voltage	+/- 2% (+/- 25% load step change) +/- 3% (+/- 50% load step change) recovery within 3 cycles
Inverter Overload Threshold	380% for 16 line cycles, 125% for 10 minutes
Crest Factor	3.8
Operating Temp (Inverter)	0° to 40° C
Operating Temp (Battery)	20° to 30° C
Storage Temp (electronics only)	-20° to 70° C
Relative Humidity	< 95%
Battery	Maintenance-free Valve Regulated Lead Acid (VRLA)
Audible Noise (standby mode)	45 dba @ 1m
Certifications	UL 924 Listed

*Input +/- 3%, Output in emergency +/- 0.05Hz



Features

- PWM/IGBT inverter design for optimal switching speed
- Micro-processor controlled, temperature compensating charger
- 120 to 277 Input/Output Voltage Options
- Valve Regulated Lead Acid (VRLA) batteries provide long life and are maintenance free
- Low Battery Voltage Disconnect protects batteries against deep discharge
- Includes Input Circuit Breaker and Battery Protection
- User Programmable / Password Protected Interface
- High-Contrast VFD display screen
- Includes RS232 Serial Communications port
- Durable steel compact cabinet design with white finish
- Forced air cooling only while in the emergency mode with no filter requirement
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements
- Covered by IOTA's standard 1-Year Warranty on all electronic components and pro-rated warranty on batteries.
- Factory Startup, On-Site Training, and Preventative Maintenance available



IISC SERIES

1.0KVA-2.8KVA SINGLE-PHASE INVERTER SYSTEMS

ORDERING GUIDE

MODEL NAME

	Output Wattage ¹	AC Input	AC Output
IISC	<input type="text"/>	<input type="text"/>	<input type="text"/>
1000 (1.0 KW / KVA)		120IN (120VAC)	120OUT (120VAC)
1600 (1.6 KW / KVA)			120/277OUT (120/277VAC) ³
2200 (2.2 KW / KVA)		208IN (208VAC)	120OUT (120VAC) ³
2800 (2.8 KW / KVA)			120/240OUT (120/240VAC) ³
		240IN (240VAC)	120/240OUT (120/240VAC) ³
		277IN (277VAC)	120OUT (120VAC) ³
			277OUT (277VAC)
			120/277OUT (120/277VAC) ³

Example Model: IISC 1600 120IN 120OUT WALL

¹ Derate for applications >10,000 ft. elevation

² Contact Factory for Load Control Applications

³ Enclosure height may increase. Contact Factory.

⁴ Adds 4 in. to height.

⁵ Includes Extended Two-Year Warranty.

⁶ Requires Factory Start Up option.

⁷ Not available for multiple breakers

Note: Batteries must be connected to continuous AC power within the time period as detailed per battery warranty. Under no circumstances should batteries remain unenergized for a period exceeding 180 days.

DIMENSIONS / WEIGHT

Inverter Model	Width/Height/Depth (inches)	Electronics Weight	# of Batteries (90 min)	Battery Weight	Total Weight
IISC 1000	24.25" x 27.25" x 10.5"	121 lbs	4	160 lbs	281 lbs
IISC 1600	24.25" x 43.25" x 10.5"	165 lbs	6	240 lbs	405 lbs
IISC 2200	24.25" x 43.25" x 10.5"	174 lbs	8	320 lbs	494 lbs
IISC 2800	24.25" x 55" x 10.5"	203 lbs	10	400 lbs	603 lbs

RECOMMENDED ACCESSORIES

These ALCR items are ordered separately to be used in conjunction with the loads connected to the IIS inverter supply. ALCRs eliminate the power consumption from 24/7 "Always On" fixtures while enabling occupants to regain local fixture control without impacting required emergency performance.

ETS DR

The ETS DR is a fixture-level ALCR that shunts power around local controls, allowing the inverter supply to operate the fixture regardless of ON/OFF control setting. Includes the DR dimming relay to also bypass any present 0-10V dimming signal, forcing the fixture to operate at full brightness.

ETS 20

Circuit-level ALCR that shunts power around the local control operating multiple fixtures on a designated circuit, allowing the inverter supply to operate the fixture regardless of ON/OFF control setting.

ETS 20 DR

Same ACLR function as the ETS 20. Includes dual dimming relay for bypassing up to two different 0-10V dimming signals, forcing the fixtures to operate at full brightness.

Warranty: 1-Year Limited Warranty

Complete warranty terms located at

www.acuitybrands.com/CustomResources/Terms_and_conditions.aspx

ADDITIONAL OPTIONS

Check any that apply

- [blank] - none
- MDC - Status Monitoring Dry Form C Contacts
- MDCP - Status Monitoring Contacts w/ Panel
- RAP - Remote Summary Alarm Panel
- IDC - Inverter on Dry Form C Contact
- SDC - Summary Fault Form C Contacts
- BLOCK(#) - Breaker Locks, (#) - qty
- BYPASS - Internal Maintenance Bypass ("make before break")
- BYPASSBBM - Internal Maintenance Bypass ("break before make")
- EXTPASS - External Maintenance Bypass⁷
- OTDELAY - Output Transfer Delay
- BACNET - BACnet (MS/TP Only)
- BACIP - BACnet (over ethernet) ASHRAE 135 compliant interface
- MODBUSRTU - RTU protocol for BAS, SCADA (serial)
- MODBUSIP - TCP/IP protocol for BAS, SCADA (RJ45)
- FLOOR - Floor Mounting Bracket⁴
- STRAP - Battery Strapping
- WALL - Wall Mount Brackets
- SZM - Seismic Mounting to Floor⁴
- SNMP - Serial to RJ45 Network Adaptor
- DRIP - Nema 2 Drip Top
- LCR - Load Control Relay
- ZM(#) - Zone Monitoring, (#) = qty
- FSREG* - Factory Start Up⁵, (*) is the assigned installation zone (1-18)
- TREG(#) - On Site Training⁶, (#) is the assigned installation zone (1-18)
- PM(A or B)5REG(#) - 5-Year Preventative Maintenance⁶, (A) for annual plan, (B) for bi-annual plan, (#) is the assigned installation zone (1-18)
- BATINST - Battery Installation by Factory Certified Technician⁶
- 5YR - Extended Five-Year Warranty⁶

Output Breaker "A"



Breaker Package Worksheet

QTY maximums

Max. breaker positions is 10. Note that 2-pole breakers will require 2 breaker positions.

10 unsupervised, 6 supervised

Max. 9 normally off breakers. At least one breaker must be normally on.

If all breakers are the same type, complete "Output Breaker A" section

Output Breaker A

QTY	Pole/Voltage	Amps	Type	Output Trip Alarms
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
OB(#) - (#) = qty	1P120 - 1 pole 120V 1P277 - 1 pole 277V 2P208 - 2 pole 208V 2P240 - 2 pole 240V	10AMP - 10A Breaker 16AMP - 16A Breaker 20AMP - 20A Breaker 25AMP - 25A Breaker 32AMP - 32A Breaker	ON - Normally On OFF - Normally Off	OTA(#) - (#) is qty

If requiring 2 types of breakers, identify the second type in the "Output Breaker B" section:

Output Breaker B

QTY	Pole/Voltage	Amps	Type	Output Trip Alarms
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
BOB(#) - (#) = qty	B1P120 - 1 pole 120V B1P277 - 1 pole 277V B2P208 - 2 pole 208V B2P240 - 2 pole 240V	B10AMP - 10A Breaker B16AMP - 16A Breaker B20AMP - 20A Breaker B25AMP - 25A Breaker B32AMP - 32A Breaker	BON - Normally On BOFF - Normally Off	BOTA(#) - (#) is qty

If requiring 3 or more types of breakers, then IOTA will assign a Breaker Package number for ALL of the breakers combined. Do not complete Output Breaker A or B sections; instead, identify all of the desired breakers in the worksheet below:

QTY	Pole/Voltage	Amps	Type**	Output Trip Alarms
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>