

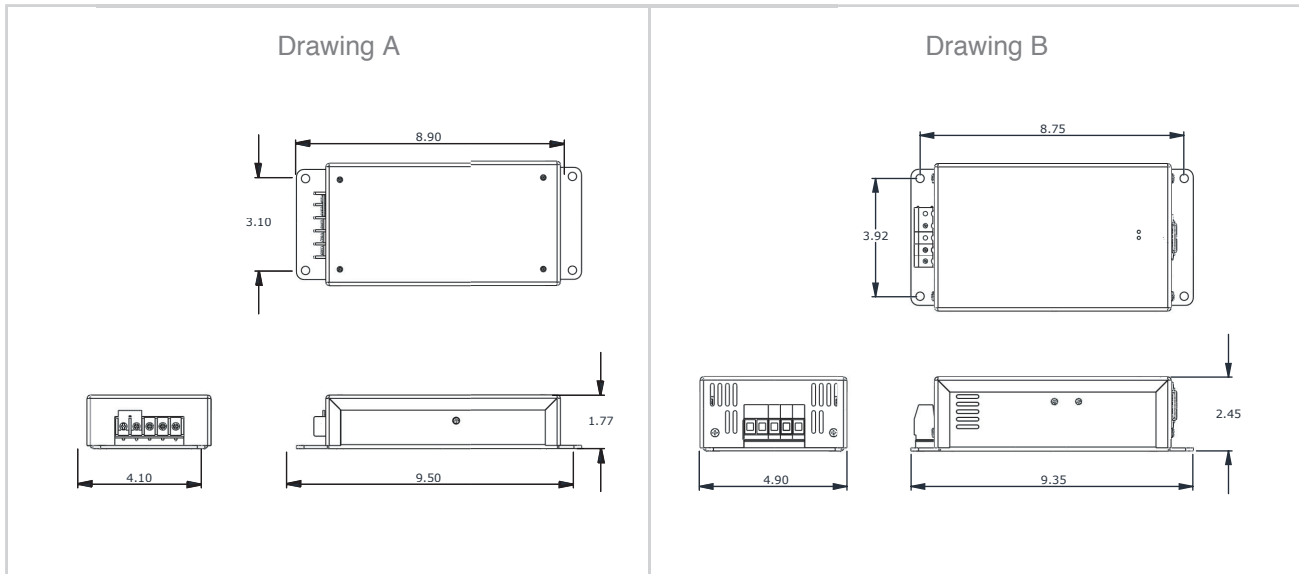
SPECIFICATIONS

Model Number	Input Voltage Range	Output Voltage	Output Current (Cont.)	Output Current (Peak)	Current Limiting	Line Regulation	Load Regulation	Output Ripple (Max)	Efficiency (Typical)	Input Fuse	Operating Temperature Range	Dimensions	Remote Terminal Operation
ICT1212-12AI2	11-18 VDC	13.8 VDC +/- 150 mV	10.0 Amps	12.0 Amps	12.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	88%	20 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT1212-35AI2	11-18 VDC	13.8 VDC +/- 150 mV	32.0 Amps	35.0 Amps	35.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	60 Amp	-20°C to +40°C	Drawing B	Note 1)
ICT1224-10AI2	11-18 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	10.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	35 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT1224-20AI2	11-18 VDC	27.6 VDC +/- 300 mV	17.0 Amps	20.0 Amps	20.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	60 Amp	-20°C to +40°C	Drawing B	Note 1)
ICT103048-5AI2	11-30 VDC	48.0 VDC +/- 300 mV	4.0 Amps	5.0 Amps	5.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	35 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT206012-12AI2	20-60 VDC	13.8 VDC +/- 150 mV	10.0 Amps	12.0 Amps	12.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	88%	15 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT206012-20AI2	20-60 VDC	13.8 VDC +/- 150 mV	17.0 Amps	20.0 Amps	20.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	20 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT206024-10AI2	20-60 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	10.5 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	20 Amp	-20°C to +40°C	Drawing A	Note 1)
ICT206012-35AI2	20-60 VDC	13.8 VDC +/- 150 mV	32.0 Amps	35.0 Amps	35.5 Amps +/- 5%	0.5%	0.5%	20mV RMS	90%	40 Amp	-20°C to +40°C	Drawing B	Note 1)
ICT206024-20AI2	20-60 VDC	27.6 VDC +/- 300 mV	18.0 Amps	20.0 Amps	21 Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	40 Amp	-20°C to +40°C	Drawing B	Note 1)
ICT9016012-20AI2	90-160 VDC	13.8 VDC +/- 150 mV	16.0 Amps	20.0 Amps	22Amps +/- 5%	0.5%	0.5%	15mV RMS	90%	5 Amp	-20°C to +40°C	Drawing A	Note 2)
ICT9016024-10AI2	90-160 VDC	27.6 VDC +/- 300 mV	8.0 Amps	10.0 Amps	11Amps +/- 5%	0.5%	0.5%	30mV RMS	90%	5 Amp	-20°C to +40°C	Drawing A	Note 2)
ICT9016048-5AI2	90-160 VDC	55.2 VDC +/- 600 mV	4.0 Amps	5.0 Amps	5.25Amps +/- 5%	0.5%	0.5%	60mV RMS	90%	5 Amp	-20°C to +40°C	Drawing A	Note 2)

1. The REMOTE control input requires a voltage between 10VDC and 60VDC referenced to the input ground to enable the output of the converter. Converters ship with a jumper connecting the REMOTE input and the input positive terminal, which must be removed before the control feature will function.
2. The REMOTE control will disable the converter when the remote terminals connected to the INPUT NEG terminal of the converter. The converter is enabled when the REMOTE terminal is left floating.

OUTLINE DRAWING

DIMENSIONS IN INCHES



ICT ISOLATED SERIES 2 CONVERTERS

INSTRUCTION MANUAL



INNOVATIVE CIRCUIT TECHNOLOGY LTD.

855-315-003

ICT ISOLATED SERIES 2 CONVERTERS

ICT ISOLATED SERIES 2 DC-DC converters feature an all-new design that builds on the ICT legacy of reliability and performance. This line delivers higher efficiency and an on/off control contact to help save energy and battery life.

ISOLATED SERIES 2 converters can operate from a negative or positive ground electrical system, and are ideal for applications where complete isolation is necessary between primary and secondary circuits, as well as from the chassis.

These instructions should be read before using the product and saved for future reference.

SETUP

- ▶ Mount converter securely.
- ▶ Do not apply power until the unit is completely wired.
- ▶ REMOTE on/off setup:

Default Configuration From Factory

All models are output-enabled by factory default:

- > For models ICT206012-35AI2, ICT206024-20AI2, ICT1212-35AI2 and ICT1224-20AI2, a jumper is installed between the two REMOTE terminals.
- > For models ICT9016012-20AI2, ICT9016024-10AI2 and ICT9016048-5AI2, the REMOTE terminal is left floating.
- > For all other models, a jumper is installed between the REMOTE terminal and the INPUT POS terminal.

Remote On/Off Feature

To use the remote on/off feature, remove the jumper.

- > For models ICT206012-35AI2, ICT206024-20AI2, ICT1212-35AI2 and ICT1224-20AI2, short/open the REMOTE CONTROL terminals to turn the unit on/off.
- > For models ICT9016012-20AI2, ICT9016024-10AI2 and ICT9016048-5AI2, open/short the REMOTE terminal to the INPUT NEG terminal to turn the unit on/off.
- > For all other models apply the input voltage to the REMOTE terminal to enable the output.

- ▶ Connect load to the output.
- ▶ Connect power source to the input using appropriate fusing for the application
- ▶ For the best results, wire converter directly to the battery using heavy gauge wire.

WARNING

- ▶ Incorrect wiring may damage both the converter and any equipment connected.
- ▶ Do not place the unit on or near any sources of heat and moisture.
- ▶ Servicing of unit should be done only at ICT factory.

TROUBLESHOOTING

- ▶ Remove the cover to check fuse inside the unit. If blown, replace it only with a fuse of the same rating.
- ▶ Check for proper voltage at the input while converter is under load.
- ▶ Check for any erratic voltage conditions at the input that might trigger the overvoltage protection.

NOTES

- ▶ These converters incorporate a special noise filter design. For proper filtering, the converter chassis must be grounded.
- ▶ The continuous current ratings are for 40°C ambient temperatures. Please de-rate the output current rating 2%/°C for operating from 40°C to 60°C ambient temperatures.
- ▶ Wall mount (AI2) and single 19" Rack mount (AI2R) models are available. Read www.ict-power.com for details.

LIMITED WARRANTY

ICT Ltd. warrants to the original consumer purchaser that this product shall be in good working order, free from defects in materials and workmanship, for a period of three (3) years from the date of purchase. Should failure occur during the above stated time period, then ICT will, at its option, repair or replace this product at no additional charge except as set forth below. All parts, whether for repair or replacement, will be furnished on an exchange basis. All exchange pieces become the property of ICT. This limited warranty shall not apply if the ICT product has been damaged by unreasonable use, accident, negligence, disaster, service, or modification by anyone other than the ICT factory.

Limited warranty service is obtained by delivering the product during the above stated three (3) years warranty period to an authorized ICT dealer or ICT factory and providing proof of purchase date. If this product is delivered by mail, you will insure the product or assume risk of loss or damage in transit, and prepay shipping charges to the factory.

Every reasonable effort has been made to ensure that ICT product manuals and promotional materials accurately describe ICT product specifications and capabilities at the time of publication. However, because of ongoing improvements and updating of ICT products, ICT cannot guarantee the accuracy of printed materials after the date of publication and disclaims liability for changes, errors or omissions.

If this ICT product is not in good working order, as outlined in the above warranty, your sole remedy shall be repair or replacement as provided above. In no event will ICT be liable for any damages resulting from the use of or the inability to use the ICT product, even if an ICT employee or an authorized ICT dealer has been advised of the possibility of such damages, or for any claim by any other party.

ICT reserves the right to make changes without further notice to any products or documentation for improvement of reliability, function, or design.

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