



Description	Document No.	Rev.	Date of issue	
3×130kVA AUX converter Inverter software version Description	CGL/130/IGBT- AC/01	03	27/08/2019	



INVCC Software Release Report

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Description				

Ver. -0.0:

- IGBT based inverter code for AUX converter
- V/F control technique used for controlling speed of motor
- SVM modulation technique used for PWM
- Protection implemented:
 1. DC-link overvoltage
 2. DC-link undervoltage
 3. O/P overvoltage
 4. O/P undervoltage
 5. O/P overcurrent
 6. I/P undervoltage
 7. I/P Overvoltage
 8. Auxiliary converter phase fault
 9. Line to line circuit due to dead short at motor terminals
 10. DC link short circuit
 11. Ground fault in AC input circuit
 12. Ground fault in 3 phase load
 13. Thermal over loading
 14. Fuse failure in converter
- HMI code implemented

Ver. 1.0:


- Input current sensing added as per ALT-C
- input over-current protection implemented
- Input current sensing using 3.3ohm burden resistor

Ver. 2.0:

- ALT-C + BUR current greater than max modification in software
- Ramp up time changes for BUR current greater than max.
 - 10sec delay added in BUR1 software to resolve BUR current greater than max
- Battery charger current less than 10A issue
 - Filter added in frequency values
 - Harmonic oscillator modified

Ver. 3.0:

- Data download issues resolved for “inverter fault”
- Input over-current tuned to follow the inverse current time trip instantaneous trip.
- DC-Link overvoltage monitoring & control tuned to 500µsec (2 cycles of 250µsec).

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Ver. 4.0:

- DC-link Over-voltage issue resolved for BUR1, BUR2 & BUR3.

Ver. 5.0:

- BUR1 OCB1 & OCB2 MCB trip issue solved.
- DC-Link over voltage after neutral zone.