

# TOSHIBA



# Power Module Program

## Medium Voltage Drives



TOSHcare® 

# FEEL CONFIDENT KNOWING YOUR DRIVE IS PROTECTED BY TOSHIBA



## POWER MODULE RECONDITIONING

Toshiba International Corporation (Toshiba) offers power module reconditioning services as part of its TOSHcare® Lifecycle Services Program (TOSHcare). Equipment service options are basic reconditioning or advanced reconditioning depending on the age, physical condition and/or run time of the applicable power modules.

### WHY IS RECONDITIONING RECOMMENDED?

Reconditioning improves reliability and longevity of the power module by replacing select circuit boards and devices. Electrolytic devices such as capacitors in power modules that are stored or left unpowered for an extended time could have higher leakage currents resulting in potential performance issues. The basic, basic plus, and advanced power module reconditioning options include a one- year TOSHcare protection plan for the reconditioned modules at no additional charge.

### ARE ALL POWER MODULES ELIGIBLE FOR THIS PROGRAM?

This program is available for all functional powered (in-use) and unpowered (spare) power modules. Units that are damaged or need repairs are not eligible for reconditioning. Toshiba can assist equipment owners in determining the best service plan for their power modules based on the condition of the units.

**Power Module Reconditioning Options**

SERVICE	Basic Reconditioning	Basic Plus Reconditioning	Advanced Reconditioning
Inspection of Power Module	•	•	•
Replacement of Fiber Optic Cables	•	•	•
Replacement of IGD Boards	•	•	•
Replacement of Power Supply	•	•	•
1 Year TOSHcare Protection Plan	•	•	•
Adder for Extra Year of TOSHcare Protection Plan*	•	•	•
Full Voltage & Full Current Factory Testing	•	•	•
Extensive Cleaning		•	•
Reapplication of Thermal Compound		•	•
Replacement of All IGBTs			•
Replacement of All Clamping Diodes			•

The basic reconditioning, basic plus reconditioning and advanced reconditioning packages come with a one-year TOSHcare protection plan and the option to purchase an additional year of coverage. This plan provides coverage for defects in material or workmanship, including all parts and labor for repair shop work related to covered failures. Additionally, inspection fees for covered failures are waived during the protection plan period.

\*All TOSHcare services are subject to applicable terms and conditions and limitations.

# Cost-Effective Solutions. Smooth Equipment Operations.

## POWER MODULE RENTAL

The TOSHcare power module rental program allows equipment owners to rent power modules while reconditioning services are being performed. The rental program is an excellent option for equipment owners with no or limited spare power modules. Renting power modules helps minimize downtime during the reconditioning process and offers a cost-effective alternative to investing in spare modules.



## POWER MODULE STORAGE CONTAINERS

The TOSHcare container program allows equipment owners to ship and store power modules with confidence. Made of a combination of wood and metal, the container has a robust design that supports multiple uses with optional features for long-term power module storage.

For electrolytic devices in power modules that are stored or left unpowered for an extended time (e.g. capacitors), higher leakage currents may occur, which may lead to performance issues. This potential issue can be minimized by adding the optional control power to the container, which allows power to be applied to the modules while being stored. Space heaters can be added to the container to safeguard the power modules from the damaging effects of humidity.

Power module containers are metal on the sides, providing enhanced protection to the power modules. The containers are available for frames 0, 1, 2, 3 and 4. The container used for medium voltage adjustable speed drive frames 0, 1 and 2 is pictured below.



Visit [www.toshiba.com/tic/toshcare](http://www.toshiba.com/tic/toshcare) to submit a power module reconditioning request. Email [TIC-Service@toshiba.com](mailto:TIC-Service@toshiba.com) with any program inquiries.

**TOSHIBA**

## **FIELD SERVICE SUPPORT FOR TOSHIBA MOTORS, DRIVES & CONTROLS**

- Installation & Startup
- Troubleshooting & Repair
- Preventive Maintenance
- All Low & Medium Voltage Product Lines

## **FULL-TIME FIELD SERVICE PERSONNEL & TECHNICIANS STAFFED IN REPAIR FACILITIES**

- Houston, Texas, USA
- Edmonton, Alberta, CAN

## **ADDITIONAL SUPPORT THROUGH TOSHIBA'S SERVICE CENTER NETWORK**

## **24/7 EMERGENCY SERVICE LINE**

## **CUSTOMIZED APPLICATION & FIELD SERVICE TRAINING**

- Houston & Edmonton Training Facilities
- On-site for In-House Personnel
- Virtual Classroom Webinars

