TOSHIBA

Toshiba G3+ PACK Operation Manual Addendum

Asd, 480 volt ratings

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A DDENDUM 480 Volt Ratings

Date: December, 2007 Project No.: 60459-000

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Related Manuals for Toshiba G3+ PACK

Controller Toshiba G3 Instruction Manual

Unified controller, i/o adapter module (80 pages)

Control Unit Toshiba G3 Plus Pack Specification

Adjustable speed drives g3 plus pack (4 pages)

Control Unit Toshiba G3 Application Manualline

Direction change with rx input (2 pages)

DC Drives Toshiba G7 Series Applications Workbook

(59 pages)

DC Drives Toshiba G7 Quick Start Manual

Adjustable speed drive (54 pages)

DC Drives Toshiba G9 Installation And Operation Manual

(298 pages)

DC Drives Toshiba G9 Installation And Operation Manual

Asd (289 pages)

DC Drives Toshiba G9 ASD Quick Start Manual

(4 pages)

DC Drives Toshiba ACE-tronics G9 ASD Installation And Operation

Manual

Adjustable speed drive (297 pages)

DC Drives Toshiba GX7R ASD Quick Start Manual

(85 pages)

DC Drives Toshiba SuperMulti Drive Manual

Usb 3.0 portable (2 pages)

DC Drives Toshiba VF-P7 Instruction Manual

Compliance with ce marking and ul standard 200v class 400v class (12 pages)

DC Drives Toshiba T300MV2 Instruction Manual

Medium voltage adjustable speed motor drive (140 pages)

DC Drives Toshiba Q9+ Installation & Operation Manual

Adjustable speed drives (306 pages)

DC Drives Toshiba T300BMV2 Instruction Manual

Adjustable speed motor drive (81 pages)

DC Drives Toshiba PDP003Z Manual

Profibus-dp option function (33 pages)

Summary of Contents for Toshiba G3+ PACK

<u>Page 1</u> G3+ P ASD O PERATION ANUAL DDENDUM 480 Volt Ratings Date: December, 2007 Project No.: 60459-000...

<u>Page 2</u> Manual's Purpose and Scope This addendum manual was written by the Toshiba Technical Publications Group. This group is tasked with providing technical documentation for the G3+ Pack Adjustable Speed Drive. Every effort has been made to provide accurate and concise information to you, our customer.

Page 3 Adjustable Speed Drive Adjustable Speed Drive Please complete the Warranty Card

supplied with the ASD and return it to Toshiba by prepaid mail. Please complete the Warranty Card supplied with the ASD and return it to Toshiba by prepaid mail.

Page 5: Table Of Contents

System Setup Requirement	s8 Operational and Maintena	ance Precautions9
Standard Specifications	10 Post-Reset Requirements	12 G3+ Pack ASD
Typical Wiring Diagram	13 Part Numbering Convention	14 Ordering
Information14	Current/Voltage Specifications	15 Specifications for
Cables and Terminals	16 Dynamic Braking Resistor Wire/	Cable Specifications

Page 7: General Safety Information

CAUTION The word CAUTION without the safety alert symbol indicates a potentially hazardous situation exists which, if not avoided, may result in equipment and property damage. CAUTION G3+ Pack Addendum...

Page 8: Special Symbols

DO NOT remove or cover any of these labels. If the labels are damaged or if additional labels are required, contact your Toshiba sales representative for additional labels. Labels attached to the equipment are there to provide useful information or to indicate an imminently hazardous situation that may result in serious injury, severe property and equipment damage, or death if safe procedures or methods are not followed as outlined in this manual.

Page 9: Equipment Inspection

• Keep the equipment in an upright position. • Contact your Toshiba sales representative to report discrepancies or for assistance if required. Handling and Storage • Use proper lifting techniques when moving the ASD; including properly sizing up the load, getting assistance, and using a forklift if required.

Page 10: Installation Precautions

Installation Precautions Location and Ambient Requirements • The Toshiba ASD is intended for permanent installations only. • Installation should conform to the 2005 National Electrical Code — Article 110 (NEC) (Requirements For Electrical Installations), all regulations of the Occupational Safety and Health Administration, and any other applicable national, regional, or industry codes and standards.

Page 11: Conductor Routing And Grounding

ASD and may cause injury to personnel. • DO NOT install the ASD if it is damaged or if it is missing any component(s). • Turn the power on only after attaching and/or securing the front cover. G3+ Pack Addendum...

Page 12: Protection

Note: A supplemental emergency stopping system should be used with the ASD. Emergency stopping should not be a task of the ASD alone. • Follow all warnings and precautions and do not exceed equipment ratings. G3+ Pack Addendum...

Page 13: System Integration Precautions

Please contact your Toshiba sales representative for application-specific information or for training support. • The Toshiba ASD is part of a larger system and the safe operation of the ASD will depend on observing certain precautions and performing proper system integration. •...

Page 14: System Setup Requirements

When using an ASD output disconnect the ASD and the motor must be stopped before the disconnect is either opened or closed. Closing the output disconnect while the 3-phase output of the ASD is active may result in equipment damage or injury to personnel. G3+ Pack Addendum...

Page 15: Operational And Maintenance Precautions

Turn the power on only after attaching (or closing) the front cover and DO NOT remove the front cover of the ASD when the power is on. • DO NOT attempt to disassemble, modify, or repair the ASD. Call your Toshiba sales representative for repair information. •...

Page 16: Standard Specifications

Speeds. Terminal block control and repetitive run possible. Braking Starting frequency adjustment (0 to 120 Hz), braking current DC Injection Braking adjustment (0 to 100%), braking time adjustment (0 to 10 seconds), emergency stop braking function, motor shaft stationary control. G3+ Pack Addendum...

<u>Page 17</u> Fault reset via keypad, remote contact closure, or programming drive Reset retry. Cycling power also resets fault (fault display can be maintained). The G3+ Pack may be configured to use regenerative energy from the Ridethrough Control motor to maintain programmable settings during a brownout.

Page 18: Post-Reset Requirements

Carrier Frequency — Set to 2.2 kHz (item #42). • Discrete Input S4 — Set to 10 (EOFF; item #48). This item is to be set to Normally Closed (SuperUser access required). See the project drawing for further information on this setting. G3+ Pack Addendum...

Page 19: G3+ Pack Asd Typical Wiring Diagram

G3+ Pack ASD Typical Wiring Diagram G3+ Pack Addendum...

Page 20: Part Numbering Convention

Part Numbering Convention The G3+ Pack ASD is a special configuration, large horsepower, G3 ASD. The NEMA 3R version is designed for outdoor applications and is painted white — the indoor system is painted ANSI 61 gray. Ordering Information Use the following part numbering convention when ordering the G3+ ASD.

Page 21: Current/Voltage Specifications

Current/Voltage Specifications Table 1. 480-Volt G3+ Pack NEMA1/NEMA3R Enclosure Standard Ratings. Model Input Output Voltage Output Current Output Current Rated Motor Number Voltage/Frequency 3-Ph Variable 100% Cont. 120% for 60 Secs. HP/kW G3+B 3-Ph 50/60 Hz Frequency (Amps) (Amps) 4660...

Page 22: Specifications For Cables And Terminals

Note: Cables and Terminals specifications are based on the rated current of the ASD — They Do Not include a 10% Service Factor. Table 2. Specifications for Cables and Terminals for the 6-Pulse G3+ Pack. Lug Size Wire Size AWG...

<u>Page 23</u> Note: Cables and Terminals specifications are based on the rated current of the ASD — They Do Not include a 10% Service Factor. Table 3. Specifications for Cables and Terminals for the 12-Pulse G3+ Pack. Lug Size Wire Size AWG...

Page 24: Dynamic Braking Resistor Wire/Cable Specifications

The total wire length from the ASD to the DBR should not exceed ten feet. If EMI/RFI noise is of concern, the DBR wiring should be three-core screened cable. The screen should connect to the ASD enclosure and the resistor enclosure. G3+ Pack Addendum...

Page 25: Enclosure Dimensions

Refer to Figures 1 through pg. 24 for the location of dimensions through in tables and 5. Note: All Toshiba ASD enclosures carry at least an IP20 rating. Table 4. NEMA 1. Model Shipping Number Fig. Weight G3+B lbs.(kg) i n c h e s...

<u>Page 26</u> (893) 445K 15.5 0.62 (1549) 451K40 (1981) (394) (38) (16) 460K 470K 2000 70.07 35.04 481K (907) (1829) (2286) (1780) (890) 493K (1118) (1067) (686) 410L 412L 3500 82.07 41.04 414L40 (1588) (2134) (2794) (2085) (1042) 415L40 G3+ Pack Addendum...

Page 27 Figure 1 G3+ Pack Addendum...

Page 28 Figure 2 G3+ Pack Addendum...

Page 29 Figure 3 G3+ Pack Addendum...

Page 30 Figure 4 G3+ Pack Addendum...