



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0415

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Toshiba International Corporation

Manufacturer's Technical Representative: Bradley Engel

Mailing Address: 13131 West Little York Rd., Houston, TX 77041

Telephone: (713) 466-0277 Email: bradley.engel@toshiba.com

Product Information

Product Name: YORK OptiSpeed Drives; Toshiba T300MVi Drives & Toshiba T300MV2 Drives

Product Model Number(s): See Attachment 1

Product Category: Industrial Control Panels

Product Sub-Category: Variable Frequency Drives and Starters

General Description: Medium Voltage Adjustable Speed Drives for the control of AC induction motors.

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: EASE

Contact Person: Jonathan Roberson

Mailing Address: 5877 Pine Ave Suite 210, Chino Hills, CA 91709

Telephone: (909) 606-7622 Email: j.roberson@easeco.com

Title: SE



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
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**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

Company Name: EASE LLC

Name: Jonathan Roberson

California License Number: S4197

Mailing Address: 5877 Pine Ave., Suite 210, Chino Hills, CA 91709

Telephone: (951) 295-1892

Email: jon@EASECo.com

**Certification Method**

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): \_\_\_\_\_

**Testing Laboratory**

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)

Contact Person: Jeremy Lange

Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513

Telephone: (972) 247-9657

Email: jeremy@etldallas.com



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Seismic Parameters

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 1.17 ( $z/h = 1$ ); 1.13 ( $z/h = 0$ )

SDs (Design spectral response acceleration at short period, g) = 1.56 ( $z/h = 1$ ); 2.50 ( $z/h = 0$ )

$a_p$  (Amplification factor) = 2.5

$R_p$  (Response modification factor) = 6

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment 2

Overall dimensions and weight = See Attachment 1

HCAI Approval (For Office Use Only) - Approval Expires on 06/19/2031

Date: 6/19/2025

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDs (g) = 1.56

$z/h$  = 1

Condition of Approval (if applicable):

# ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

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TABLE 1:

| Manufacturer                                     | TOSHIBA INTERNATIONAL CORPORATION                                                                                                                                         |                  |      |       |                      |            |                      |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------|-------|----------------------|------------|----------------------|
| Product Line                                     | YORK Optispeed Medium Voltage Adjustable Speed Drives<br>Toshiba T300MVi Medium Voltage Adjustable Speed Drives<br>Toshiba T300MV2 Medium Voltage Adjustable Speed Drives |                  |      |       |                      |            |                      |
| COMPONENT                                        | MODEL NO.                                                                                                                                                                 | DIMENSIONS (IN.) |      |       | APPROX.<br>WT. (LB.) | MOUNT      | BASIS <sup>[1]</sup> |
|                                                  |                                                                                                                                                                           | W                | D    | H     |                      |            |                      |
| YORK, OptiSpeed 4160V,1000HP, YK OIL PUMP        | TX-024-39341-313 <sup>[3]</sup>                                                                                                                                           | 122.0            | 43.4 | 103.7 | 9,200                | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1000HP, YK OIL, OSHPD      | 024-41456-313,<br>MVVSD10002K-84 SI                                                                                                                                       | 122.0            | 43.4 | 103.7 | 9,200                | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1250HP, YK OIL PUMP        | TX-024-39341-314 <sup>[3]</sup>                                                                                                                                           | 122.0            | 43.4 | 103.7 | 10,400               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1250HP, YK OIL, OSHPD      | 024-41456-314,<br>MVVSD12502K-84 SI                                                                                                                                       | 122.0            | 43.4 | 103.7 | 10,400               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1500HP, YK OIL PUMP        | TX-024-39341-315 <sup>[3]</sup>                                                                                                                                           | 122.0            | 43.4 | 103.7 | 11,200               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1500HP, YK OIL, OSHPD      | 024-41456-315,<br>MVVSD15002K-84 SI                                                                                                                                       | 122.0            | 43.4 | 103.7 | 11,200               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1750HP, YK OIL PUMP        | TX-024-39341-316 <sup>[3]</sup>                                                                                                                                           | 122.0            | 43.4 | 103.7 | 12,100               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,1750HP, YK OIL, OSHPD      | 024-41456-316,<br>MVVSD17502K-84 SI                                                                                                                                       | 122.0            | 43.4 | 103.7 | 12,100               | Rigid Base | INT                  |
| YORK, OptiSpeed 4160V,2000HP, YK OIL PUMP        | TX-024-39341-317 <sup>[3]</sup>                                                                                                                                           | 122.0            | 43.4 | 103.7 | 12,700               | Rigid Base | UUT1404-1            |
| YORK, OptiSpeed 4160V,2000HP, YK OIL, OSHPD      | 024-41456-317,<br>MVVSD20002K-84 SI                                                                                                                                       | 122.0            | 43.4 | 103.7 | 12,700               | Rigid Base | INT                  |
|                                                  |                                                                                                                                                                           |                  |      |       |                      |            |                      |
| Toshiba T300MVi,4160V,1000HP,124A,INT            | M3A44100SAAS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 9,000                | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1250HP,155A,INT            | M3A44125SAAS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 10,200               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1500HP,186A,INT            | M3A44150SAAS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 11,000               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1750HP,217A,INT            | M3A44175SAAS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 11,900               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2000HP,248A,INT            | M3A44200SAAS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 12,500               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1000HP,124A,EXT            | M3A44100SABS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 8,900                | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1250HP,155A,EXT            | M3A44125SABS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 10,100               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1500HP,186A,EXT            | M3A44150SABS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 10,900               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,1750HP,217A,EXT            | M3A44175SABS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 11,800               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2000HP,248A,EXT            | M3A44200SABS                                                                                                                                                              | 122.0            | 43.4 | 103.7 | 12,400               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2250HP,279A,INT            | M3A44225SAAS                                                                                                                                                              | 164.0            | 49.5 | 103.7 | 15,700               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2500HP,310A,INT            | M3A44250SAAS                                                                                                                                                              | 164.0            | 49.5 | 103.7 | 16,500               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2250HP,279A,EXT            | M3A44225SABS                                                                                                                                                              | 164.0            | 49.5 | 103.7 | 15,600               | Rigid Base | INT                  |
| Toshiba T300MVi,4160V,2500HP,310A,EXT            | M3A44250SABS                                                                                                                                                              | 164.0            | 49.5 | 103.7 | 16,400               | Rigid Base | INT                  |
|                                                  |                                                                                                                                                                           |                  |      |       |                      |            |                      |
| Toshiba T300MV2,Fr1,4160V,1000HP,124A,INT, OSHPD | M41AN44100AAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 9,000                | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,1250HP,155A,INT, OSHPD | M41AN44125AAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 10,200               | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,1500HP,186A,INT, OSHPD | M41AN44150AAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 11,000               | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,1750HP,217A,INT, OSHPD | M41AN44175AAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 11,900               | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,2000HP,248A,INT, OSHPD | M41AN44200AAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 12,500               | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,1000HP,124A,EXT, OSHPD | M41AN44100BAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 8,900                | Rigid Base | INT                  |
| Toshiba T300MV2,Fr1,4160V,1250HP,155A,EXT, OSHPD | M41AN44125BAA0S                                                                                                                                                           | 122.0            | 43.4 | 103.7 | 10,100               | Rigid Base | INT                  |

Table continues next page

## ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

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**TABLE 1:**

| Manufacturer                                     | TOSHIBA INTERNATIONAL CORPORATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |      |       |                      |            |                      |  |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------|-------|----------------------|------------|----------------------|--|
| Product Line                                     | YORK Optispeed Medium Voltage Adjustable Speed Drives<br>Toshiba T300MVi Medium Voltage Adjustable Speed Drives<br>Toshiba T300MV2 Medium Voltage Adjustable Speed Drives                                                                                                                                                                                                                                                                                                                                                                |                  |      |       |                      |            |                      |  |
| COMPONENT                                        | MODEL NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DIMENSIONS (IN.) |      |       | APPROX.<br>WT. (LB.) | MOUNT      | BASIS <sup>[1]</sup> |  |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | W                | D    | H     |                      |            |                      |  |
| Toshiba T300MV2,Fr1,4160V,1500HP,186A,EXT, OSHPD | M41AN44150BAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 122.0            | 43.4 | 103.7 | 10,900               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr1,4160V,1750HP,217A,EXT, OSHPD | M41AN44175BAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 122.0            | 43.4 | 103.7 | 11,800               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr1,4160V,2000HP,248A,EXT, OSHPD | M41AN44200BAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 122.0            | 43.4 | 103.7 | 12,400               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr2,4160V,2250HP,279A,INT, OSHPD | M42AN44225AAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 15,700               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr2,4160V,2500HP,310A,INT, OSHPD | M42AN44250AAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 16,500               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr2,4160V,2250HP,279A,EXT, OSHPD | M42AN44225BAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 15,600               | Rigid Base | INT                  |  |
| Toshiba T300MV2,Fr2,4160V,2500HP,310A,EXT, OSHPD | M42AN44250BAA0S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 16,400               | Rigid Base | INT                  |  |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |      |       |                      |            |                      |  |
| YORK, OptiSpeed 4160V,2250HP, YK OIL PUMP        | TX-024-39341-318 <sup>[3]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 15,900               | Rigid Base | INT                  |  |
| YORK, OptiSpeed 4160V,2250HP, YK OIL, OSHPD      | 024-41456-318,<br>MVVSD22502K-84 SI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 164.0            | 49.5 | 103.7 | 15,900               | Rigid Base | INT                  |  |
| YORK, OptiSpeed 4160V,2500HP, YK OIL, OSHPD      | 024-41456-319,<br>MVVSD25002K-84 SI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 164.0            | 49.5 | 103.7 | 16,700               | Rigid Base | INT                  |  |
| YORK, OptiSpeed 4160V,2250HP, YK OIL, OSHPD      | TX-024-39341-319 <sup>[3]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 164.0            | 49.5 | 103.7 | 16,700               | Rigid Base | UUT1404-2            |  |
| Mounting                                         | RIGID BASE (FLOOR): a free-standing, base mounted condition with the component rigidly attached to a supporting structure and no lateral support above the base.                                                                                                                                                                                                                                                                                                                                                                         |                  |      |       |                      |            |                      |  |
| Enclosure                                        | Powder coated carbon steel. NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only.                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |      |       |                      |            |                      |  |
| Notes                                            | 1. BASIS: <ul style="list-style-type: none"><li>• UUT#: Indicates that a test specimen matching these characteristics was tested as part of this testing program.</li><li>• INT (Interpolate/Extrapolate): indicates a model that was not specifically tested, and by which seismic certification is established through evaluation of testing of other, similar models in the product line.</li></ul> 2. Special Seismic Certification is limited to subcomponents listed in Table 2 and those meeting exceptions of CBC §1705A.14.3.1. |                  |      |       |                      |            |                      |  |
|                                                  | 3. Type Form No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |      |       |                      |            |                      |  |



**ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS**

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**TABLE 2: SEISMICALLY CERTIFIED SUBCOMPONENTS**

| SUBCOMPONENT        | DESCRIPTION/RATING                            | MANUFACTURER       | MODEL/PART NO.    | BASIS                  |
|---------------------|-----------------------------------------------|--------------------|-------------------|------------------------|
| Primary Fuses       | FUSE E/200E 5.5KV 12D                         | Mersen             | PC16101P663       | INT                    |
|                     | FUSE E/250E 5.5KV 12DD                        | Mersen             | PC16101P671       | INT                    |
|                     | FUSE E/300E 5.5KV 12DD                        | Mersen             | PC16101P672       | INT                    |
|                     | FUSE E/350E 5.5KV 12DD                        | Mersen             | PC16101P673       | UUT1404-1              |
|                     | FUSE E/400E 5.5KV 12DD                        | Mersen             | PC16101P674       | UUT1404-2              |
|                     |                                               |                    |                   |                        |
| Input Controller    | ASSY,INPUT CONTROLLER, 7.2kV, 360A            | Toshiba Int'l Corp | GCI6721G100SE-YRK | UUT1404-1              |
|                     | ASSY,INPUT CONTROLLER, 7.2kV, 360A            | Toshiba Int'l Corp | GCI6721G100SE     | SAME                   |
|                     | ASSY,INPUT CONTROLLER, 7.2kV, 360A            | Toshiba Int'l Corp | GCI6722G100SEYRK  | SAME                   |
|                     | ASSY,INPUT CONTROLLER, 7.2kV, 360A            | Toshiba Int'l Corp | GCI6722G100SE     | UUT1404-2              |
|                     |                                               |                    |                   |                        |
| Precharge Contactor | VACUUM CONTACTOR 7.2 kV, 400A                 | Toshiba Int'l Corp | HCV-5HA           | UUT1404-1<br>UUT1404-2 |
|                     |                                               |                    |                   |                        |
|                     |                                               |                    |                   |                        |
| Precharge Reactor   | PRE-CHARGE REACTOR,4160V,1695kVA              | Neeltran           | PC34740P001       | UUT1404-1              |
|                     | PRE-CHRG REACTR,4160V,2119kVA                 | Neeltran           | PC34740P002       | UUT1404-2              |
|                     |                                               |                    |                   |                        |
| Primary Transformer | XFMR,24 Pulse,4160V,1000HP, W/AUX, F1 SEISMIC | Hammond            | PC32741P100S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1250HP, W/AUX SEISMIC     | Hammond            | PC32741P125S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1500HP, W/AUX SEISMIC     | Hammond            | PC32741P150S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1750HP, W/AUX SEISMIC     | Hammond            | PC32741P175S      | INT                    |
|                     | XFMR,24 Pulse,4160V,2000HP, W/AUX SEISMIC     | Hammond            | PC32741P200S      | UUT1404-1              |
|                     | XFMR,24 Pulse,4160V,1000HP, F1 SEISMIC        | Hammond            | PC32740P100S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1250HP SEISMIC            | Hammond            | PC32740P125S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1500HP SEISMIC            | Hammond            | PC32740P150S      | INT                    |
|                     | XFMR,24 Pulse,4160V,1750HP SEISMIC            | Hammond            | PC32740P175S      | INT                    |
|                     | XFMR,24 Pulse,4160V,2000HP SEISMIC            | Hammond            | PC32740P200S      | INT                    |
|                     | XFMR,24 Pulse,4160V,2250HP, W/AUX SEISMIC     | Hammond            | PC32741P225S      | INT                    |
|                     | XFMR,24 Pulse,4160V,2500HP, W/AUX SEISMIC     | Hammond            | PC32741P250S      | UUT1404-2              |
|                     | XFMR,24 Pulse,4160V,2250HP SEISMIC            | Hammond            | PC32740P225S      | INT                    |
|                     | XFMR,24 Pulse,4160V,2500HP SEISMIC            | Hammond            | PC32740P250S      | INT                    |
|                     |                                               |                    |                   |                        |
| Rectifier Assembly  | ASSY,RECTIFIERS W/ 200A FUSE PC15373P201      | Toshiba Int'l Corp | GCI6721G060       | INT                    |
|                     | ASSY,RECTIFIERS W/ 250A FUSE PC15373P250      | Toshiba Int'l Corp | GCI6721G060       | UUT1404-1              |
|                     | ASSY,RECTIFIERS                               | Toshiba Int'l Corp | GCI6722G060       | UUT1404-2              |
|                     |                                               |                    |                   |                        |
| Power Module        | ASSY,POWER MODULES,2000HP,4.16kV,BF,248A      | Toshiba Int'l Corp | GCI6721G050BSE    | UUT1404-1              |
|                     | ASSY,Power Module,372A,4.16kV,HD              | Toshiba Int'l Corp | GCI6722G050A      | UUT1404-2              |
|                     |                                               |                    |                   |                        |
| Fan Assembly        | ASSY,FAN,SINGLE,3700CFM                       | Toshiba Int'l Corp | GCI6721G195-YRK   | SAME                   |

**ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS**

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**TABLE 2: SEISMICALLY CERTIFIED SUBCOMPONENTS**

| SUBCOMPONENT                      | DESCRIPTION/RATING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | MANUFACTURER       | MODEL/PART NO.   | BASIS     |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|-----------|
|                                   | ASSY,FAN,SINGLE,3700CFM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Toshiba Int'l Corp | GCI6721G195      | UUT1404-1 |
|                                   | ASSY,FAN,3700CFM,SINGLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Toshiba Int'l Corp | GCI6722G190      | SAME      |
|                                   | ASSY,FAN,3700CFM,SINGLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Toshiba Int'l Corp | GCI6722G190-YRK  | UUT1404-2 |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                  |           |
| Low Voltage<br>Component Assembly | PWB/CNN/CTR,T300MVi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Toshiba Int'l Corp | GCI6721G280I-YRK | UUT1404-1 |
|                                   | PWB/CNN/CTR,T300MVi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Toshiba Int'l Corp | GCI6721G280I     | INT       |
|                                   | PWB/CNN/CTR,YORK,2400,4.16k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Toshiba Int'l Corp | GCI6722G280I     | INT       |
|                                   | PWB/CNN/CTR,YORK,MV2,4.16k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Toshiba Int'l Corp | GCI6721G280E-YRK | INT       |
|                                   | PWB/CNN/CTR,T300MV2,FR1,4.16k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Toshiba Int'l Corp | GCI6721G280E     | INT       |
|                                   | PWB/CNN/CTR,T300MV2,FR2,4.16kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Toshiba Int'l Corp | GCI6722G280E     | INT       |
|                                   | PWB/CNN/CTR,YORK,MV2,4.16k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Toshiba Int'l Corp | GCI6722G280E-YRK | INT       |
|                                   | PWB/CNN/CTR,YORK,2400,4.16k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Toshiba Int'l Corp | GCI6722G280I-YRK | UUT1404-2 |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                  |           |
| Output Reactor                    | ACL,4160V,260/195A,0.1mH,300MV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Hitran             | PC34741P101      | UUT1404-1 |
|                                   | ACL,4160V,380A,0.10mH,T300MV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Hitran             | PC34741P102      | UUT1404-2 |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                  |           |
| York CPT                          | CPT 4160:460/115 3/2KVA 5K' YK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Hitran             | PC33260P103      | UUT1404-1 |
|                                   | CPT 4160:460/115 3/2KVA 5K' YK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Hitran             | PC33260P103      | UUT1404-2 |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                  |           |
| York CPT Fuses                    | FU E/3E 4.8KV 5.63                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mersen             | PC16109P903      | UUT1404-1 |
|                                   | FU E/3E 4.8KV 5.63                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mersen             | PC16109P903      | UUT1404-2 |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                  |           |
| Notes                             | <p>1. BASIS:</p> <ul style="list-style-type: none"><li>• UUT#: Indicates that a test specimen matching these characteristics was tested as part of this testing program.</li><li>• INT (Interpolate/Extrapolate): indicates a model that was not specifically tested, and by which seismic certification is established through evaluation of testing of other, similar models in the product line</li></ul> <p>2. Special Seismic Certification is limited to identified subcomponents when installed as part of a complete assembly of the components defined in Table 1.</p> |                    |                  |           |

## ATTACHMENT 2: TEST SPECIMEN SUMMARY

ATTACHMENT PAGE | 1 OF 1

| UUT1404-1 YORK OPTISPEED 2000HP MEDIUM VOLTAGE DRIVE                                                                         |        |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                 |                        |                        |
|------------------------------------------------------------------------------------------------------------------------------|--------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------|------------------------|
| Manufacturer:                                                                                                                |        |                | Toshiba International Corporation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                 |                        |                        |
| Identification:                                                                                                              |        |                | Model No.: MVVSD2000RK-84<br>Type Form No.: TX-024-39341-317                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 |                        |                        |
| Description:                                                                                                                 |        |                | 2000 HP, 4160 V, Frame 1 Adjustable Speed Drive<br>YORK OptiSpeed interface, monitoring devices and control software. See Attachment 1, Table 2.<br><u>Optional features present in UUT:</u><br>1. Seismic Configuration Option.<br>2. Interface, monitoring devices and control software unique to the Toshiba T300MVi brand product line.<br><u>Modifications to UUT made at Lab:</u><br>1. Plastic cable ties added around DIN rail mounted relay in Control Section.<br>2. Torque on vertical tie rods securing Primary Transformers to support beam increase from 80 ft-lb to 100 ft-lb.<br>3. Plastic wire ties around FRP isolation shields at primary fuses. |                                 |                        |                        |
| Mounting:                                                                                                                    |        |                | Rigid Base mount using (11) – 5/8" dia. hex head Gr.8 bolts w/ washers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 |                        |                        |
| Dimensions (in.)                                                                                                             |        |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Lowest Resonant Frequency (Hz.) |                        |                        |
| Width                                                                                                                        | Depth  | Height         | Weight (lb.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Side-Axis                       | Front-Axis             | Vert-Axis              |
| 122                                                                                                                          | 43     | 104            | 12,700                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3.8                             | 2.1                    | 6.2                    |
| ICC-ES AC156 Shake Table Test Parameters                                                                                     |        |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                 |                        |                        |
| S <sub>DS</sub> (G)                                                                                                          | z/h    | I <sub>p</sub> | A <sub>FLX-H</sub> (G)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | A <sub>RIG-H</sub> (G)          | A <sub>FLX-V</sub> (G) | A <sub>RIG-V</sub> (G) |
| 1.56<br>2.00                                                                                                                 | 1<br>0 | 1.5            | 2.50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.87                            | 1.68                   | 0.68                   |
| Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test. |        |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                 |                        |                        |

| UUT1404-2 YORK OPTISPEED 2500HP MEDIUM VOLTAGE DRIVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |                |                        |                                                                                      |                        |                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------|------------------------|--------------------------------------------------------------------------------------|------------------------|------------------------|
| Manufacturer: Toshiba International Corporation                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |                |                        |  |                        |                        |
| Identification: Model No.: MVVSD2500RK-84<br>Type Form No.: TX-024-39341-319                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                |                        |                                                                                      |                        |                        |
| Description: 2500 HP, 4160 V, Frame 2 Adjustable Speed Drive<br>YORK OptiSpeed interface, monitoring devices and control software. See Attachment 1, Table 2.<br><u>Optional features present in UUT:</u> <ul style="list-style-type: none"><li>Seismic Configuration Option.</li><li>Interface, monitoring devices and control software unique to the Toshiba T300MVi brand product line.</li></ul> <u>Modifications to UUT made at Lab:</u><br>Plastic cable ties added around DIN rail mounted relay in Control Section. |        |                |                        |                                                                                      |                        |                        |
| Mounting: Rigid Base mount using (16) – 5/8" dia. hex head Gr.8 bolts w/ washers                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |                |                        |                                                                                      |                        |                        |
| Dimensions (in.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |                | Weight (lb.)           | Lowest Resonant Frequency (Hz.)                                                      |                        |                        |
| Width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Depth  | Height         |                        | Side-Axis                                                                            | Front-Axis             | Vert-Axis              |
| 164                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50     | 104            |                        | 2.5                                                                                  | 9.3                    | 5.2                    |
| ICC-ES AC156 Shake Table Test Parameters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |                |                        |                                                                                      |                        |                        |
| S <sub>DS</sub> (G)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | z/h    | I <sub>p</sub> | A <sub>FLX-H</sub> (G) | A <sub>RIG-H</sub> (G)                                                               | A <sub>FLX-V</sub> (G) | A <sub>RIG-V</sub> (G) |
| 1.56<br>2.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1<br>0 | 1.5            | 2.50                   | 1.87                                                                                 | 1.68                   | 0.68                   |
| Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.                                                                                                                                                                                                                                                                                                                                                                                                |        |                |                        |                                                                                      |                        |                        |