

## Overview of Quantum Modular evaluation for Compliance to AS/NZS 61439-2

No-LECO-00-011 — Rev-E-50ka 08-07-2025

| Clause   | Clause Description                        | Tested / Assessment               | Results            |
|----------|---|-----------------------------------|--------------------|
|          |   | Ratings                           |                    |
| 10.2     | Strength of material parts                |                                   |                    |
| 10.2.2   | Resistance to corrosion                   | Test A – Indoor                   | Pass               |
| 10.2.3   | Properties of insulating material         |                                   |                    |
| 10.2.3.1 | Confirmation of thermal stability of      |                                   | Pass               |
| 40 2 2 2 | enclosures                                | Les letter contestes              | A                  |
| 10.2.3.2 | Confirmation of resistance of the         | Insulating materials              | Assessment by use  |
|          | insulating materials to abnormal heat     | retaining current carrying        | of tested material |
|          | and fire due to internal electric effects | parts in position: 960*C          | D                  |
|          |   | Other insulating materials: 650*C | Pass               |
| 10.2.4   | Resistance to UV radiation                |                                   | Assessment by use  |
|          |   |                                   | of tested material |
|          |   |                                   | Pass               |
| 10.2.5   | Lifting                                   | Base Lift                         | Pass               |
| 10.2.6   | Mechanical impact                         | ICC-ES-AC-156 - RP-1223           | Pass               |
| 10.2.7   | Marking                                   | Labelling                         | Pass               |
| 10.3     | Degree of protection                      | IP5X Test Doc                     | Pass               |
|          |   | Spectrum 8753                     |                    |
| 10.4     | Clearances and creepage distances         | Clearance min 20mm                | Pass               |
|          |   | between phases based on           |                    |
|          |   | Uimp-8kv Creepage min             |                    |
|          |   | 25mm based on 2kv                 |                    |
| 10.5     | Protection against electric shock and     |                                   |                    |
|          | integrity of protective circuits          |                                   |                    |
| 10.5.2   | Effective earth continuity between the    | TUVAU24E1TM 001                   | Pass               |
|          | exposed conductive parts of the           | 50Ka / 1 sec                      |                    |
|          | assembly and the protective circuit       |                                   |                    |
| 10.5.3   | Short-circuit withstand of the            | TUVAU24E1TM 001                   | Pass               |
|          | protective circuit                        | 50Ka / 1 sec                      |                    |
| 10.6     | Incorporation of switching devices and    | TUVAU24E1TM 001                   | Pass               |
|          | components                                | 50Ka / 1 sec                      |                    |
| 10.7     | Internal electrical circuits and          | TUVAU24E1TM 001                   | Pass               |
|          | connections                               | 50Ka / 1 sec                      |                    |
| 10.8     | Terminals for external conductors         | TUV24BGGI 001                     | Pass               |
|          |   |                                   |                    |

| 10.9        | Dielectric properties  |                                 |      |
|-------------|--|---------------------------------|------|
| 10.9.2      | Power frequency withstand voltage                                    | Ui 800v                         | Pass |
| 10.9.3      | Impulse withstand voltage  | Uimp 8kv                        | Pass |
| 10.9.4      | Testing of enclosures made of insulating material                    | TUV24BGGI 001                   | Pass |
| 10.10       | Verification of temperature rise                                     | TUV24BGGI 001                   | Pass |
| 10.10.2.3.5 | Verification of incoming circuit for normal ambient Outgoing circuit | TUV24BGGI 001                   | Pass |
| 10.11       | Short circuit withstand strength                                     | TUVAU24E1TM 001<br>50Ka / 1 sec | Pass |
| 10.12       | Electromagnetic compatibility  |                                 | Pass |
| 10.13       | Mechanical operation   | 200 operations                  | Pass |
| 8.101       | Internal separations of Assemblies                                   | 2, 2A, 3B, 3bih                 | Pass |



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