

/// LIFEGUARD®

PRODUCT STANDARDS UPDATE

AS/NZS 61439 LV SWITCHGEAR & CONTROLGEAR ASSEMBLIES



Electrical



For more information:



/// Jackson

jackson.co.nz

0800 543 348

SALES

| HIRE

| SERVICING

WHAT DOES THE UPDATED AS/NZS 61439 REALLY MEAN FOR YOU AND YOUR TEAM?

Here at Jackson Industries making LIFEGUARD® products, testing and compliance has always been the way. Under the previous Standard AS/NZS3439 (Based on IEC 439). Required testing in the form of Type Tests and Partial Type Tests of assemblies (TTA and PTTA).

The latest AS/NZS 61439 is not so new, we have been following the changes for a long time. As we do with all Standards requirements. In fact at Jackson Industries we sit on some of these electrical Standards. That's how seriously we take it.

The AS/NZS 61439 aligns more to the IEC 61439. The IEC Part 4 version has been in place since 2014. The latest AS/NZS 61439 contains many of the same elements as the previous AS/NZS 3439 including creepage and clearance, mechanical impact, short-circuit withstand requirements, temperature rise requirements, IP ratings, insulating requirements, to name a few.

IN SHORT

Lots of talk over the latest AS/NZS 61439 Standards.

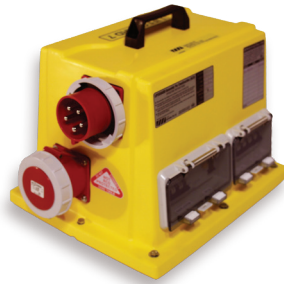
Trust us, it's not complicated for Jackson LIFEGUARD® power products.

Don't be confused by other messages stating this is all new.

**The great news is
- it is mostly the same.**



THE NEW ELEMENTS IN AS/NZS 61439 HAVE NOT REQUIRED A REDESIGN OF OUR LIFEGUARD® PRODUCT



One of the many advantages of buying our products is that they are built within the requirements. They are designed by us, made by us. They are tested and compliant.

If special changes are required, the latest AS/NZS 61439 Standard provides a clearer way to do this for both us and our customers, ensuring safety and surety for all.

SO WHAT DOES THE AS/NZS 61439 STANDARD DO?

- *Brings together the many rules and requirements applicable to low-voltage switchgear and controlgear assemblies, harmonised in one Standard.*
- *Achieves uniformity of requirements and verification for assemblies.*
- *Confirms the mandatory design requirements and is a clearer path for compliance.*

AS/NZS 61439 moves to a Design Verification (DV) process of testing, assessment (including calculation), and comparison. The path of these options depends on what element is under test. This is all managed by Jackson Industries, so the customer receives a compliant product.

A really cool thing is its flexibility. As applications and designs for our products change over time, AS/NZS 61439 allows a path for new technology. It allows a process for the end user, and us as the manufacturer, to reach an agreement on the requirements, changes or component substitution on a switchboard. And yes, we take care of the compliance DV.

OTHER CHANGES BETWEEN AS/NZS 3439 AND AS/NZS 61439

From a LIFEGUARD® Assembly for Construction Site board design perspective not a lot has changed.

Both the previous and the latest Standard require all assemblies to demonstrate that they meet minimum safety and performance elements. UV performance check requirements and EMC review have been added in the latest standard.

Temperature rise requirements have always been there. Some internal temperature rise elements have increased (to do with Busbars particularly), however many of the other elements remain the same.

There is further clarification on arc fault mitigation, this element was in AS/NZS 3439, so not really a change at all, but now allows testing to IEC TR 61461 - it is also referenced on AS/NZS 3000 and particular to boards >800A.

Need changes to an existing standard board design? Let us know what they are. We do the review and via the DV in AS/NZS 61439 either calculate, compare, or test the changes in relation to your requirements.

HOW CAN WE HELP?

No.	LIFEGUARD® Characteristics verified under AS/NZS61439.4	Clauses	LIFEGUARD® tested and compliant
1	Strength of material and parts: (10.2.x)		
	Strength to corrosion	10.2.2	✓
	Properties of insulating materials: (10.2.3.x)		
	Thermal stability	10.2.3.1	✓
	Resistance to abnormal heat and fire due to internal electrical effects	10.2.3.2	✓
	Resistance to ultra-violet (UV) Radiation	10.2.4	✓
	Lifting	10.2.5	✓
	Mechanical impact	10.2.6	✓
	Marking	10.2.7	✓
2	Degree of protection of enclosures	10.3	✓
3	Clearances	10.4	✓
4	Creepage distances	10.4	✓
5	Protection against electric shock and integrity of protection circuits: (10.5.x)		
	Effective continuity between the exposed conductive parts of the ACS and the protective circuit	10.5.2	✓
	Short-circuit withstand strength of the protective circuit	10.5.3	✓
6	Incorporation of switching devices and components	10.6	✓
7	Internal electrical circuits and connections	10.7	✓
8	Terminals for external conductors	10.8	✓
9	Dielectric properties: (10.9.x)		
	Power-frequency withstand voltage	10.9.2	✓
	Impulse withstand voltage	10.9.3	✓
10	Temperature-rise limits	10.10	✓
11	Short-circuit withstand strength	10.11	✓
12	Electromagnetic compatibility (EMC)	10.12	✓
13	Mechanical operation	10.13	✓

How do we do this?

We have been designing and building for over 40 years. Our products are tested onsite and with reputable testing laboratories. Plus, we have representation on Standards New Zealand and Standards Australia committees.

Look us up!

Jackson Industries is listed on the EESS database as a Responsible Supplier (E5354). Jackson Industries can supply a document verifying compliance to the AS/NZS 61439 Standard.

ABOUT OUR RANGE



The LIFEGUARD® range offers an extensive scope of Portable & Wall Mounted Power, Cabling and Lighting solutions where safe power is required.

Most units are fully customizable, with the support of an expert Sales team. The equipment is popular across a variety of industries, including Building & Construction, Film & TV, Military, Marine & Ports, Farming & Forestry, Industrial Mining, Ship Building, Camping & Caravans, and Transport.

Below is a selection of our Portable, Wall mounted and Lighting products. Contact our sales team to discuss your specific requirements.



LG6.6PSOA



LG20B



LG33B



LG83



LG26B



TPL®



For more information:



 **Jackson**

jackson.co.nz

0800 543 348

SALES

HIRE

SERVICING