How do I test to IEC 61010 using the Rigel 288+?

The Rigel 288+ is fitted with a dual body model for testing to IEC 60601 and AAMI. A dedicated IEC 61010 body model is not present. However, tests can be done to check the safety of the equipment by using the pass / fail limits from IEC 61010 whilst measuring through the IEC 60601 body model. The main difference between the IEC 60601 and 61010 body models is the resistance of 1KΩ (60601) compared to the 2KΩ (61010), whilst the effects of the frequency response should not provide any significant differences in measurements.

IEC 61010 states that leakage measurements are only required if the measured touch voltage is >33V (>55V SFC). The Rigel 288+ will always perform a leakage measurement despite the touch voltage, however, leakage is the ultimate pass of fail thus this approach is fail safe. Due to the 1KΩ body model, we can conclude that the µA reading correlates with the mV touch voltage value E.g. a touch current of 100µA = 100µV touch voltage.

Regarding the limits of IEC 61010, you can program a test using the 61010 limits for enclosure leakage (500µA normal, 3500µA SFC). This is the only leakage test you do.

If you require more help, please contact us at https://www.seaward.com/us/enquire/.