

Vari-Lite lights up the entertainment world

Highlights:

- Vari-Lite's lighting controls and consoles are critical to small and large entertainment venues, and downtime is not an option
- When designing the latest generation of its RigSwitch+, Vari-Lite needed a flexible electronics housing solution that would make it easy to customize
- The BC Housing from Phoenix Contact was easy to adapt, had numerous accessories available, and was available with custom printing
- Phoenix Contact provided a one-stop shop with numerous other components and personalized technical support

"I found a one-stop shop for the multiple pieces we needed for this project." – Trey Lakatos, development engineer at Vari-Lite

Customer profile:

Vari-Lite, located in Dallas, Texas, empowers lighting designers and consultants to achieve their creative visions – and create unforgettable looks that amaze – with an end-to-end portfolio of advanced, energy-efficient LED luminaires, data, architectural control, consoles, and power solutions.

Martin Palmer, the product management and marketing leader, describes Vari-Lite as "an iconic brand in the entertainment industry. We were the first to come to market with moving lights in the industry. We're known for both moving and fixed luminaires" (Figure 1).



Figure 1:
Vari-Lite pioneered moving lights in the entertainment industry.

continued →



“We create systems for lighting controls and consoles for theatrical applications or rock venues,” Trey Lakatos, a development engineer for Vari-Lite, explained. “We also make the luminaires, both moving and fixed luminaires. That’s what we’re known for.”

“We’re very entertainment-focused, so that’s the heart of our industry,” said Martin. “We range from the smallest school theater or a village hall in Europe, all the way up to the big professional shows and international sporting events. Everything we build is of high quality so that no matter what, the show will always happen.”

“It’s about making the venues better,” Trey said.

Challenge: No second chances

In show business, there are no second chances. “The show must go on,” Martin said. “We can’t wait a day to open the building. The show, the audience, and the artists are there – everyone’s ready to go. So, the power failing and the lights not working is not acceptable.”

The RigSwitch+ is one of Vari-Lite’s flagship products. While redesigning the latest generation of RigSwitch+, Vari-Lite needed to ensure the highest quality and reliability.

“RigSwitch+ is a configurable solution for controlling a variety of loads. You can wire it up in any way you want in terms of what you put on the loads,” Trey explained. “However, we have standardized packages, from four channels all the way up to 52 channels. Some are branch-fed, so they don’t include breakers in the box, and some are mains-fed, so you just put your mains directly in. You have circuit protection, and it allows an electrician to very easily install your mains, install your connections to your loads, and then go from there with any of the lighting protocols we support.”

Vari-Lite needed to find an electronic housing series that could scale to size based on the user options and number of channels needed. In addition, they needed to wire and ground all of the channels for a three-phase system but treat them as single-phase.

Martin explained, “The solution has to be reliable, and we need quality that will last. I can’t afford for a luminaire to fail in a show. I especially can’t afford for the technology powering those luminaires in a permanent installation to go out in a show.”

Solution:

Adaptable housing with accessories and value-added services

The Phoenix Contact team introduced Vari-Lite to the BC Housing, an electronic housing for building automation applications such as lighting. The modular housing is easy to adapt to different needs and comes with numerous accessories for further customization (Figure 2).

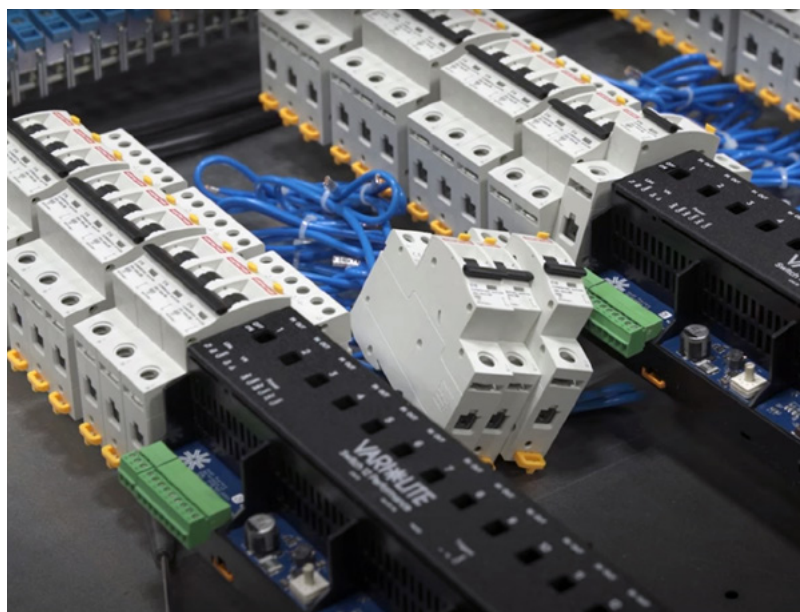


Figure 2:
The modular BC Housing is easy to adapt and has many different accessories, so Vari-Lite could customize it to meet the needs of both small and large customers.

“The BC Housing was really crucial to this design because our product manager specified a standard DIN-rail sizing that he wanted to work on,” said Trey. “He wanted to work in DIN rail spacings, and the BC Housing is conveniently spaced in 6, 9, and 12 for this product. The consistent form factor makes it very easy for us to work in our configurable solution.”

Phoenix Contact also offers milling and printing as value-added services, which saves Vari-Lite time and money.

“Previously, we always labeled the products in-house,” said Martin. “Then we found out that Phoenix Contact can print it straight out of the house for us. That improves sustainability, because now it’s not an additional part or an additional SKU. Every single SKU costs money in our system. So when it comes in, it’s all ready to go. It saves manufacturing time. It’s a real value partnership between us and a real added value to this product” (Figure 3).

continued →



Figure 3:
Vari-Lite had previously printed its own housings, but Phoenix Contact offered printing and milling as a value-add service.

He continued, “On the system side, Phoenix Contact has really worked for us. It’s been a chance for us to find some consistent form factors, some consistent connectors, and some consistent breakers and power application pieces that allow us to expand and focus on the next parts of the RigSwitch+ in a way that allow us to continue making a product that’s good form factor, good fit, and still looks the same and still feels Vari-Lite overall.

Martin concluded “Phoenix Contact, for me, has been the best partner ever on this project. I’ve heard nothing but great reports all the way through this project, not just in terms of technology, but also looking at sustainability. So, the printing of the DIN systems has made it an end-to-end product and a true value-added partner.”

Watch a video about the application here.

<https://www.youtube.com/watch?v=NEKyy6tCqEY>

Results:

Consistency counts

“I already knew that we had a connector portfolio in Phoenix Contact, but understanding that they also have DIN housing, breakers, and much more allowed me to not worry about the design as much,” Trey said. “I didn’t have to go find 10 vendors for something. Instead, I found a one-stop shop for the multiple pieces that we needed for this project.” (Figure 4).

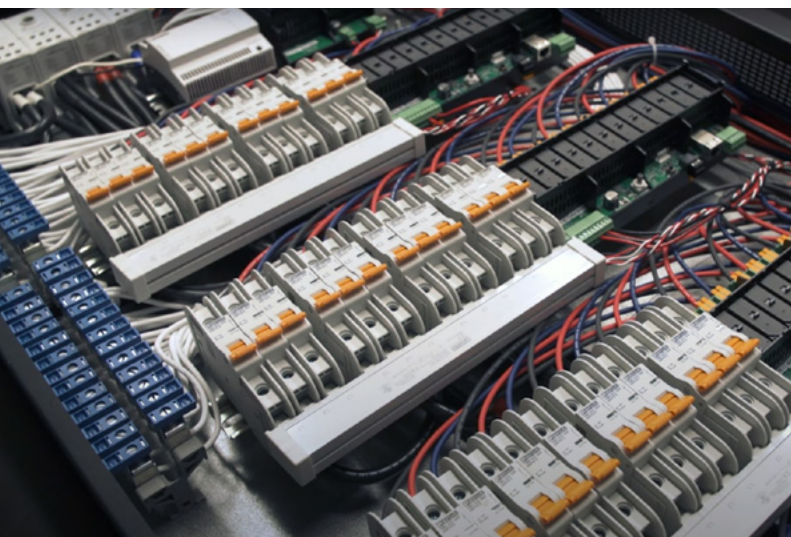


Figure 4:
By partnering with Phoenix Contact, Vari-Lite has found consistency in its form factors, connectors, circuit breakers, and more.