Original equipment manufacturers (OEMs) need to deliver solutions that are robust and reliable over long periods to go beyond customer expectations—offering speed, efficiency and intelligence like never before. At the same time, advancing productivity and profitability is equally essential.

The integration of Eaton’s Power Defense™ circuit breakers with motor protection technology and Power Xpert® Release (PXR) electronic trip units provides machine builders with a foundation for success. By combining IoT connectivity with embedded communications and metering functionalities, fewer components are needed for each machine, which translates into lower cost and a smaller footprint.

Here are 5 additional ways Eaton’s intelligent circuit protection systems can help OEMs build better machines:

1. **Value-added equipment health**
   The granular level of monitored performance data provided through Eaton’s intelligent circuit protection enables end-users to shift from reactive troubleshooting when an expensive failure occurs, to proactive prevention. The integrated PXR electronic trip units are equipped with the latest microprocessor technology including advanced algorithms that provide notifications when the power distribution system needs to be maintained or replaced.

2. **Reduced production costs**
   Power Defense circuit breakers with PXR electronic trip units feature built-in metering, allowing you to use fewer components and a simplified design. For example, Eaton’s intelligent circuit protection technology is driving cost savings for an OEM producing hydraulic power units—resulting in savings of approximately $4,000 on each unit.

3. **Improved machine protection**
   Power Defense technology is engineered with Eaton’s Arcflash Reduction Maintenance System™ to help protect workers by reducing dangerous and potential arc flash incident energy levels, and enabling workers to activate this system from a safe distance without altering critical protection settings of the breaker. Additional Zone Selective Interlock (ZSI) technology protects equipment by intelligently selecting faster trip times in coordinated systems, an advantage that can keep operators safe and productive.

4. **Enhanced uptime**
   Resetting legacy breakers after trip events can be extremely challenging. To address this challenge, Eaton Power Defense circuit breakers include high load alarms. This allows users to remotely open a contactor, allowing the load to clear without tripping the breaker. This functionality significantly improves equipment uptime while offering improvements in operator safety.

5. **Opportunities for recurring revenue**
   Eaton’s intelligent circuit protection solutions create the potential for enhanced profitability. With built-in communications, OEMs can seamlessly connect equipment to the cloud for remote monitoring. This allows machine builders to offer proactive maintenance services when called for by the equipment.

Regardless of your application or industry, Eaton delivers the innovative solutions needed to help bridge the productivity gap. With Eaton’s latest circuit protection innovations, you can build with confidence to not only increase reliability and uptime—but also get to market faster, at lower cost and with fewer components.

To learn more, visit Eaton.com/PowerDefense