ZTR™ Intelligent Equipment Management Solutions

KickStart

Locomotive batteries can be expensive to replace and the cost of a failed start can be considerable. KickStart™ uses supercapacitor technology to bolster locomotive batteries during the engine start, reducing battery strain. That means less energy drain from batteries, longer battery life, less time to recharge batteries, faster cranking speed and outstanding overall locomotive reliability.

Benefits

Extended Locomotive Battery Life

Batteries are costly to install and replace, but KickStart reduces battery drain during start to improve life by up to 50%.

Increased Locomotive Availability

KickStart ensures that your locomotive performs when it is most critical by significantly enhancing starting reliability in all weather conditions.

Charge Maintenance

If the battery drains down, Kickstart will maintain a charge and be ready to assist the starting of your locomotive even after extended shut-down intervals.

Reliable Cold Weather Performance

KickStart supercapacitor technology is not affected by cold weather extremes.

Minimized Battery Voltage Drop

KickStart augments the power required during engine start, reducing the drop in battery voltage. Electronics stay on and the strain on the batteries is significantly reduced.

Easy Installation & Zero Maintenance

The light and compact design provides for safer installation and allows KickStart to be installed in a variety of locations, with no regular maintenance required after installation.

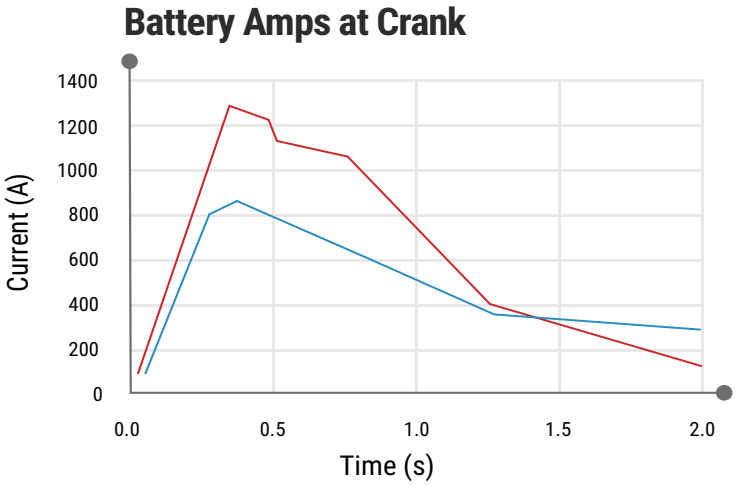
Diagnostic Interface

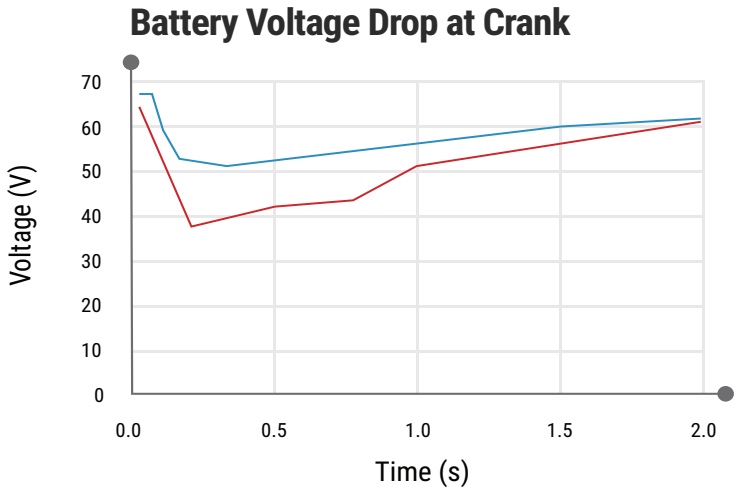
Integrated monitoring, fault notifications and diagnostics eliminate the need to install proprietary software for setup and commissioning operations.

Reduced Battery Charge Time

KickStart reduces battery drain which can mean less time to recharge.

Reduce starting issues, **improve** starting **reliability** and increase **locomotive availability** today with KickStart™





without KickStart — with KickStart

The graphs above show typical results obtained during testing.

Kickstart supplies **outstanding** overall locomotive **reliability.**

KickStart reduced battery amperage required by up to **35%**, while also reducing the drop in battery voltage by up to **38%.** The current through the starting motors was consistent in both tests, as KickStart provided the additional power required.