ETL

SYSTEM FUNCTIONALITY

Series 45 PCLS pump with electronic torque limiting control
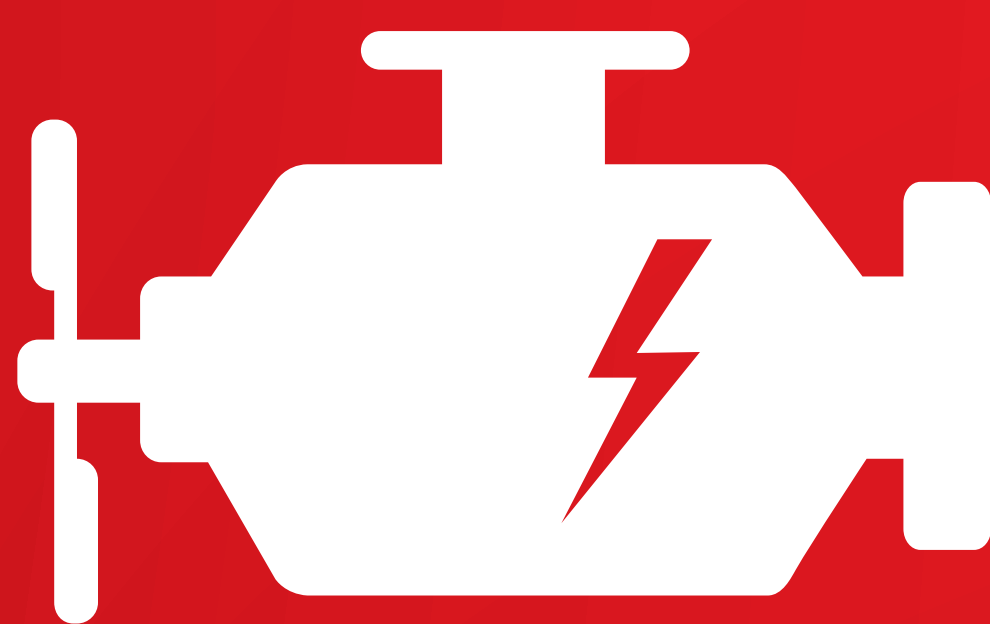
Power management solution to maximize machine performance

The pump's response is regulated by a standard PCLS control with integrated PRV. If electrical power is lost, the pump automatically defaults to normal PCLS functionality.
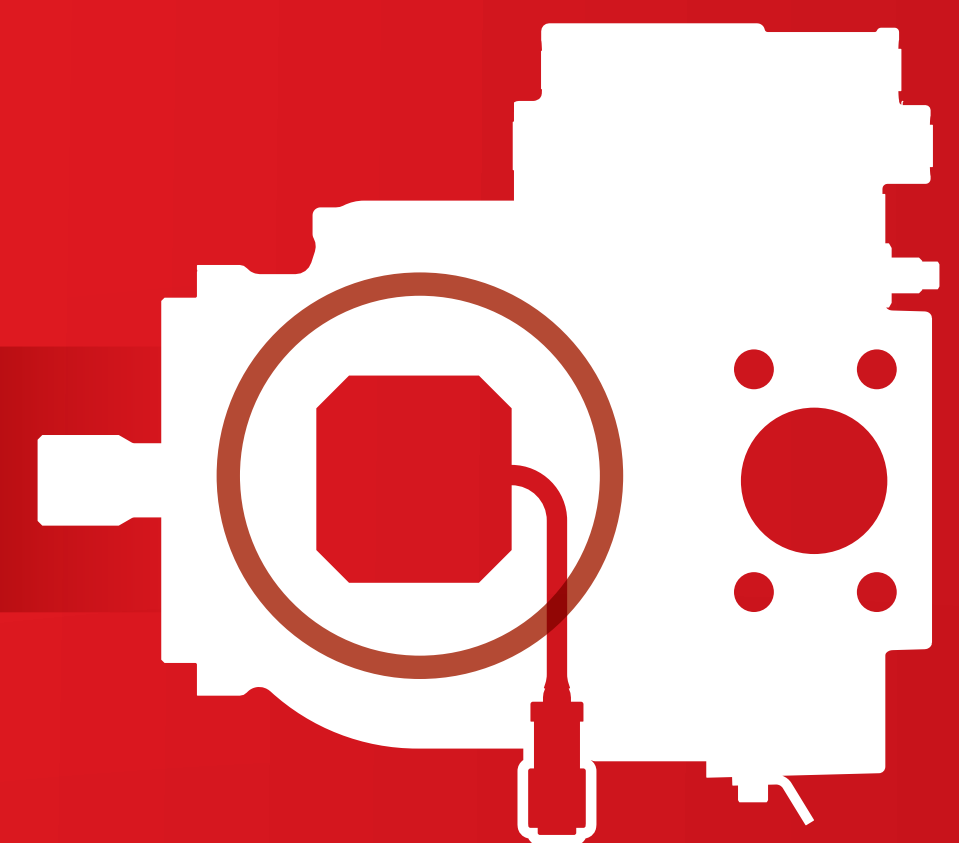
PLUS+1 GUIDE software adjusts the pump's proportional relief valve (PRV) setting for each respective displacement at a given engine speed. GUIDE software blocks are available — allowing for easy integration into existing GUIDE software applications.

Engine speed signal sent to PLUS+1® microcontroller. Plug and perform technology allows the CanBus signal to be used for engine speed monitoring.

Your engine torque vs. speed curve is programmed into a PLUS+1 microcontroller. Pre-keyed MC-12 hardware is also available and software can be adopted for your proprietary control systems.

Pump displacement information is continuously fed to the PLUS+1 microcontroller via the angle sensor — allowing for proactive torque limiting protection.

Simple integration means immediate value

- **Increase productivity up to 22%** over alternative torque controls
- **Move up to 34% more material** with the same amount of fuel
- **Increase fuel efficiency by 16%** while achieving the same or better productivity

To learn more about Series 45 ETL technology, contact your Danfoss representative or visit **powersolutions.danfoss.com**