

innovations

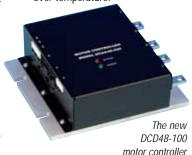
New motor controller extends battery life and 'gets you home'

Performance Controls has introduced the DCD48-100 four-quadrant digital motor controller for machines that employ series wound, or permanent magnet brush motors and offers flexible motor control for electric forklift trucks, electric carts and aerial lifts as well as automation systems and robotics.

The units digital tuning allows performance customisation and the use of the same drive controller for multiple applications. It also offers:

- Optimal power efficiency, resulting in longer run time per battery charge - as a result of employing high-quality MOSFET power devices.
- More efficient use of supply voltage for less heating and losses in the motor - due to the unit's proprietary high frequency pulse-width-modulated modulation technique.
- A 'get-me-home' feature that allows continued operation at reduced capacity and a controlled shutdown in the event that the unit approaches cut out temperatures.
- Superior fault protection helps protect the controller and motor circuits.
- Separate forward/reverse speed limits and smooth, programmable acceleration and deceleration as a result of internal closed-loop speed and torque control - eliminating the need for external controllers.

- Electrical isolation eliminates the need for external isolation components.
- Supply voltage can run as high as 75Vdc while charging the battery as a result of using high voltage components - thereby eliminating the need to use relays or other components to disconnect the battery.
- Inherent motor and controller protection circuitry includes peak current, over RMS current, and over temperature.



New pump and motor from Eaton

Eaton Corporation has introduced a new high-efficiency inline axial piston pump and motor with high-speed/high-flow capabilities, The Series 760 range is targeted at mobile equipment applications, have a working pressure of 430 bar and are available with displacements of 130cc/rev at 3,200 rpm or 160cc/rev at 2950 rpm operating speed.

Standard features of the new pumps, which are said to be quieter and more efficient, include a high displacement integral charge pump and same-side porting. Bolt-on valves and rear ports are optional. The motor features a standard integral shuttle valve design with optional bolt-on valve configurations for same side or rear ports.

enquiries



The new Series 760 axial piston pump from Eaton

New Telehandler/ crane controller

Eaton has added two new, high-performance controllers to its SFX electro-hydraulic controller range. The new SFX 1000 and SFX 2000 controllers offer higher operating speeds and meet Safety Integrity Level (SIL) two and three requirements of the off-highway industry.

"These new controllers are designed specifically for applications where control loop times are critical," says Eaton product manager Christophe Natter. "In addition, both the SFX 1000 and SFX 2000 controllers have an internal Freescale HC 908 'watchdog CPU' and monitoring software that enables them to comply with the IEC 61508 safety standard. When used as stand-alone controllers they meet SIL 2 requirements for off-highway vehicle applications."



The new Eaton SFX200o controller

"The SFX 2000 has an additional TTP (time triggered protocol) controller that enables deterministic network bus communications. With this capability, a customer can network two SFX 2000 controllers together in an electro-hydraulic application and achieve SIL 3 certification. SIL 3 is important because new technologies that have a higher degree of risk, like steer-by-wire, will need to achieve SIL 3 compliance."

Retractable barriers for cordoning-off

Barrier system specialist Tensator is targeting the industrial market with a belt type retractable barrier system. Up until now the company has focused on queue management applications such as for airport check in lines. However with the HSE reporting that the number of injuries resulting from poor cordoning off it is pitching heavier versions of its well known range for use in industrial plants or internal construction areas.

Chris Wilson, Tensator's business development manager for the Health & Safety sector said: "We have had a noticeable increase in enquiries from sectors such as warehousing, logistics and distribution, and transport. There are a number of easy, cost-effective solutions that can be implemented to help prevent accidents in the workplace. Retractable belt barriers and wall-mounted units can quickly cordon off and increase visibility of wet, dangerous and non-access areas during maintenance work."



Retractable belt type barriers might be a more efficient way of cordoning-off areas where cranes or lifts are at work?

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