

ECPS4-LT (Electric Cryo Pump System Light)

The ECPS4-LT Electric Pump System is the consistent improvement and simplification of the previous systems for direct-drive electrical centrifugal pumps for cryo applications. The frequency converter system supports variable speed-drive to provide the pump pressure required for a specific medium.



The system is designed for 37kW output and makes full use of the 63 Ampere 3-phase a.c. technology available at the site of installation. The main control cabinet and the operator box are made of high-grade stainless steel and provide effective protection against mechanical damage and the ingress of moisture.

Unlike many systems in the market, the main control cabinet with the frequency converter of this system is enclosed completely. Besides, the cooling does not depend on any circulation with outside air, which avoids damage due to the entry of moisture.

The operator box is designed primarily for intuitive operation. All status and error messages as well as the information about the capacity utilization of the system are displayed on a color GUI; the service is greatly simplified by an integrated error memory.

To protect the cryo pump and the gasket, the system is serially equipped with cold mode monitoring.

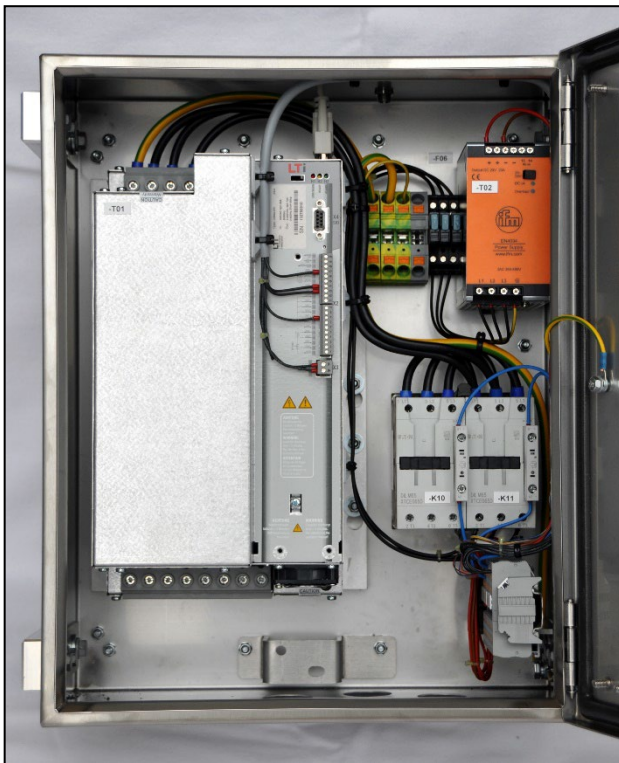
In addition to the basic version (power supplied from grid) the system can operate with an additional generator from the traction vehicle. The power source is selected directly at the operator box before the pump is started. Another available option is presence monitoring (man-down button); the operator is prompted regularly to perform an operation. This can be by pressing a button next to the operator box or, additionally, from an optional cable-connected

handheld control box. In the latter case, the operator can carry the box, e.g., when he walks to the customer's tank.

Technical specifications:

Main control cabinet

- Frequency converter with 37kW output (72 Ampere), 400-480V AC, 50-60Hz supply, integrated suppression, CAN interface
- Compact, high-grade stainless-steel control cabinet measuring 500x400x320mm (HxWxD), IP66 protection
- Powerful cooling system by ColdPlate with external ventilation
- PTC connection for motor overheat protection
- Motor connection for screened supply cable with EMC compliant grounding
- Internal voltage supply of control and volume meter by 24V DC
- External fan for heat dissipation at the heat sink, suitable for mobile applications
- Additional option: second power feed can be installed at the control cabinet



Operator box

- Powerful mobile control unit in connection with a color display for mobile applications, 320x240 pixels, IP67 protection, CAN interface, integrated error memory
- Compact control cabinet measuring 300x300x150mm (HxWxD), IP66 protection
- Integrated cold mode monitoring for connection of a thermocouple (monitors the cryo pump temperature)
- Intuitive menu-prompted operation
- Optional cable-connected man-down function available
- Optional operation from diesel engine/p.t.o. at operator box (remote start/stop and engagement/disengagement of the traction vehicle's p.t.o.) in combination with generator power feeding



Optional: Cable-connected man-down button



Optional: wireless RC-man-down button



If you need more information, please contact us.

Wehn Fahrzeugtechnik GmbH