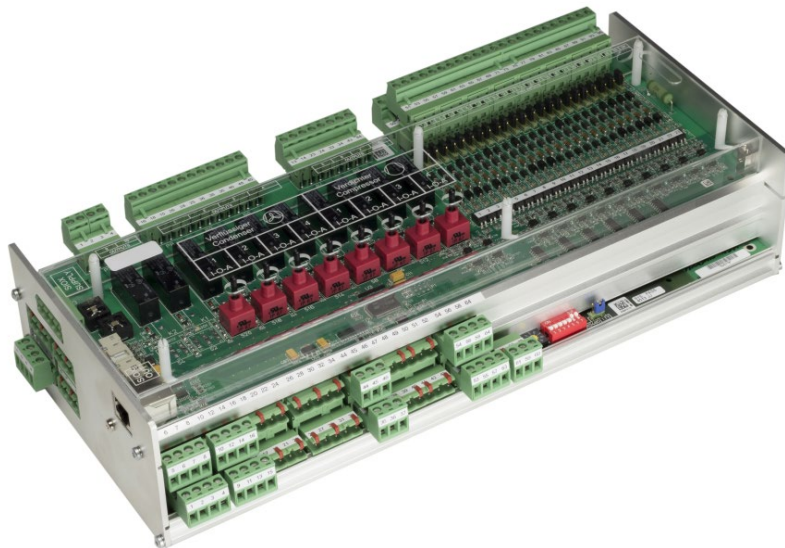


Eckelmann

E*LDS FS 3010 Pack Controller



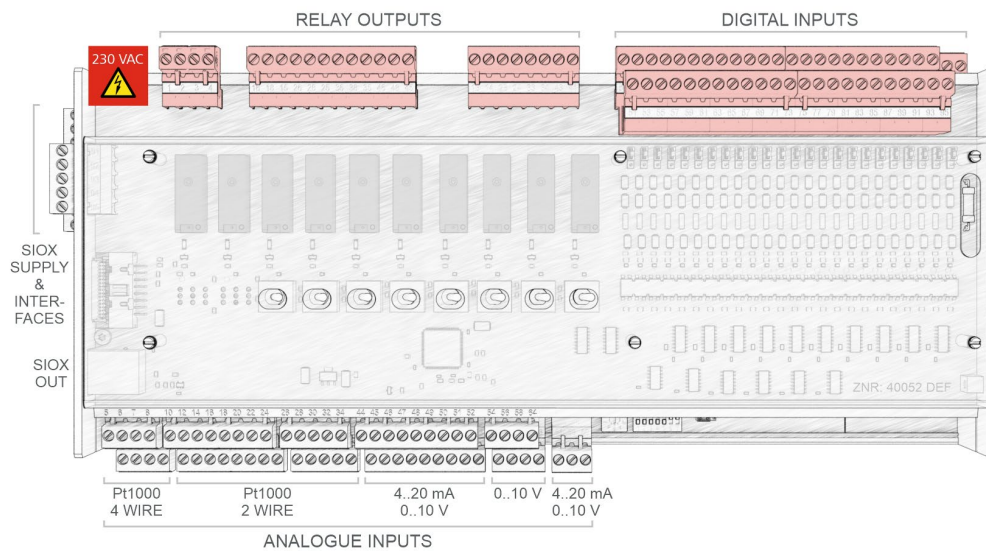
Special functions and features

- For liquid chiller refrigeration systems
- Basic design for 4 compressors and 4 condenser fans, with SIOX extension module extendable to 6 compressors / 8 compressor stages and 8 condenser fans
- Control of 2 pumps in one brine loop and 2 pumps in one coolant loop
- Manual switch for individual control of separate stages (emergency operation / commissioning)
- Condenser pressure control
- Integration of room and outside temperature and ambient humidity into control action
- Various operation and display capabilities on system centre, service centre by means of Virtus Control Desk (browser-based service and integral part of the Virtus System Centre) or service notebook
- Extensive wiring options
- Extensive monitoring functions
- Recording of starts, run times and activity ratios
- Heat recovery mode
- Internal 230 V power supply

Order numbers

- LIVS301014 FS 3010 Pack Controller

Connection diagram FS 3010



Specifications

Electrical connection

- Operating Power: 230 V AC, 200 - 265 V AC / 50 - 60 Hz / 24 VA

Interfaces

- Outputs
 - Relay: 6 N.O. / 4 changeover: 230 V AC / 6(3) A floating for compressors, enabling, fans, pumps
 - Analog: 4 x 0..10 V* for fan speed control
- Inputs
 - Digital: 23 x 230 V AC floating for system operating status recording
 - Analog: 13 + 2 x temperature sensors (type: Pt1000) for outside, room, cylinder head and brine temperatures
 - 6 x 4..20 mA* for pressure transducers and humidity sensor
 - 1 x 0..10 V*
- Field bus: CAN bus / floating
- Data: Serial RS232 / RS485 for download and external systems such as building control, interface for SIOX extension module, TTY inverted
- Other: Power supply for SIOX extension module
- Archive memory: Compressor run times / impulses / activities (other refrigeration data by system centre)
- Real-time clock: Power reserve (lithium cell)
- Monitoring function: Watchdog

General data

- Dimensions: W 338 x H 160 x D 84 mm
- Temperature range
 - Transport: -20 °C .. +80 °C
 - Operation: 0 °C .. +55 °C
- Relative humidity
 - Transport: 8 % .. 80 %
 - Operation: 20 % .. 80 %
- Protection: IP20
- Standards: Complying with EU Directives
 - 2004/108/EEC (EMC-Directive)
 - 2006/95/EEC (Low Voltage Directive)
 - 2002/95/EEC (RoHS)

* Standard configuration