#### **Products**

| Product number | Description  |
|----------------|--|
| 1772-2100164   | SPIDER Universal ON/OFF controller with 2G modem.                          |
| 1772-2104164   | SPIDER Universal ON/OFF controller with 4G modem.                          |
| 1772-2103824   | SPIDER - IO-Modul.<br>Extended I/O modul.                                  |
| 1772-2101164   | Display 2.4 "" OLED incl. joystick for the SPIDER Controller               |
| 1772-2102164   | Serial interface for the SPIDER external HMI display. Incl. 1.5m cable set |
| ACOWA-EAGLE-7  | HMI 7"" Touch Color Display  |
| DR-15-24       | Power Supply, 230V AC / 24V DC.  |
| EM340DIN       | CG EM340 400V AC   |



w/MODBUS.









**Local Supplier:** 

# Spider Quickguide



### **About Spider**

## Installation and specifications

#### **Functions**

SPIDER is a compact unit on a DIN rail. As standard, SPIDER is delivered with a GSM/GPRS modem and without a display. Modules are available to adapt the SPIDER to suite specific applications.

SPIDER is developed and produced in Denmark. The hardware and software design is based upon many years of experience within communication products. SPIDER complies with all specifications regarding placement of electronic components in harsh environments.

SPIDER is a universal controller with standard functions for:

- Pump stations
- Data logger
- Alarm handling
- Ground water
- Management

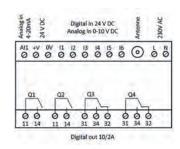


## **Applications**

- The SPIDER is a universal pump controller, with multiple applications. The SPIDER controls several pumps with alternating operation, with only one float switch connected. On the same float switch it has the option of high level alarm, or a defect pump function.
- The SPIDER can also be connected to a standard pressure transmitter or ultrasound level measurer with optional measuring range. Upon the connection of a pressure transmitter, Spider can perform a valid Pump Flow measurement like never before seen. Based on this functionality, the necessity of pump service can be predicted.

For installation of the SPIDER controller, the following specifications may be required.

NOTE! SPIDER controller is not EX-rated and therefore cannot be used for installation in EX areas.



| Dimensions   | $L = 87 \text{mm} \times H = 90 \text{mm} \times M = 62 \text{mm}$             |
|--|--|
| Operation tempature  | -20°C til +60°C  |
| Weight   | 250g   |
| Cable connection   | 0.5 – 2,5 mm2  |
| Enclosure class  | IP20   |
| Number of analog input   | 1. (4-20mA, impedanca approx. $100\Omega$ )                                    |
| Electrically isolated  | No   |
| Number of digital input  | 6. (Of which 2 can be changed to 0-10V DC, impedance approx. 20Ω)              |
|  |  |
| Electrically isolated  | No   |
| Electrically isolated  Number of digital output  | No<br>4. (max current 10/2A)   |
|  |  |
| Number of digital output   | 4. (max current 10/2A)   |
| Number of digital output<br>Electrically isolated  | 4. (max current 10/2A) Yes   |
| Number of digital output Electrically isolated Relay type  | 4. (max current 10/2A) Yes Relay outputs                                       |
| Number of digital output Electrically isolated Relay type Signal cable length                          | 4. (max current 10/2A) Yes Relay outputs Max. 100m                             |
| Number of digital output Electrically isolated Relay type Signal cable length Voltage supply           | 4. (max current 10/2A) Yes Relay outputs Max. 100m 230V AC +10% / -20%         |
| Number of digital output Electrically isolated Relay type Signal cable length Voltage supply Frequency | 4. (max current 10/2A) Yes Relay outputs Max. 100m 230V AC +10% / -20% 50/60Hz |

- Up to 4 pump controls with empty / fill function and internal pump alternation.
- Multiprotocol, Modbus RTU/TCP & COMLI.
   SPIDER auto-detects the protocol used by the SCADA system.
- Click connection for a joystick-equipped graphic 2,4" OLED display directly onto SPIDER.
- Possibility to connect a 7" color touch-sensitive display via a serial HMI interface.
- Validated flow calculation where the pump's exact capacity is calculated.
- Status words function that can take a failed pump out of operation.
- Emergency control function via a float switch when a pressure transmitter fails.
- Indication of required pump service where SPIDER informs that a pump has reduced capacity.
- Built-in power bank that maintains control during power failures and sends an alarm to SCADA.
- Daily running of pumps so they do not seize after long idle periods.
- Daily depth pumping to avoid top sediment layer.
- Choice of various start levels to prevent sediment accumulation at liquid entrance point.
- Configuration of SPIDER via ACOWA ZOO software, both locally (Micro USB cable) or via server setup.

