

Upgrade software VASCO 2013 (LCD XXX.30)

From January 2013 will be introduced in VASCO 209,214,406,409,414,418,425,430 a new software release.

The main changes are:

1) 2 sensors (4-20 mA) can be connected to analog inputs AN1 and AN2.

If connected, sensor 2 can monitor pressure value on pump suction side (cavitation, no water...) and VASCO gives an alarm if this value goes below *"Min alarm value"*.

2) Function of sensor 1 and sensor 2 can be set in the advanced parameter

"function AN1, AN2" to be:

- independent: Only sensor 1 is used for PI regulation. Sensor 2 will take the place of sensor 1 only if it fails. Sensor 2 can be used to monitor suction side pressure.
- Selectable: By using digital input IN3.
- higher value. Sensor with higher readen value will be considered in constant value regulation.
- lower value. Sensor with lower readen value will be considered in constant value regulation.
- difference 1 -2. To realize differential constant pressure.

3) Extension of constant value regulation to many other physical dimensions and units:

- a. Pressure (bar, psi, atm)
- b. Flow (m³ / h, l/min, USgpm)
- c. Temperature (°C, °F, °K)

- d. Level (m, cm, in, ft)
- e. %

In this way “constant pressure” or “constant flow” or “constant temperature” modes will turn into “constant value mode” while user will be able to choose proper measure unit.

In general pressure or flow or temperature have been substitute by the word “value”. So *Pressure set* has become “*set value*”.

Previous parameters *delta start pressure*, *f min Q=0*, *Ramp Q=0* had become *delta control*, *frequency control*, *ramp control*.

Frequency control means the frequency below that VASCO tries to stop the pump following ramp control until the measured value stays above (*set value – delta control*). If during ramp control measured value drops down (*set value – delta control*), VASCO starts again the pump.

- 4) *Delta start* parameter is now referred from pump stopping condition.
- 5) Set value for sensor 1 can be regulated using analog input AN3 (4-20 mA or 0-10 V).
- 6) When using *function AN1, AN2 as “Selectable”* , Set value for sensor 2 can be regulated using analog input AN4 (4-20 mA or 0-10 V).
- 7) Possibility in COMBO mode to choose which devices have to be included in the alternance and which not.
- 8) Alternance will be made also if the group is not fully stopped.
- 9) Possibility to remotely program all slaves in the group by master.
- 10) A new parameter (*Restarts delay*) make it possible to choose restart delay after a stop due to dry run alarm.
- 11) A time settable *Periodic autorun* makes pump starting after a certain period of inactivity.

- 12) In the diagnosis menu a new screen let the user analyze *frequencies/hours statistics* thus explaining which percentages of motor hours are made at different frequencies.

All manuals in different languages will be updated accordingly.