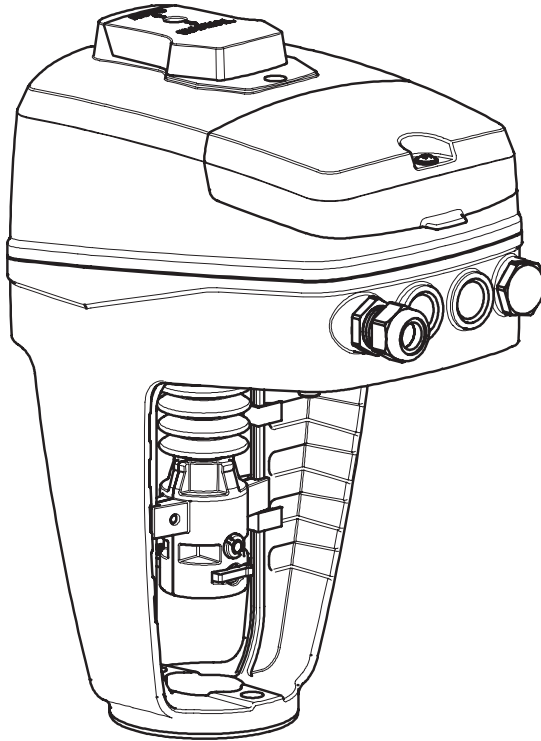


TA-Slider 750/1250 Modbus TCP Protocol Implementation



General information

Date: 15/09/2017
Product Name: TA-Slider 750 Plus Modbus TCP,
TA-Slider 1250 Plus Modbus TCP
Product Model Number: 322226-X421X, 322227-X421X
Product Description: Digitally configurable proportional push-pull actuator – 750 N,
Digitally configurable proportional push-pull actuator – 1250 N
Firmware Revision (Modbus TCP): 1.0.2; 1.1.0
Address: 1* to 247
IP addressing: DHCP by default, settable with HyTune app via the TA-Dongle
TCP port: 502*

*) *Default value*

Modbus holding registers

| Register | Address | Size (Word) | Access | Value range | Description |
|-------------------|---------|-------------|--------|-------------|---|
| InPos | 0 | 1 | R/W | [0-10000] | Input position |
| Relay1 | 1 | 1 | R/W | [0-1] | Activate/Deactivate relay 1, need relay function set to Bus control (see App) |
| Relay2 | 2 | 1 | R/W | [0-1] | Activate/Deactivate relay 2, need relay function set to Bus control (see App) |
| ForceCalib | 3 | 1 | R/W | [0-1] | Request forced calibration |
| BusBinaryInput | 4 | 1 | R/W | [0-1] | Bus binary input, use to change stroke limitation, need App configuration |
| FlowUnit | 5 | 1 | R/W | [0-1] | Flow unit (0 = l/h, 1 = USGPM)** |
| Flow | 8 | 2 | R | Float | Flow (l/h or USGPM, depending on FlowUnit)** |
| MBSN | 10 | 2 | R | [0-2^32] | S/N of actuator |
| CurrentPos | 12 | 1 | R | [0-10000] | Actual actuator position |
| CalibStroke | 13 | 1 | R | [0-25000] | Measured stroke in μm |
| MotorStatus | 14 | 1 | R | [0-6] | Motor status (0 = Stop, 1 = Retract, 2 = Extend, 3 = Calibration, 4 = Manual-override, 5 = Clogging, 6 = Error) |
| CurrentTime | 15 | 2 | R | [0-2^32] | Number of seconds elapsed since last restart |
| Motor_OnTime | 17 | 2 | R | [0-2^32] | Total of seconds of running motor |
| Actuator_OnTime | 19 | 2 | R | [0-2^32] | Total of seconds of running actuator |
| Actuator_Distance | 21 | 2 | R | [0-2^32] | Distance traveled by the actuator spindle |
| BinaryInput | 23 | 1 | R | [0-1] | Status of binary input |
| Relay1 | 24 | 1 | R | [0-1] | Status of relay 1* |
| Relay2 | 25 | 1 | R | [0-1] | Status of relay 2* |
| PowerType | 26 | 1 | R | [0-3] | Power type (0 = None, 1 = AC/DC low voltage, 2 = AC high voltage, 3 = USB) |
| Characteristic | 27 | 1 | R | [0-2] | Characteristic (0 = Linear, 1 = EQM, 2 = AntiEQM) |

*) *Only with relay option.*

***) *Available from firmware version 1.1.0 (Main board: 4.0.0)*

Modbus holding registers – continuation

| Register | Address | Size (Word) | Access | Value range | Description |
|--------------|---------|-------------|--------|-------------|--|
| Speed | 28 | 1 | R | [3-16] | Speed in s/mm |
| SignalSource | 29 | 1 | R | [0-5] | Signal source (1 = Volt, 2 = Current, 3 = 3pts, 4 = On-Off, 5 = BusCom) |
| ValveName | 30 | 13 | R | String | Valve name (Set by App, free text) |
| ObjectName | 43 | 13 | R | String | Object Name(Set by App, free text) |
| Localisation | 56 | 13 | R | String | Localisation (Set by App, free text) |
| CurErr | 74 | 2 | R | | Actual error status (None = 0x00, PowerFailure = 0x01, Clogging = 0x02, StrokeDetectionFailure = 0x04, CyclicTime = 0x08, SignalOutOfRange = 0x10, OutputLineBreak = 0x20, InputLineBreak = 0x40, ResetToFactoryDefault = 0x80, SoftwareDBAccess = 0x2000, SoftwareError = 0x4000, MotorControllerError = 0x8000, ClearError = 0x80000000) |
| Errors[10] | 76 | 2 | R | [0-2^32] | Time in seconds (see current Time) reset to 0 when actuator restarts |
| | 78 | 2 | R | | Error, see actual error description above, cleared when Clear error flag is set |
| | 80 | 2 | R | [0-2^32] | Value (if exist data for error) |
| | ... | 48 | R | | Keeps up to 10 errors |
| | 130 | 2 | R | [0-2^32] | Time in seconds (see current Time) reset to 0 when actuator restarts |
| | 132 | 2 | R | | Error, see actual error description above, cleared when Clear error flag is set |
| | 134 | 2 | R | [0-2^32] | Value (if exist data for error) |

We reserve the right to introduce technical alterations without prior notice.