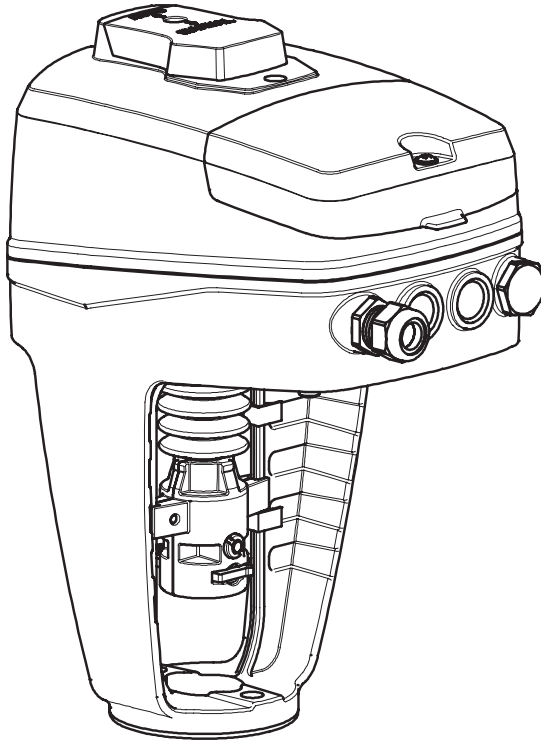


# TA-Slider 750/1250 Modbus RTU Protocol Implementation



## General information

Date: 26/06/2017  
 Product Name: TA-Slider 750 Plus Modbus RTU,  
 TA-Slider 1250 Plus Modbus RTU  
 Product Model Number: 322226-X221X, 322227-X221X  
 Product Description: Digitally configurable proportional push-pull actuator – 750 N,  
 Digitally configurable proportional push-pull actuator – 1250 N  
 Firmware Revision (Modbus RTU): 1.0.1; 2.0.2  
 Address: 1\* to 247  
 Baud rates: AutoDetect, 1200, 2400, 4800, 9600\*,  
 19200, 38400, 56200, 76800, 115200  
 Parity: Odd, Even\*, None  
 Databits: 8  
 Stopbit: 1

\*) *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 2.0.2 (Main board: 4.0.0)*

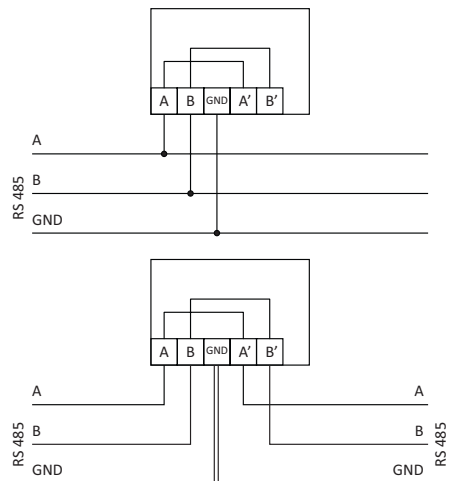
## Modbus holding registers – continuation

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)

## RS-485 termination resistance

The jumper placed just behind the wire connector on the Communication board must be removed for activating the 120 Ohm RS-485 termination resistance.

## Wiring diagram



Note: A, B, A', B' and GND terminals are isolated from all other terminals.

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