

TA-Slider actuator by **IMI TA**

Optimal control and flexibility in buildings



Breakthrough
engineering for
a better world



I want reliable and adaptable control solutions

Perfect for INSTALLERS & CONTRACTORS:

- Save costs and avoid delays with up to 50% faster commissioning in comparison with conventional actuators
- Digitally set up actuator configurations – even without BUS communication
- On-site adaptability to real system conditions and mounting in space-restricted areas

I need connectivity and energy efficiency

Perfect for DESIGNERS:

- Reduce design complexity thanks to fewer and more versatile product variants
- Full configuration flexibility to remove worries of post-installation design changes
- Flexible installation options and longer lasting performance

TA-Slider 160 & 500



→ Find out more
climatecontrol.imiplc.com

For valves requiring adjusting force up to 160N or 500N



Color LED indicators
Violet for error-detection and Red-Blue for easy recognition of heating / cooling mode in changeover systems

Universal connectivity M30x1,5
Small terminal unit standard: compatible with all IMI TA valves



BUS versions available:



- Electronic fail-safe function available
- Reduction in commissioning time
- Efficient digital configuration with smartphone (via TA-Dongle and HyTune app) or through the BMS
- Installation flexibility and high longevity
- 10 times more setting parameters for flexible installation options
- Fast fault detection with tracking of operation statistics and last 10 errors
- Versions available with halogen free cable

TA-Slider 750 & 1600

For valves requiring adjusting force up to 750N or 1600N

Red-Green LED indicator for easy recognition of operating status

Manual override in just 5 turns for easier maintenance



BUS versions available:

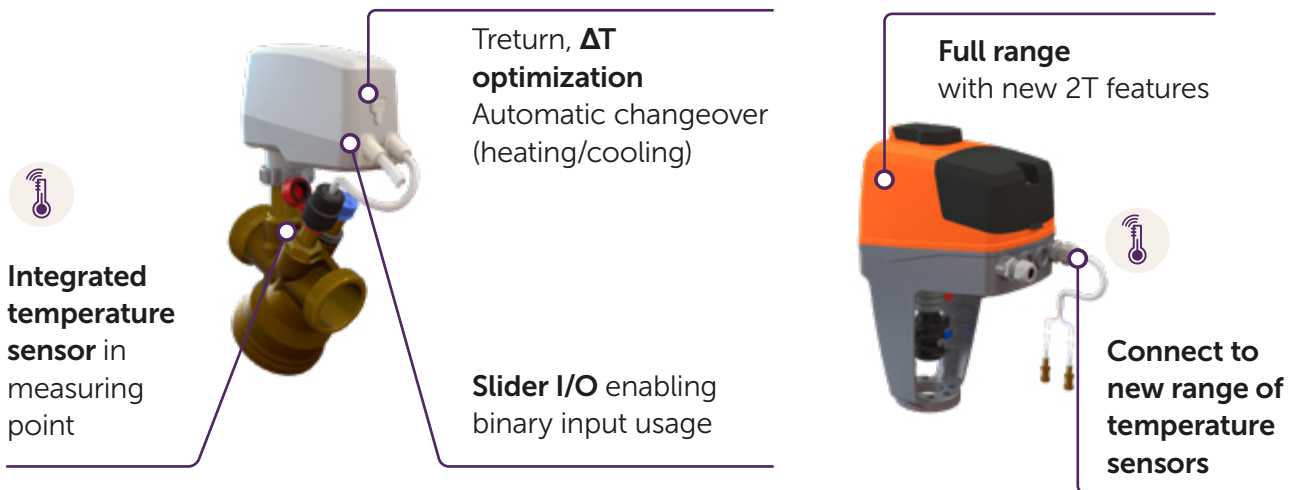


T and 2T feature

Combining advanced functionality with real-time temperature monitoring

The TA-Slider with T or 2T feature can seamlessly integrate with temperature sensors, effectively limiting return temperatures to address Low Delta T Syndrome and optimising energy consumption.

Furthermore, it independently manages changeover based on pipe temperature, reducing commissioning time.



Your benefits

- ✓ Easy retrofitting and building upgrade
- ✓ Improve energy efficiency and comply with regulations thanks to ΔT control
- ✓ Ease of commissioning and installation

Temperature Sensors

Insert	Pocket	Surface
		
<ul style="list-style-type: none"> • Ideal for retrofit • Accurate and fast response time • No piping work • Available for valves from DN10-400 	<ul style="list-style-type: none"> • Reliable, well-established market solution • Available for piping from DN10-DN300 	<ul style="list-style-type: none"> • Ideal for retrofit • No piping work • Requirement of insulation to ensure accuracy and good response time

*See TA-Slider range in pages 8 and 10

TA-Dongle

Digitally configure TA-Sliders without BUS communication

UNIQUE

TA-Slider is the only range of actuators that allow you to digitally view and control your actuator settings thanks to TA-Dongle.

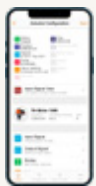
TA-Dongle is compatible with the full **TA-Slider Range**: TA-Slider 160, 500, 750 and 1600.

Moves actuator UP


Moves actuator DOWN

AUTO or MANUAL regime for easy and flexible actuator maintenance

Bluetooth signal for comfortable interface with smartphone and HyTune app



Micro USB connector cable

Micro USB connection 

On/Off button

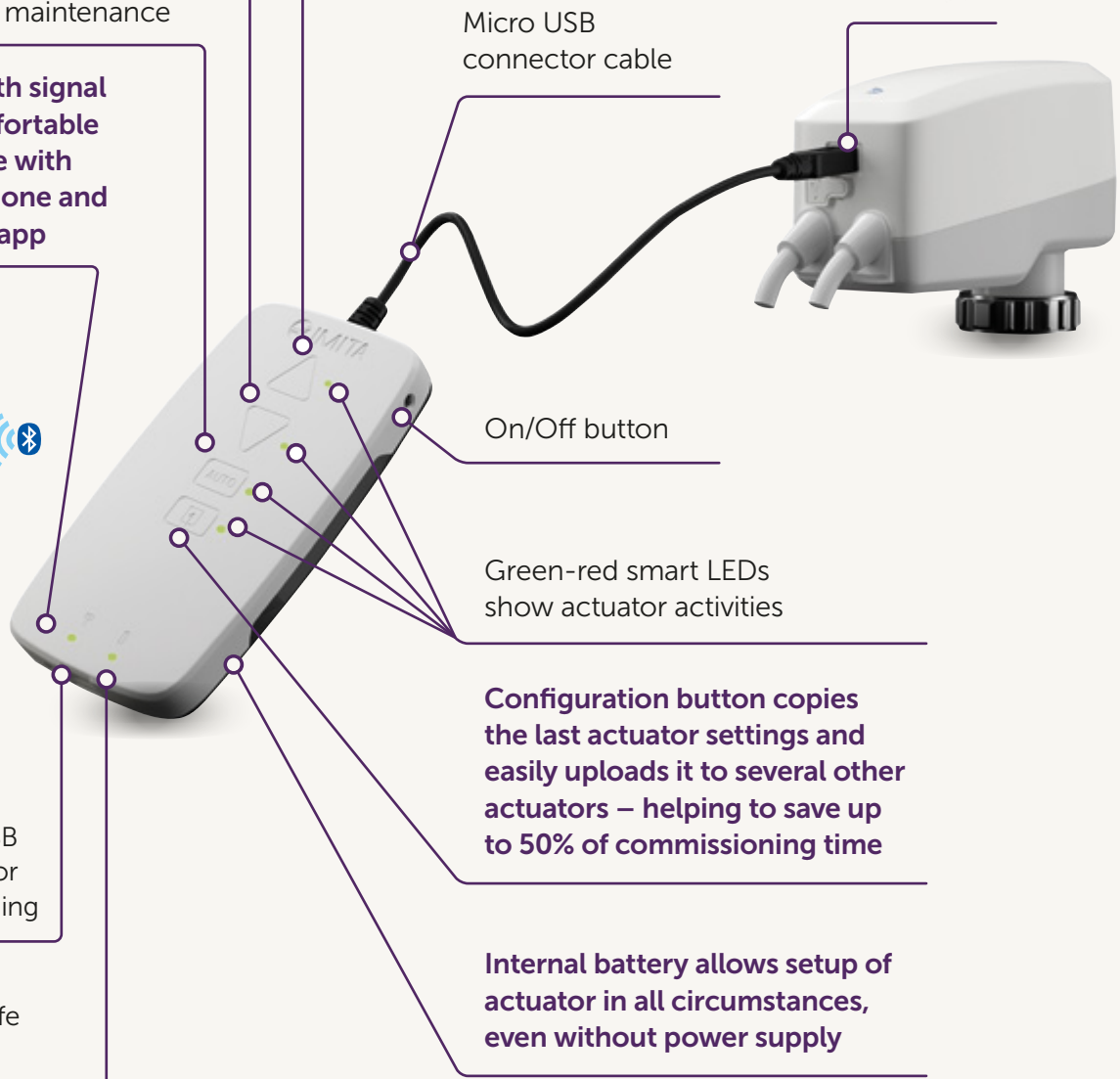
Green-red smart LEDs show actuator activities

Configuration button copies the last actuator settings and easily uploads it to several other actuators – helping to save up to 50% of commissioning time

Micro USB connector for charging

Battery life indicator

Internal battery allows setup of actuator in all circumstances, even without power supply



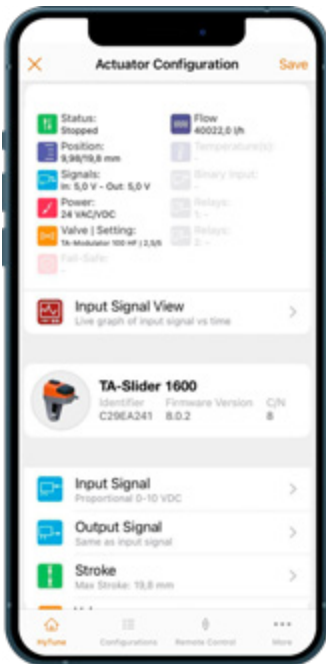
HyTune app



WATCH THE VIDEO

HyTune and TA-Dongle Tutorial for TA-Slider actuators

Mobile application to configure TA-Slider without BUS Communication



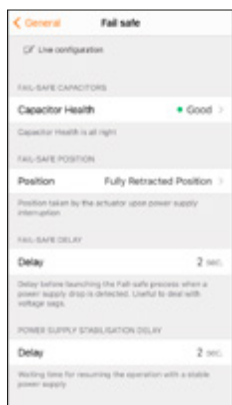
- Automatic detection of TA-Slider type
- Enables comfortable set-up of TA-Slider even on hard to reach or poorly lit environments
- Intuitive and easy to use

HyTune app is available on AppStore or GooglePlay

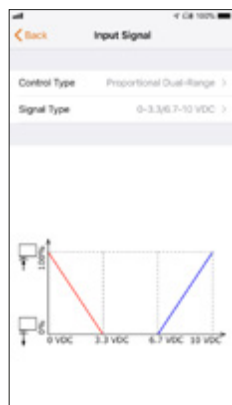


TA-Dongle enables Interface between actuator and smartphone using Bluetooth communication

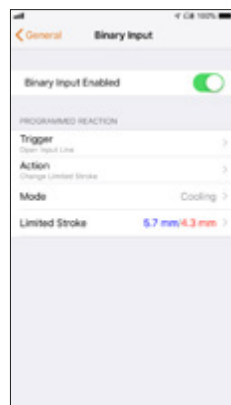
Full digital configuration of all actuator parameters



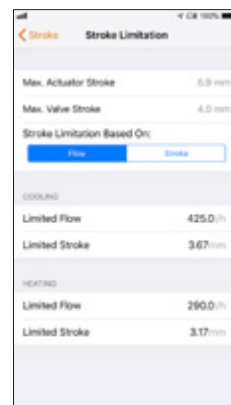
Fail-Safe Parameters



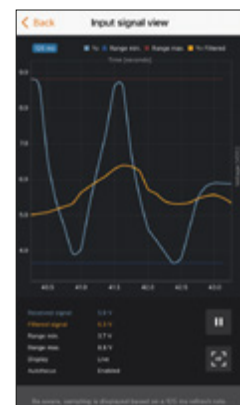
Input signal or dual-range input signal for heating-cooling changeover



Programmable binary input



Possibility to limit flow or Kv value (can be activated by binary input)




























Input signal quality with oscilloscope function

- And much more:**
- Overview of actual operating statuses & statistics
 - Output signal

- Type of calibration mode
- Error safe position

TA-Slider 160 & 500

Range Overview and Compatible IMI TA valves

TA-Slider versions	TA-Slider 160	TA-Slider 500
TA-Slider versions for Non-BUS Systems	 Std  I/O	 Std  I/O
	 CO  Plus  T I/O	 Plus  T I/O
	 Fail-safe I/O  Fail-Safe R24  2T I/O	 Fail-safe I/O  Fail-Safe R24  2T I/O
	 KNX  KNX R24	 ModBus  ModBus R24
	 ModBus  ModBus CO	 BACnet  BACnet R24
	 BACnet  BACnet CO	

Compatible IMI TA valves*	TA-Slider 160	TA-Slider 500
Stroke (max.) [mm]	6.9	16.2
Adjusting Force [N]	160 / 200	500 (push) 300 (pull)
TBV-C	✓	
TBV-CM	✓	
TA-COMPACT-P	✓	
TA-Modulator DN 10-32	✓	
TA-Modulator DN 40-50		✓
KTM 512 DN 15-50	✓	✓

*Please consider the static pressure value for final valve & actuator selection

TA-Slider 160 & 500

TA-Slider versions and article numbers

Control System Type	System Voltage	Type of System Communication	BUS Communication	Actuator Features			TA-Slider article number (with 1m cable length**)			
				Input Signal 0(2)-10 VDC	Output Signal 0(2)-10 VDC	Binary Input	Relay	TA-Slider	TA-Slider 160	TA-Slider 500
				✓	✓	✓	✓			
Modulating / Proportional	24 VAC/VDC	Non-BUS Comms		✓				Std	32222410111	32222510111
				✓	✓	✓		I/O	32222410411	32222510411
				✓	✓	✓		Fail-safe I/O	32222410614	32222510614
				✓	✓	✓	230V ✓	Plus	32222410211	32222510211
				✓	✓	✓	24V ✓	Fail-safe R24	32222410714	32222510714
				✓	✓	✓		I/O T	32222410814	32222510814
				✓	✓	✓		I/O 2T	32222410914	32222510914
		BUS Comms	Modbus RTU	✓		✓	24V ✓	Modbus R24		32222512314
				✓		✓		Modbus	32222412011	32222512011
				✓		✓	24V ✓	BACnet R24		32222513314
				✓		✓		BACnet	32222413011	32222513011
			BACnet MS/TP	✓		✓	24V ✓	KNX R24	32222401301	
						✓		KNX	32222401001	
								CO*	32222410511	
								Modbus CO*	3222241251	
Changeover System	24 VAC	Non-BUS Comms	BACnet Modbus RTU	✓		✓	24V ✓	BACnet CO*	32222413514	
				✓		✓	24V ✓			
				✓		✓	24V ✓			
















* With „Click and connect“ feature for effortless integration with rotary actuator of the TA-6-way valve

** Article numbers will differ according to cable length. Available with 1, 2, or 5m cable length.



TA-Slider 750 & 1600

Range Overview and Compatible IMI TA valves

TA-Slider versions	TA-Slider 750	TA-Slider 1600	
TA-Slider versions for Non-BUS Systems	 Std  Plus  2T	 Std  Plus  2T	
	 Fail-Safe Plus/24V (with relay)  Fail-Safe Plus/HV (with relay)	 Fail-Safe Plus/24V (with relay)  Fail-Safe Plus/HV (with relay)	
TA-Slider versions for BUS Communication Systems	 Plus (with relay) Modbus RTU  Plus Modbus RTU  Plus (with relay) BACnet MS/TP	 Plus (with relay) Modbus RTU  Plus Modbus RTU  Plus (with relay) BACnet MS/TP	
	 Plus BACnet MS/TP  Plus (with relay) Modbus TCP  Plus Modbus TCP	 Plus BACnet MS/TP  Plus (with relay) Modbus TCP  Plus Modbus TCP	
	 Plus (with relay) BACnet IP  Plus BACnet IP  2T	 Plus (with relay) BACnet IP  Plus BACnet IP  2T	
Compatible IMI TA valves	Stroke (max.) [mm]	22	33
	Adjusting Force [N]	750	1600
	TA-Modulator DN 65-125	✓	
	TA-Modulator DN 100*-200		✓
	KTM 512 DN 65-125	✓	✓

*TA-Slider 1600 is required for DN100 and DN125 if the pressure is higher than 4 bar

TA-Slider 750 & 1600

TA-Slider versions and article numbers

Control System Type	System Voltage	Type of System Communication	BUS Communication	Physical layer	Actuator Features							TA-Slider article number			
					Input Signal	Output Signal	Input Signal	Output Signal	Binary Input	2 Relays	TA-Slider version	TA-Slider 750	TA-Slider 1600		
					0(2)-10 VDC	0(2)-10 VDC	0(2)-10 VDC	0(4)-20 mA	0(4)-20 mA						
Modulating / proportional / On-off / 3 point control	24 VAC/VDC	Non-BUS Comms			✓	✓	✓					Std	32222610110	32222810110	
					✓	✓	✓	✓	✓	230V ✓	Plus (with relay)	32222610219	32222810219		
					✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay)	32222610419	32222810419		
					✓	✓	✓	✓	✓	230V ✓	Fail-Safe Plus (with relay)	32222610319	32222810319		
					✓	✓	✓	✓	✓	230V ✓	2T Fail-Safe Plus (with Relay)	32222610519	32222810519		
					✓	✓	✓				Plus Modbus RTU	32222612210	32222812210		
		with BUS Comms	Modbus	RS 485	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus RTU	322226-12219	32222812219		
					✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) Modbus RTU	32222612419	32222812419		
					✓	✓	✓				Plus Modbus TCP	32222614210	32222814210		
			BACnet	Ethernet	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus TCP	32222614219	32222814219		
					✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) Modbus TCP	32222614419	32222814419		
					✓	✓	✓				Plus BACnet MS/TP	32222613210	32222813210		
	100-240 VAC/VDC	Non-BUS Comms				✓	✓	✓					Std	32222640110	32222840110
						✓	✓	✓	✓	✓	230V ✓	Plus	32222640219	32222840219	
						✓	✓	✓	✓	✓	230V ✓	Fail-Safe Plus/HV (with relay)	32222640319	32222840319	
						✓	✓	✓				Plus Modbus RTU	32222642210	32222842210	
						✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus RTU	32222642219	32222842219	
						✓	✓	✓				Plus Modbus TCP	32222644210	32222844210	
		BUS Comms	Modbus	Ethernet	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus TCP	32222644219	32222844219		
					✓	✓	✓				Plus BACnet MS/TP	32222643210	32222843210		
					✓	✓	✓	✓	✓	230V ✓	Plus (with relay) BACnet MS/TP	32222643219	32222843219		
			BACnet	Ethernet	✓	✓	✓				Plus BACnet IP	32222646210	32222846210		
					✓	✓	✓	✓	✓	230V ✓	Plus (with relay) BACnet IP	32222646219	32222846219		
					✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) BACnet IP	32222646219	32222846219		

TA-Slider + TA-Modulator

Linear Actuator + PIBCV for modulating control that are fully configurable via your smartphone



TA-Slider 160 and TA-Modulator DN25

- Unique EQM characteristic on the valve, which is not distorted by the change of applied differential pressure*
- Optimized combination of EQM valve and linear actuator enables up to 6x higher operating stroke for **better valve rangeability, even for small flows**
- Modulating control reduces temperature oscillations and pumping costs helping to reach up to 18% annual energy savings**
- Limit return temperature and solve Low Delta T Syndrome, improving system performance and energy efficiency.



→ Find out more
climatecontrol.imiplc.com

Key technical data

- For systems with or without BUS communication
- Available in sizes DN 10-200



TA-Slider 500 and
TA-Modulator DN40



TA-Slider 750 and
TA-Modulator DN80



TA-Slider 1600 and
TA-Modulator DN125



→ Find out more
climatecontrol.imiplc.com

*Upon testing of 3 competitors, their valve characteristics were all sensitive to low differential pressure

**in comparison to on-off control

TA-Slider + TA-Modulator



WATCH THE VIDEO

TA-Modulator Pressure Independent Balancing & Control Valve

Typical Applications

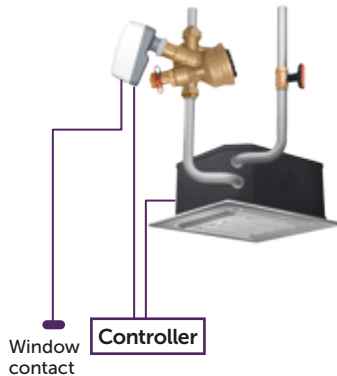
TA-Slider connects TA-Modulator to all BMS systems to ensure only the necessary amount of energy is delivered to keep the temperature constant – without oscillations.

Further energy savings can be achieved thanks to TA-Slider's digitally programmable binary input.

TA-Slider + TA-Modulator = the perfect match

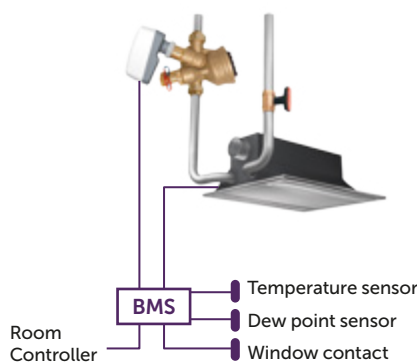
The combination of the linear actuator with a valve with EQM characteristic offsets the non-linear characteristic of the terminal units **enabling a very stable control of the power output and energy efficiency.**

TA-Modulator + TA-Slider 160 Plus



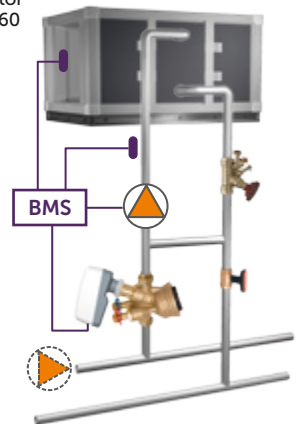
Fan-coils

TA-Modulator + TA-Slider 160



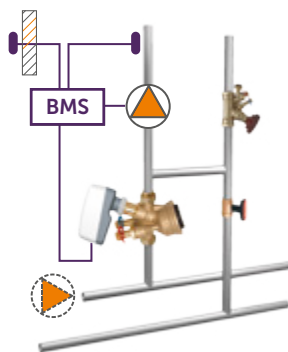
Chilled beams

TA-Modulator + TA-Slider 160



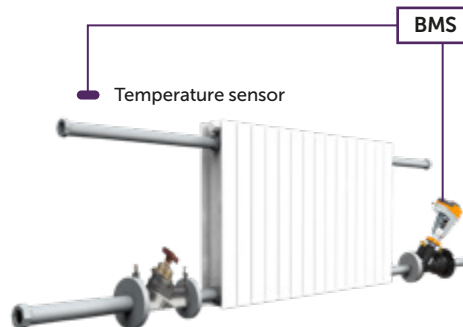
Air handling units

TA-Modulator + TA-Slider 160



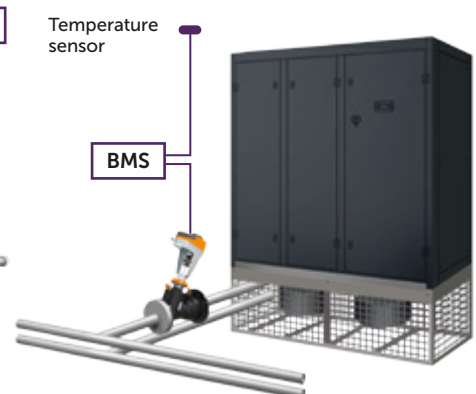
Pressure independent mixing circuits

TA-Modulator + TA-Slider 1600



Heat exchanger

TA-Modulator + TA-Slider 750



CRAH units

TA-Slider + TA-6-way valve

Changeover solution between heating and cooling in 4-pipe systems that is fully configurable via your smartphone.



TA-M106 actuator enables switch between the heating and cooling network in one device

TA-6-way valve prevents leakages thanks to male connection

The "click and connect" feature of the **TA-Slider 160 CO** enables effortless electrical connection with the TA-M106 actuator

Key technical data

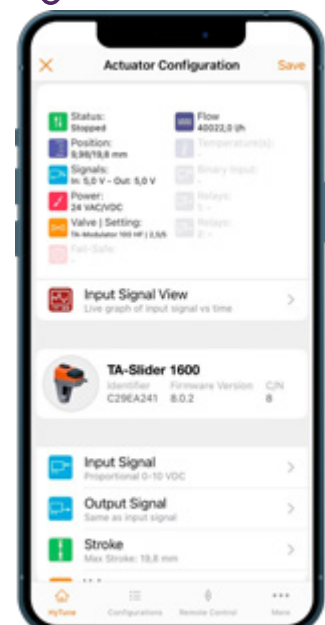
- For systems with or without BUS communication
- Available in sizes DN 15-20



PIBCV **TA-Modulator** with EQM characteristic allows for precise modulating of flow between the cooling and heating network

TA-Dongle enables the interface between TA-Slider and smartphone for digital configuration via the HyTune app

HyTune app enables digital configuration of system parameters to control changeover between heating and cooling – even if swapped during installation



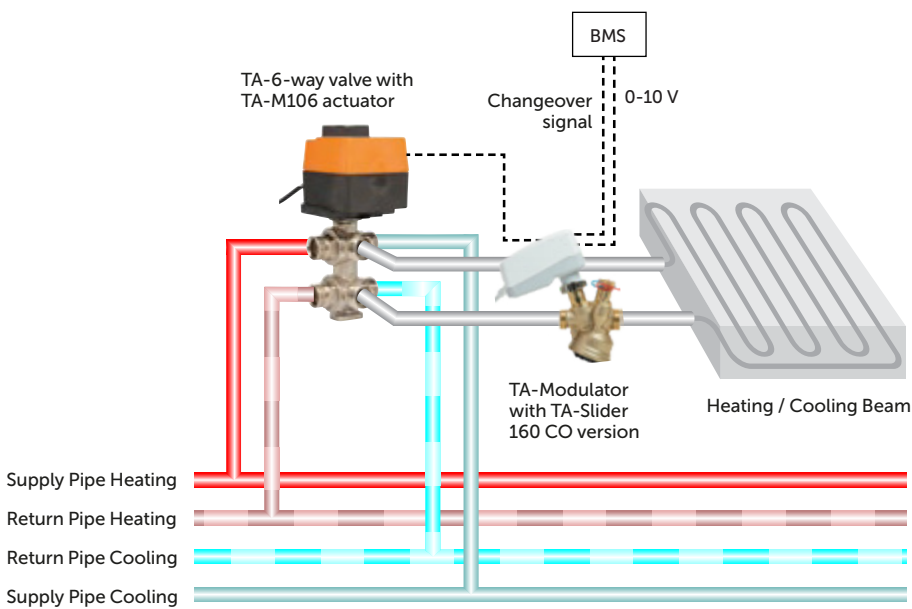
TA-Slider + TA-6-way valve

Typical Applications

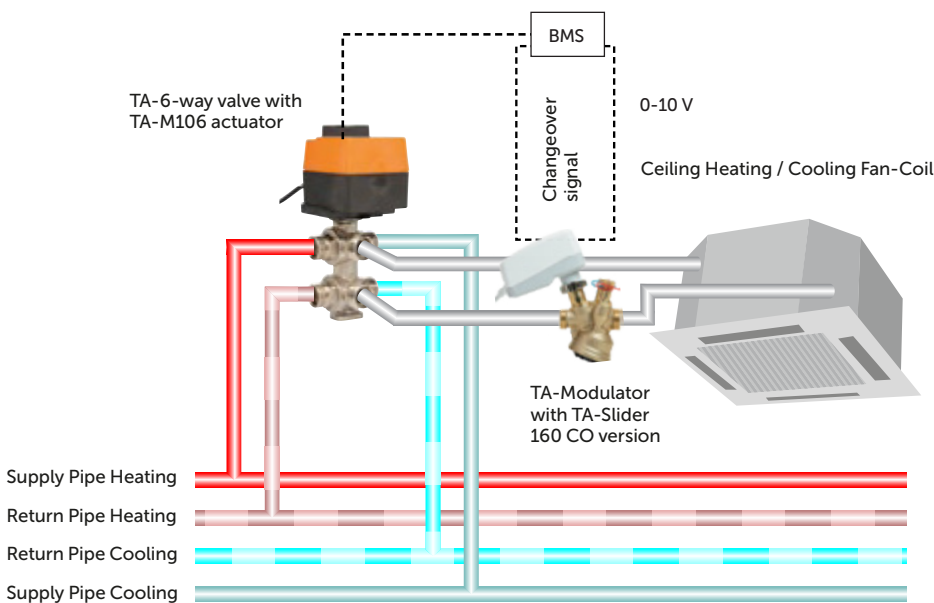
The TA-6-way valve switches between the heating and cooling functions controlled by the BMS signal, or for non-BUS systems, by the TA-Slider digital configuration parameters.

TA-Slider + TA-6-way valve = Highly precise and flexible control, with no risk of cross-flow

Access easy balancing, commissioning, troubleshooting and diagnostics all thanks to digital configuration and control.



Changeover solution with two control signals and Beam Terminal Unit



Changeover solution with three control signals and Fan-coil Terminal Unit

An extensive range of actuators

→ Find out more
climatecontrol.imiplc.com



With functions for all your HVAC systems' needs



TA-Slider 160
 160
 Std version
 I/O version
 KNX



TA-Slider 160
 CO version
 T I/O
 Plus version
 KNX R24



TA-Slider 160
 Fail-Safe I/O
 Fail-Safe R24



TA-Slider 160
 With BUS
 communication



TA-Slider 500
 500
 Std version
 I/O version



TA-Slider 500
 Fail-Safe I/O
 T I/O
 Fail-Safe R24



TA-Slider 500
 Plus version



TA-Slider 500
 with BUS
 communication



TA-Slider 750
 750
 Std version



TA-Slider 750
 Plus (std)
 Fail-Safe
 2T
 Plus/24V or HV



TA-Slider 750
 Plus (with relays)
 with or without BUS
 Communication
 Fail-Safe Plus (with relays)



TA-Slider 1600
 1600
 Std version



TA-Slider 1600
 Plus (std)
 Fail-Safe
 Plus/24V or HV
 2T



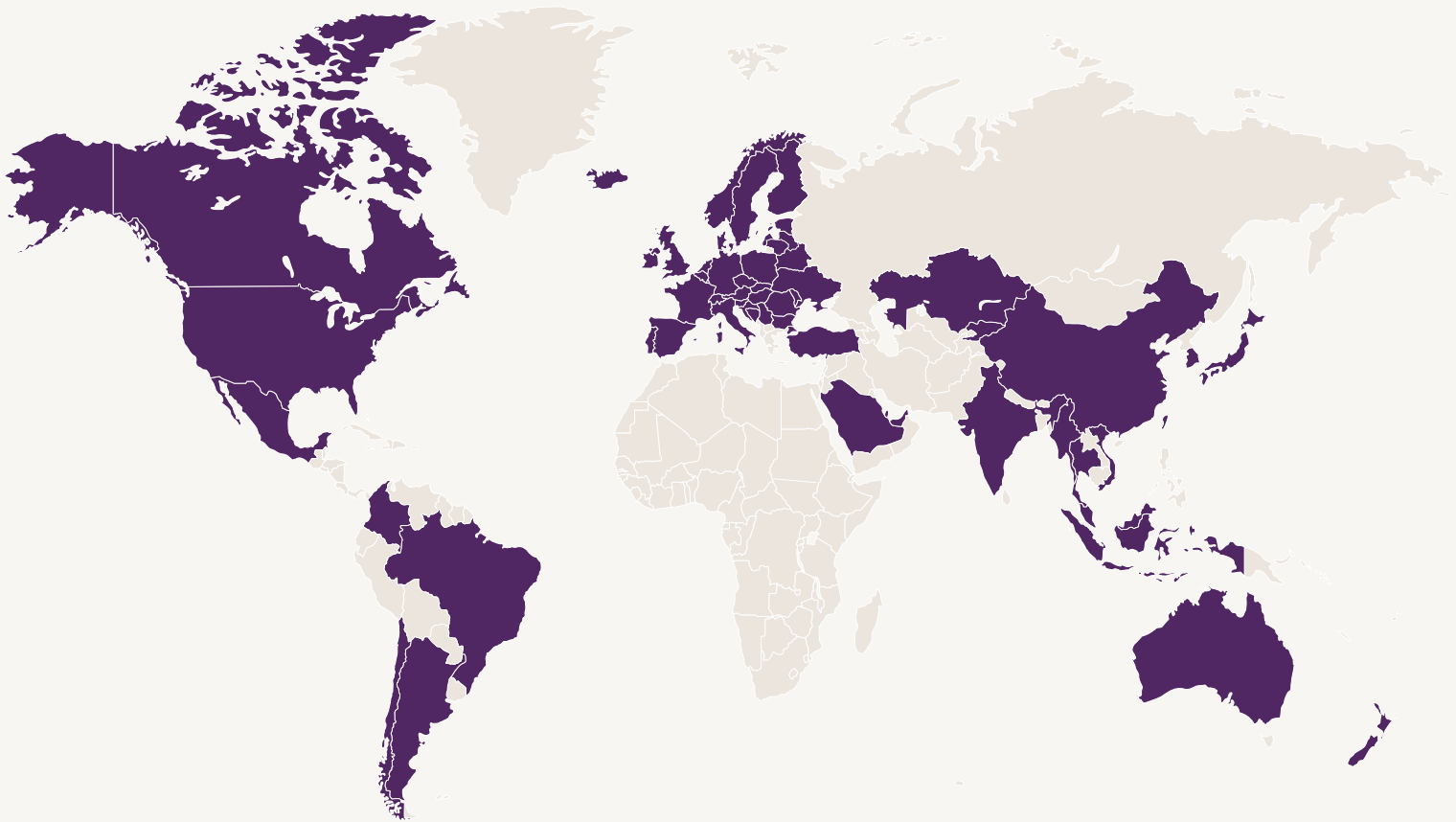
TA-Slider 1600
 Plus (with relays)
 with or without BUS
 Communication
 Fail-Safe Plus (with relays)

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