

# 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](http://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:

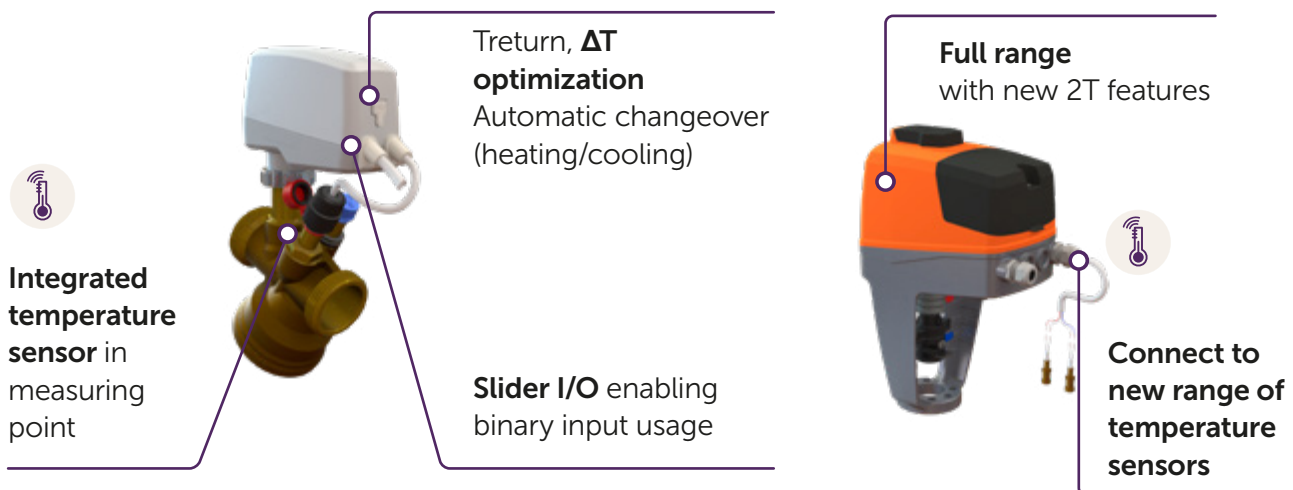


# T and 2T feature

## 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  $\Delta T$  control
- ✓ Ease of commissioning and installation

### Temperature Sensors

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

\*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.

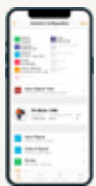
TA-Dongle is compatible with the full **TA-Slider Range**: TA-Slider 160, 500, 750 and 1600.

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

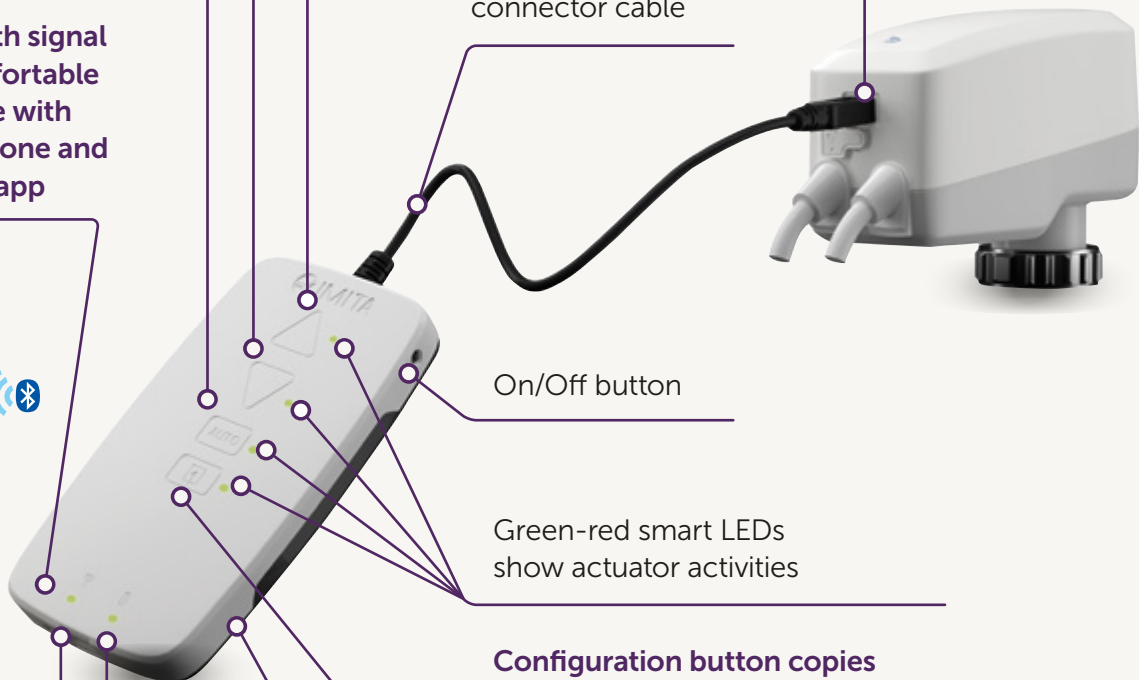
Green-red smart LEDs show actuator activities

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



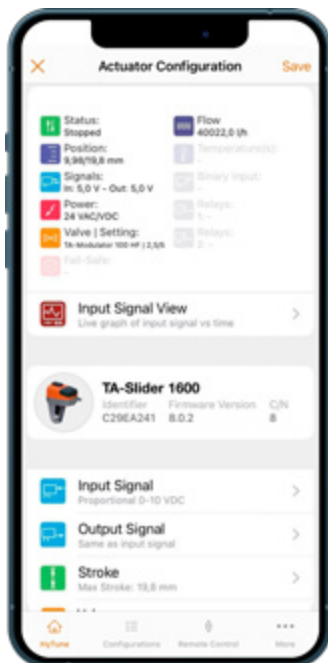
# HyTune app

## Mobile application to configure TA-Slider without BUS Communication



WATCH THE VIDEO

HyTune and TA-Dongle Tutorial for TA-Slider actuators



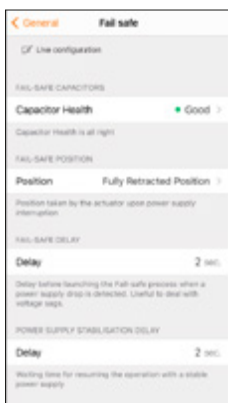
- Automatic detection of TA-Slider type
- Enables comfortable set-up of TA-Slider even on hard to reach or poorly lit environments
- Intuitive and easy to use

HyTune app is available on AppStore or GooglePlay

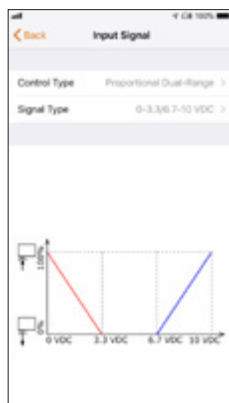


TA-Dongle enables Interface between actuator and smartphone using Bluetooth communication

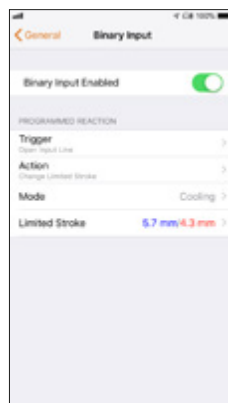
### Full digital configuration of all actuator parameters



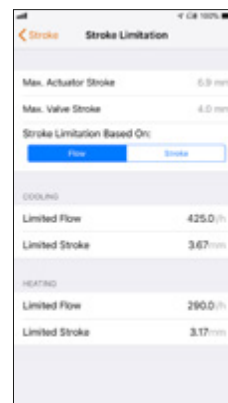
Fail-Safe Parameters



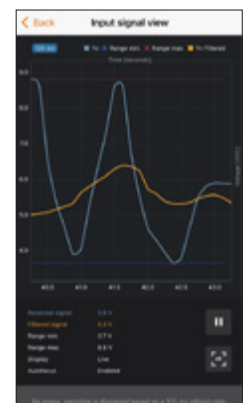
Input signal or dual-range input signal for heating-cooling changeover



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

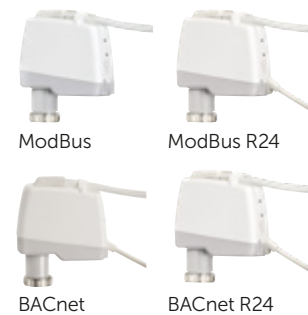
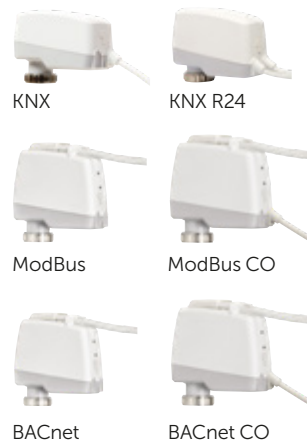
### TA-Slider 160

### TA-Slider 500

#### TA-Slider versions for Non-BUS Systems



#### TA-Slider versions for BUS Communication Systems














#### Compatible IMI TA valves\*

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 
			BACnet MS/TP	✓		✓	24V ✓	BACnet R24		32222513314 
				✓		✓		BACnet	32222413011 	32222513011 
			KNX			✓	24V ✓	KNX R24	32222401301	
						✓		KNX	32222401001	
Changeover System	24 VAC	Non-BUS Comms		✓	✓	✓	24V ✓	CO*	32222410511	
				✓		✓	24V ✓	Modbus CO*	3222241251 	
				✓		✓	24V ✓	BACnet CO*	32222413514	

\* 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.



Version only available with Halogen free cable

# 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

Modulating / proportional / On-off / 3 point control	Control System Type		Actuator Features										TA-Slider article number		
	System Voltage	Type of System Communication	BUS Communication	Physical layer	Input Signal 0(2)-10 VDC	Output Signal 0(2)-10 VDC	Input Signal 0(4)-20 mA	Output Signal 0(4)-20 mA	Binary Input	2 Relays		TA-Slider version	TA-Slider 750	TA-Slider 1600	
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	
					✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus RTU	322226-12219	32222812219	
					✓	✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) Modbus RTU	32222612419	32222812419	
					✓	✓	✓					Plus Modbus TCP	32222614210	32222814210	
					✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus TCP	32222614219	32222814219	
	with BUS Comms	Modbus	RS 485	✓	✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) Modbus TCP	32222614419	32222814419		
				✓	✓	✓					Plus BACnet MS/TP	32222613210	32222813210		
				✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) BACnet MS/TP	32222613219	32222813219		
				✓	✓	✓					Plus BACnet IP	32222616210	32222816210		
				✓	✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) BACnet MS/TP	32222613419	32222813419		
				✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) BACnet IP	32222616219	32222816219		
		BACnet	Ethernet	✓	✓	✓	✓	✓	✓	230V ✓	2T Plus (with relay) BACnet IP	32222813419	32222816419		
				✓	✓	✓					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		
BUS Comms	Modbus	Ethernet	✓	✓	✓					Plus Modbus TCP	32222644210	32222844210			
			✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) Modbus TCP	32222644219	32222844219			
			✓	✓	✓					Plus BACnet MS/TP	32222643210	32222843210			
			✓	✓	✓	✓	✓	✓	230V ✓	Plus (with relay) BACnet MS/TP	32222643219	32222843219			
			✓	✓	✓					Plus BACnet IP	32222646210	32222846210			
			✓	✓	✓	✓	✓	✓	230V ✓	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](https://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 DN40TA-Slider 750 and  
TA-Modulator DN80TA-Slider 1600 and  
TA-Modulator DN125

Find out more  
[climatecontrol.imiplc.com](https://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

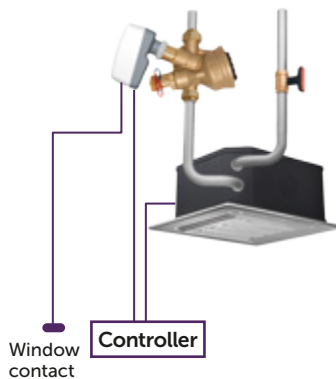
TA-Slider connects TA-Modulator to all BMS systems to ensure only the necessary amount of energy is delivered to keep the temperature constant – without oscillations.

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

### TA-Slider + TA-Modulator = the perfect match

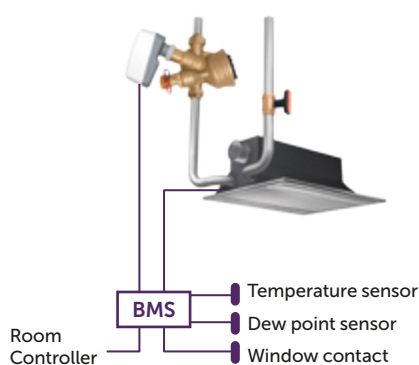
The combination of the linear actuator with a valve with EQM characteristic offsets the non-linear characteristic of the terminal units **enabling a very stable control of the power output and energy efficiency.**

TA-Modulator  
+ TA-Slider 160 Plus



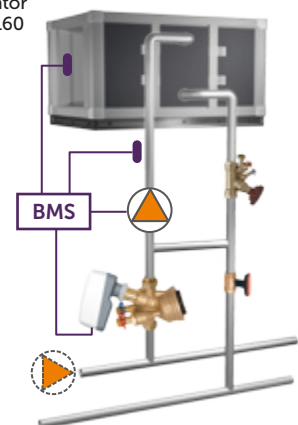
Fan-coils

TA-Modulator  
+ TA-Slider 160



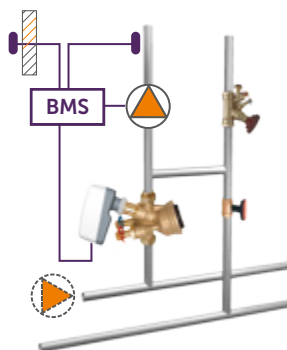
Chilled beams

TA-Modulator  
+ TA-Slider 160



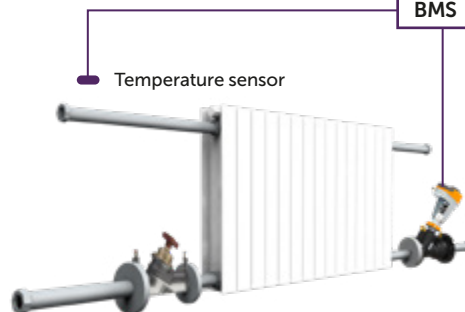
Air handling units

TA-Modulator  
+ TA-Slider 160



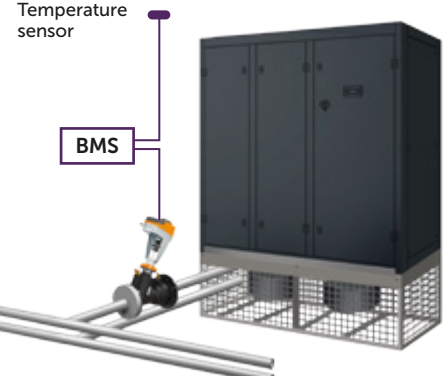
Pressure independent mixing  
circuits

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

## Key technical data

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

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

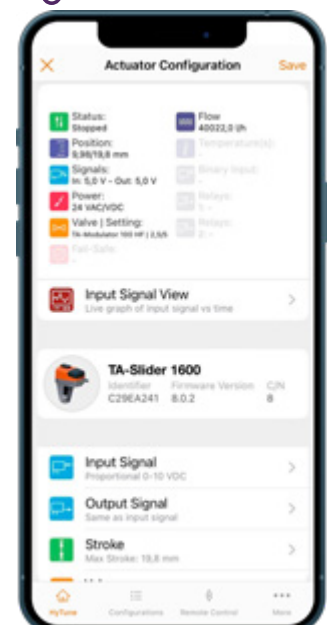
The "click and connect" feature of the **TA-Slider 160 CO** enables effortless electrical connection with the TA-M106 actuator

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



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



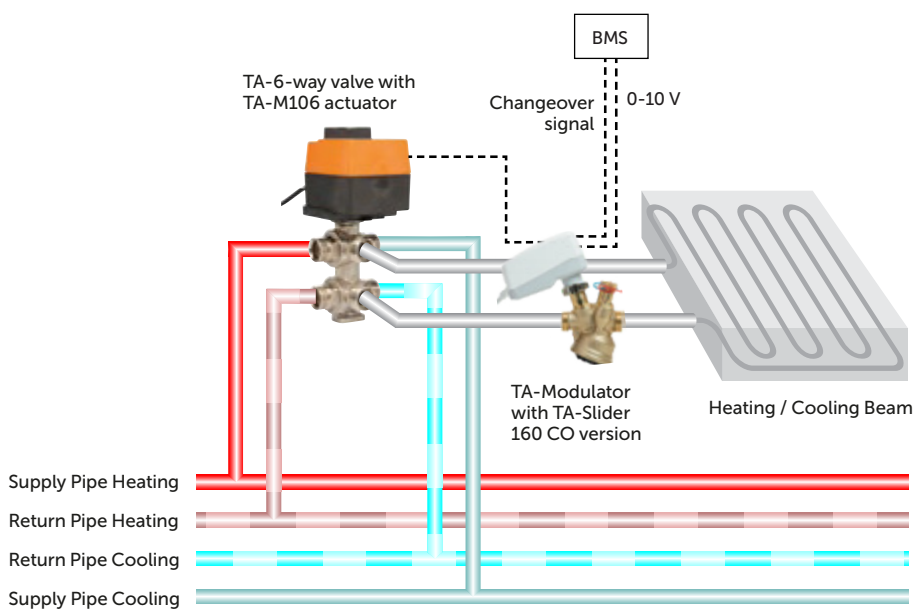
# TA-Slider + TA-6-way valve

## Typical Applications

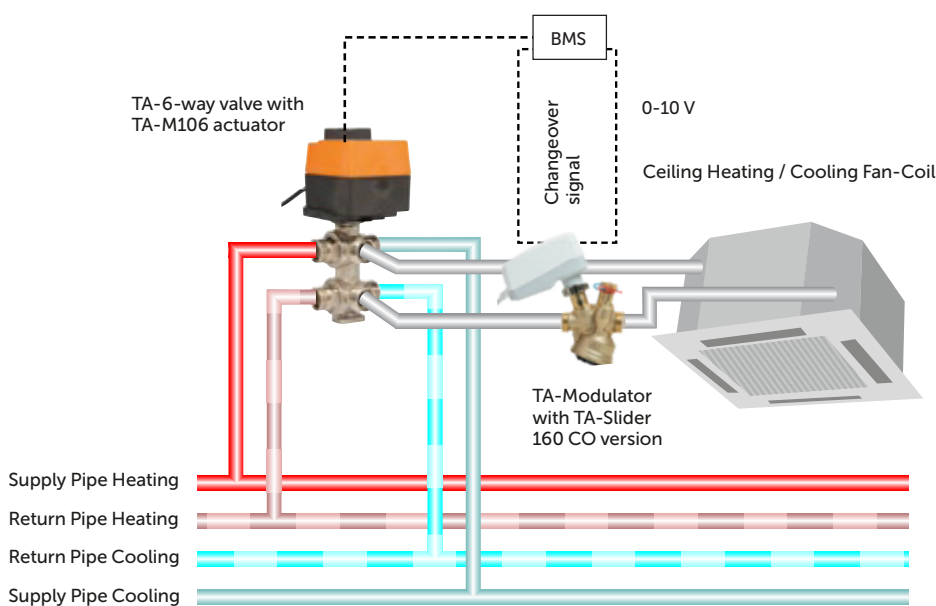
The TA-6-way valve switches between the heating and cooling functions controlled by the BMS signal, or for non-BUS systems, by the TA-Slider digital configuration parameters.

**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](http://climatecontrol.imiplc.com)



With functions for all your HVAC systems' needs



**TA-Slider 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**  
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**  
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**  
Std version



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



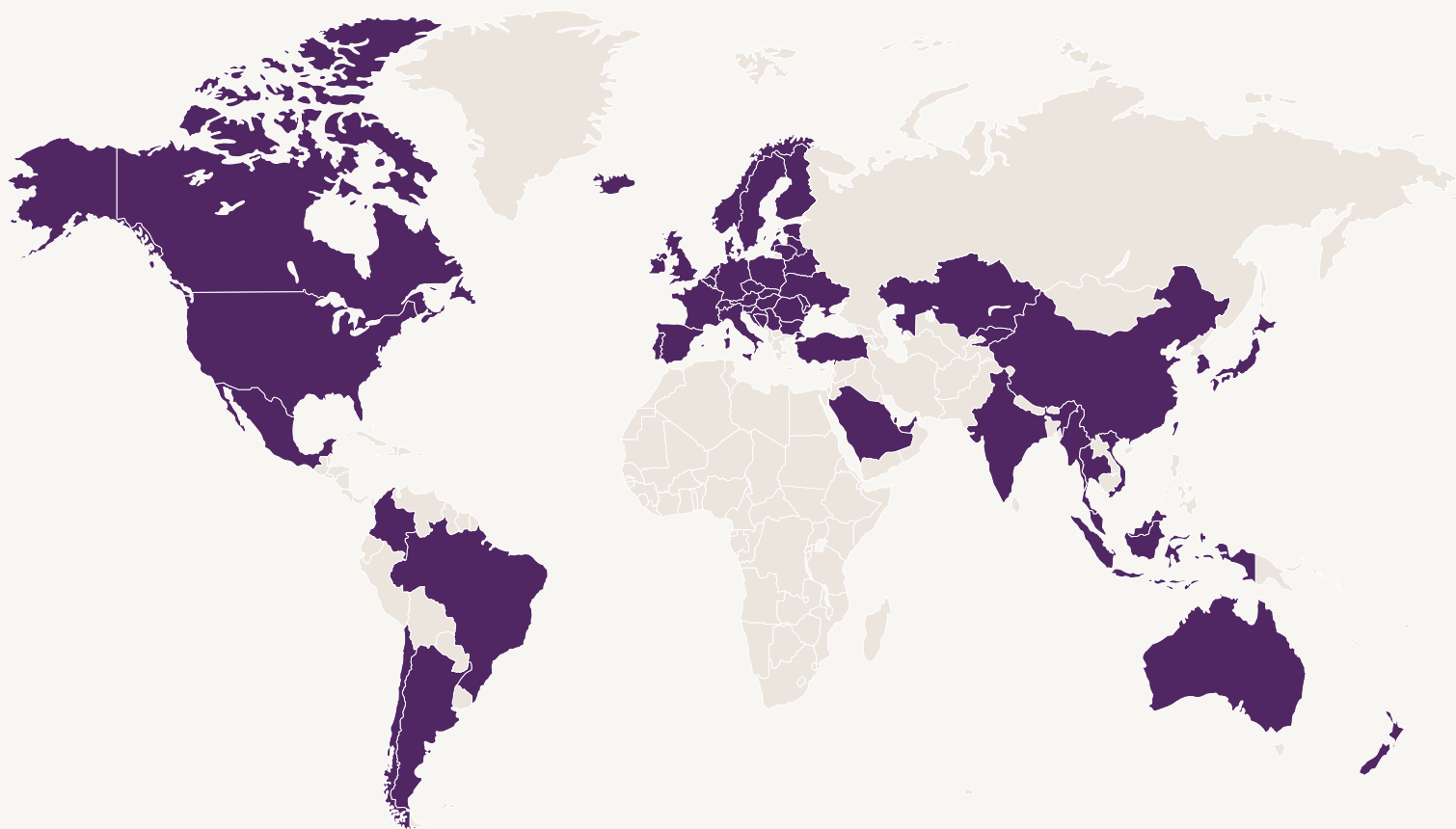
**TA-Slider 1600**   
Plus (with relays)  
with or without BUS  
Communication  
Fail-Safe Plus (with relays)

# How can we help you?

We are operating in more than 33 countries, please get in touch with one of our local offices and our expert team will be happy to help you.



If you want to know more, please scan the QR code and fill in the online form and our expert team will answer all your questions.



Contact us  
[climatecontrol.imiplc.com](https://climatecontrol.imiplc.com)



[illegible]





## Climate Control

Our product brands:  
IMI Pneumatex  
IMI TA  
IMI Heimeier

**Climate Control, a Sector of IMI plc**  
(Legally trading as IMI Hydronic Engineering SA)  
Route de Crassier 19  
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Switzerland

ENG-09/2024