

Acvatix – valves and actuators for room and zone applications

TEVA (Terminal Equipment Valves and Actuators) is the comprehensive range of valves and actuators from Siemens covering all major HVAC applications in rooms and zones and satisfying all customer requirements.

Thanks to the clear and application-related structure, the right combination of valve and actuator can be quickly and straightforwardly selected for any type of application – be it for fan coil units, chilled ceilings, or general zone or radiator applications. The valves and actuators offer long service life, are of very high quality and excel in rugged design, low-noise operation, and performance. Owing to an optimum match of valves, actuators and controllers, TEVA products make a major contribution to energy efficiency. As a result, energy and costs are saved.

This way, you select products that offer you the highest levels of efficiency and reliability – from installation to maintenance. This is made possible not only by tools specifically developed by Siemens for sizing, calculation and project handling, but also by worldwide on-site support in more than 50 countries.



Applications

Overview of applications

Fan coil units/terminal units/induction units

– 2- and 3-port valves or 3-port valves with bypass

Chilled ceilings

– 2-port valves

Radiators

– Valves and thermostatic heads as per EN 215

Zones

– 2- or 3-port valves
– On/off control

Floor heating systems

– Electrothermal actuators for floor heating distributors

■ Equal-percentage ■ Linear for radiators ■ On/off for floor heating systems
■ Linear ■ On/off for zones

	SSA..	STA..	STP..	SSP..	SSB..	SSY..	SSD..	SFA..	SFP..	SUA21/1..	RTN..
Manual adjustment	Yes	–	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pluggable cable	Yes	Yes ¹⁾	Yes ¹⁾	–	Yes	–	–	–	–	–	–
Auxiliary switch	Yes	Yes ¹⁾	Yes ¹⁾	–	Yes	–	–	Yes	Yes	–	–
Control											
2P AC 24 V spring return	–	STA73..	STP73..	–	–	–	–	SFA71..	SFP71..	–	–
2P AC 230 V spring return	–	STA23..	STP23..	–	–	–	–	SFA21..	SFP21..	SUA21/1 ²⁾	–
3P AC 24 V	SSA81..	–	–	SSP81..	SSB81..	SSY81..	SSD81..	–	–	–	–
3P AC 230 V	SSA31..	–	–	SSP31..	SSB31..	SSY31..	SSD31..	–	–	–	–
DC 2...10 V, AC/DC 24 V	SSA61.2	–	–	–	–	–	SSD61.2	–	–	–	–
DC 0...10 V, AC/DC 24 V (for conversion from linear to equal-percentage)	SSA61EP ³⁾	–	–	–	–	–	SSD61EP ³⁾	–	–	–	–
DC 0...10 V, AC/DC 24 V	SSA61..	–	–	SSP61..	SSB61..	–	SSD61..	–	–	–	–
DC 0...10 V, AC 24 V spring return	–	STA63..	STP63..	–	–	–	–	–	–	–	–
VVP45../VXP45../VMP45..	PN 16, small valves										
	k _{vs} 0.25-6.3 m ³ /h Externally threaded as per ISO228-1 Versions with BS84 (Conex®) Δp, 400 kPa VVP45.. Δp, 500 kPa VVP45..N										
VPI45..	PN 25, combi valves										
	Flow rate: Types 90...3050 l/h Differential pressure range: 14...400 kPa Internally threaded as per ISO7/1										
VVP47../VXP47../VMP47..	PN 16, small valves										
	k _{vs} 0.25-4 m ³ /h Externally threaded as per ISO228-1 (versions with BS84, Conex) Δp, 300 kPa										
VPI46../VPP46..	PN 25, combi valves										
	Flow rate: 30...1330 l/h Differential pressure range: 15...400 kPa Internally threaded as per ISO7/1 Externally threaded as per ISO228-1										
VDN../VEN../VUN../VD..CLC	PN 10, radiator valves										
	k _{vs} 0.25-2.6 m ³ /h Connections as per EN 215-1										
VPD../VPE..	PN 10, combi valves for radiators and chilled ceilings										
	Flow rate: 300...500 l/h Connections as per EN 215-1										
VVI46../VXI46../VXI46..T	PN 16, zone valves										
	k _{vs} 2/3.5/5 m ³ /h Internally threaded as per ISO7/1 Δp, 300 kPa										
Floor heating distributors	Various brands										
	see data sheet										

■ NC: Normally Closed □ NO: Normally Open
¹⁾ With cable ASY... as an accessory item ²⁾ SPST = Single Pole Single Throw ³⁾ With equal-percentage valve characteristic ⁴⁾ With SSA31..04, 34 seconds, 4860

HVAC Integrated Tool – comprehensive support

The HVAC Integrated Tool (HIT) developed by Siemens is a software package that enables you to reliably plan and engineer heating, ventilation, air conditioning and refrigeration plants – more straightforwardly and faster.

HIT simplifies the selection of products: The tool enables you to directly access the complete HVAC portfolio marketed by Siemens, which includes more than 2,500 products – valves, actuators, controllers, sensors, thermostats or variable speed drives.

To allow you to plan projects straightforwardly and quickly, HIT also offers you ... more than 300 standard applications,

... integrated product selection modules for demand-oriented selection of products (e.g. in connection with sizing), ... automatic generation of your tender specifications.

With HIT, you can also benefit from Siemens' extensive know-how – thanks to the comprehensive documentation the tool offers. To take advantage of Siemens' full support, visit: www.siemens.com/hit



TEVA product range overview

Actuators	Type	Operating voltage/control	Output	Connecting cable	Data sheet
SSB.. electromotoric actuators for small valves V..P45..					
	SSB31	AC 230 V, 3-point	6 VA	1.5 m ¹⁾	4891
	SSB31.1	AC 230 V, 3-point, HS ²⁾	6 VA	1.5 m	4891
	SSB61	AC/DC 24 V, DC 0...10 V	2.5 VA	1.5 m ¹⁾	4891
	SSB81	AC 24 V, 3-point	0.8 VA	1.5 m ¹⁾	4891
	SSB8.1	AC 24 V, 3-point, HS ²⁾	0.8 VA	1.5 m	4891
SSY.. electromotoric actuators for small valves VVP45.15-2.5N, VVP45.20.4N and VVP45.25-6.3N Small valves (550 kPa)					
	SSY31	AC 230 V, 3-point	6 VA	1.5 m	4894
	SSY81	AC 24 V, 3-point	0.8 VA	1.5 m	4894
SSD.. electromotoric actuators for small valves and combi valves VPI45..					
	SSD31	AC 230 V, 3-point	6 VA	1.5 m ¹⁾	4861
	SSD61	AC 24 V, 0...10 V	2.5 VA	1.5 m ¹⁾	4861
	SSD61.2	AC/DC 24 V, DC 2...10 V	2.5 VA	1.5 m	4861
	SSD61.EP	AC/DC 24 V, DC 2...10 V	2.5 VA	1.5 m	4861
	SSD61.5	AC/DC 24 V, DC 2...10 V ⁴⁾	2.5 VA	1.5 m	4861
	SSD81	AC 24 V, 3-point	0.8 VA	1.5 m ¹⁾	4861
	SSD81.5	AC 24 V, 3-point ⁴⁾	2.5 VA	1.5 m	4861
SSP.. electromotoric actuators for small valves V..P47..					
	SSP31	AC 230 V, 3-point	6 VA	1.5 m ¹⁾	4864
	SSP61	AC/DC 24 V, DC 0...10 V	2.5 VA	1.5 m ¹⁾	4864
	SSP81	AC 24 V, 3-point	0.8 VA	1.5 m ¹⁾	4864
	SSP81.04	AC 24 V, 3-point	0.8 VA	1.5 m ¹⁾	4864
SSA.. electromotoric actuators for radiator, zone and small valves V..I46..					
	SSA31	AC 230 V, 3-point	6 VA	1.5 m ¹⁾	4893
	SSA31.1	AC 230 V, 3-point, HS ²⁾	6 VA	1.5 m	4893
	SSA31.04	AC 230 V, 3-point	6 VA	1.5 m	4893
	SSA61	AC/DC 24 V, DC 0...10 V	2.5 VA	1.5 m ¹⁾	4893
	SSA61.2	AC/DC 24 V, DC 0...10 V	2.5 VA	1.5 m	4893
	SSA61.EP	AC/DC 24 V, DC 0...10 V	2.5 VA	1.5 m	4893
	SSA81	AC 24 V, 3-point	0.8 VA	1.5 m ¹⁾	4893
	SSA8.1	AC 24 V, 3-point, HS ²⁾	0.8 VA	1.5 m	4893
STA../STP.. thermal actuators for radiator, small valves and combi valves V..P47.. (see combinations)					
	STA23 ³⁾	AC 230 V, 2-point	2.5 / 58 VA	1 m ¹⁾	4884
	STA23B/00	AC 230 V, 2-point	2.5 / 58 VA	1 m ¹⁾	4884
	STA23HD	AC 230 V, 2-point	2.5 / 58 VA	0.8 m	4884
	STA63	AC 24 V, DC 0...10 V	2.5 / 6 VA	1 m	4884
	STA73 ³⁾	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
	STA73B/00	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
	STA73HD	AC 24 V, 2-point	2.5 / 6 VA	0.8 m	4884
	STA73PR/00	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
	STP23	AC 230 V, 2-point	2.5 / 58 VA	1 m ¹⁾	4884
	STP23B/00	AC 230 V, 2-point	2.5 / 58 VA	1 m ¹⁾	4884
	STP63	AC 24 V, DC 0...10 V	2.5 / 6 VA	1 m	4884
	STP73	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
	STP73B/00	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
	STP73PR/00	AC 24 V, 2-point	2.5 / 6 VA	1 m ¹⁾	4884
SFA../SFP.. motoric actuators for zone valves V..I46.. and small valves V..P47.. (see combinations)					
	SFA21/18	AC 230 V, 2-point	9.8 VA	1.8 m	4863
	SFA71/18	AC 24 V, 2-point	9.8 VA	1.8 m	4863
	SFP21/18	AC 230 V, 2-point	9.8 VA	1.8 m	4865
	SFP71/18	AC 24 V, 2-point	9.8 VA	1.8 m	4865
	ASC2.1/18	Auxiliary switches AC 230 V 3(2)A	1.8 m	4863/4865	
SUA21.. electromotoric actuators for combi valves VPI46.. and VPP46..					
	SUA21/1	AC 230 V, 2-point	6 VA	1.5 m	4830

¹⁾ With type ..I00, the cable must be ordered as a separate item. Different cable lengths and halogen-free cables are available for actuators operating on AC 24 V
²⁾ Auxiliary switches
³⁾ Also available as multipacks
⁴⁾ With spring return