

ACVATIX™

Small valves, actuators and accessories

Product range overview



for radiator, floor heating and chilled ceiling applications

- **Actuators:** RTN.. / SSA.. / ST..40.. / ST..65..
- **Radiator valves:** VDN1.. / VEN1.. / VDN2.. / VEN2.. / VUN2.. / VPD..-135 / VPE..-135 / VPU..-135
- **Radiator lockshield valves:** ADN.. / AEN..
- **Compression fittings:** AVN15-15
- **Adapter:** ASA.. / AV..
- **Cable:** ASY21.. / ASY61.. / ASY62..

Self-acting RTN.. Actuators without auxiliary power

- CEN-certified and tested to DIN EN 215 part 1
- UKCA Great Britain conformity
- Absolute noiseless actuator technology
- Manual setpoint adjustment, min. and max. limitation

Favorably priced thermal actuators ST..40 and ST..65.., for demanding requirements

- UKCA Great Britain conformity
- Absolute noiseless actuator technology

Electromotive actuators SSA.. for the most demanding requirements

- Automatic detection of valve stroke
- Low noise
- Pre-cabled

RF-controlled radiator valve actuator

- SSA955 for integration in Synco system
- SSA911.02ZB for integration in SIEMENS Connected Home

Preadjustable radiator valves VDN.., VEN.., VUN..

- CEN-certified and tested to DIN EN 215 part 1
- UKCA Great Britain conformity
- Insert can be replaced while plant is under pressure

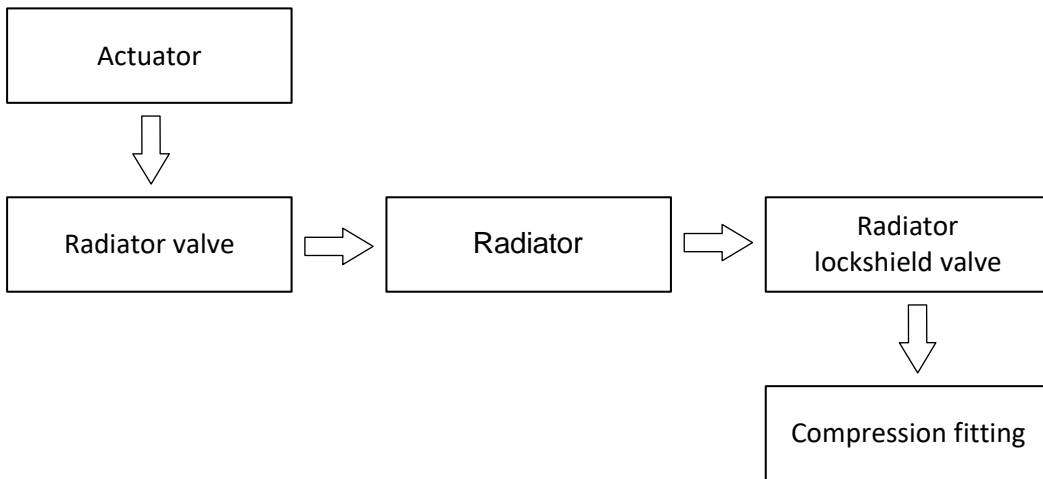
Pressure compensated radiator valves VPD.., VPE.., VPU.. (PICV) for perfect hydraulic balancing

- Low noise operation
- No additional line balancing required
- Significantly simplifies hydraulic balancing
- Creates comfort and saves energy

Various mounting accessories

- Simple and fast mounting.
- High operation safety

Equipment combinations: Thermostatic and electronic actuators, valves and fittings






Thermostatic actuators (without auxiliary power)






RTN51/RTN51G	RTN71	RTN81
		



Electric actuators (with auxiliary power)



SSA118../SSA131../SSA161../SSA331..	ST..40.. / ST..65..	SSA955	SSA911.02ZB
			

Radiator valves

DIN	DIN215	NF	DIN
VDN110 (3/8") VDN115 (1/2") VDN120 (3/4")	VPD110..-135 (3/8") VPD115..-135 (1/2") VPD120..-135 (3/4")	VPD210..-135 (3/8") VPD215..-135 (1/2") VPD220..-135 (3/4")	VDN210 (3/8") VDN215 (1/2") VDN220 (3/4")
			

Radiator valves			
DIN	DIN215	NF	DIN
VEN110 (3/8") VEN115 (1/2") VEN120 (3/4")	VPE110..-135 (3/8") VPE115..-135 (1/2") VPE120..-135 (3/4")	VPE210..-135 (3/8") VPE215..-135 (1/2") VPE220..-135 (3/4")	VEN210 (3/8") VEN215 (1/2") VEN220 (3/4")
			
	VPU110A-135 (3/8") VPU115A-135 (1/2")	-	VUN210 (3/8") VUN215 (1/2")
			

Radiator lockshield valves	
ADN10 (3/8") ADN15 (1/2") ADN20 (3/4")	AEN10 (3/8") AEN15 (1/2") AEN20 (3/4")
	

Compression fittings	
For copper and soft pipes	For plastic pipes with aluminum foil
AVN15-15	AVN15A16 ¹⁾
	

¹⁾ Phased-out model

Adapter (AV..)

For mounting

- thermostatic actuators RTN..
- Electromotive actuators SSA..
- RF-controlled actuator SSA955

on radiator valves of other manufacturer according to table:

AV.. adapters for Siemens actuators on third-party TRV valves	AV52 ¹⁾	AV53	AV54	AV55	AV57	AV58	AV59 ¹⁾	AV60 ¹⁾	AV61
									
	Comap	Danfoss RA-N	Danfoss RAVL	Danfoss RAV	Herz	Oventrop < 2002	Vaillant	TA < 2002	MMA Markaryd
Adapter thread	M28 x 1.5	-	-	-	M28 x 1.5	M30 x 1	-	M28 x 1.5	M28 x 1.5
Stock number	BPZ: AV52	BPZ: AV53	BPZ: AV54	BPZ: AV55	BPZ: AV57	BPZ: AV58	BPZ: AV59	BPZ: AV60	BPZ: AV61

¹⁾ Also compatible with thermal actuators ST..40.. and ST..65.. in combination with ASA80 adapter.

Adapter (ASA..)

For mounting

- thermal actuators St..40.. and ST..65..

on radiator valves of other manufacturer according to table:

ASA.. adapters for Siemens actuators on third-party TRV valves	ASA04H	ASA10	ASA26	ASA59	ASA72 ¹⁾	ASA78	ASA80
							
	Beulco Floorheating	Strawa Floorheating	Giacomini	Danfoss RAV/L	Danfoss RAV	Danfoss RA	-
Adapter thread	M30 x 1.0	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	-	M30 x 1.5
Stock number	S55845-Z304	S55845-Z305	S55845-Z299	S55845-Z300	S55845-Z301	S55845-Z302	S55845-Z303

¹⁾ Only the plastic component is included in delivery.

Cable

For actuators ST..121.65/00 and ST..321.65/00	ASY21L10	ASY21L20	ASY21L50	ASY21L100	ASY21L10H	ASY21L50H	ASY21L100H
	PVC cable				Halogen-free cable		
Cable length	1 m	2 m	5 m	10 m	1 m	5 m	10 m
Stock number	S55845-Z304	S55845-Z305	S55845-Z299	S55845-Z300	S55845-Z301	S55845-Z302	S55845-Z303
For actuators ST..161.65L10 and ST..162.65L10	ASY61L10	ASY61L20	ASY61L50	ASY61L100	ASY61L10H	ASY61L50H	ASY61L100H
	PVC cable no position feedback				Halogen-free cable no position feedback		

Cable length	1 m	2 m	5 m	10 m	1 m	5 m	10 m
Stock number	S55845-Z285	S55845-Z286	S55845-Z287	S55845-Z288	S55845-Z289	S55845-Z290	S55845-Z291
For actuators ST..161.65L10 and ST..162.65L10	ASY62L10	ASY62L20	ASY62L50	ASY62L100	ASY62L10H	ASY62L50H	ASY62L100H
	PVC cable Position feedback				Halogen-free cable Position feedback		
Cable length	1 m	2 m	5 m	10 m	1 m	5 m	10 m
Stock number	S55845-Z292	S55845-Z293	S55845-Z294	S55845-Z295	S55845-Z296	S55845-Z297	S55845-Z298

Type reference (alphabetical)

Actuators

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
RTN51..	BPZ:RTN51..	Thermostatic actuator <ul style="list-style-type: none"> white (RAL 9016) glossy or matte 	M30x1.5	Self acting	N2111
RTN71	BPZ:RTN71	Thermostatic actuator		with remote sensor	
RTN81	BPZ:RTN81			with remote adjuster	
SSA118.09HKN	S55180-A111	Electromotive actuators		DC 24 V	A6V11858280
SSA131.00	S55180-A106			AC 24 V	A6V11858276
SSA151.05H	S55180-A110			AC / DC 24 V	A6V11858278
SSA161.05	S55180-A107				A6V11858276
SSA161.05HF	S55180-A108				A6V11858278
SSA161E.05HF	S55180-A109				
SSA31	BPZ:SSA31			AC 230 V	N4893
SSA331	S55180-A105				A6V11858276
SSA61	BPZ:SSA61			AC / DC 24 V	N4893
SSA81	BPZ:SSA81			AC 24 V	
SSA911.02ZB	S55181-A105		Wireless radiator valve actuator, works with SIEMENS Connected Home	Batteries (1.5 V / AA)	A6V13722083
SSA955	BPZ:SSA955	RF-controlled actuator for radiator valves, Synco 900	Batteries (LR6 / AA)	N2700	
STA121.40L10	S55174-A219	Electrothermal actuators	AC/DC 24 V	A6V14028280	
STA121.65/00	S55174-A211				
STA121.65H20	S55174-A208				
STA121.65L10	S55174-A201				
STA121.65L20	S55174-A205				
STA126.40L10	S55174-A225				
STA161.40L10	S55174-A222				
STA161.65L10	S55174-A219		AC 24 V		

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
STA162.65L10	S55174-A216			AC/DC 24 V	
STA321.40L10	S55174-A218			AC 230 V	
STA321.65/00	S55174-A210				
STA321.65H20	S55174-A209				
STA321.65L10	S55174-A200				
STA321.65L20	S55174-A204				
STA326.40L10	S55174-A224				
STP121.40L10	S55174-A221			AC/DC 24 V	
STP121.65/00	S55174-A213				
STP121.65L10	S55174-A203				
STP121.65L20	S55174-A207				
STP161.40L10	S55174-A223			AC 24 V	
STP161.65L10	S55174-A215				
STP162.65L10	S55174-A217			AC/DC 24 V	
STP321.40L10	S55174-A220			AC 230 V	
STP321.65/00	S55174-A212				
STP321.65L10	S55174-A202				
STP321.65L20	S55174-A206				

Valves

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
VDN110	BPZ:VDN110	Radiator valves	$\frac{3}{8}$	straight, DIN	N2105
VDN115	BPZ:VDN115		$\frac{1}{2}$		
VDN120	BPZ:VDN120		$\frac{3}{4}$		
VDN210	BPZ:VDN210		$\frac{3}{8}$	straight, NF	N2106
VDN215	BPZ:VDN215		$\frac{1}{2}$		
VDN220	BPZ:VDN220		$\frac{3}{4}$		
VEN110	BPZ:VEN110		$\frac{3}{8}$	angle, DIN	N2105
VEN115	BPZ:VEN115		$\frac{1}{2}$		
VEN120	BPZ:VEN120		$\frac{3}{4}$		
VEN210	BPZ:VEN210		$\frac{3}{8}$	angle, NF	N2106
VEN215	BPZ:VEN215		$\frac{1}{2}$		
VEN220	BPZ:VEN220		$\frac{3}{4}$		
VUN210	BPZ:VUN210	$\frac{3}{8}$	reverse angle, NF		
VUN215	BPZ:VUN215	$\frac{1}{2}$			
VPD110A-135	S55264-V165	Radiator valves PICV (2-port)	$\frac{3}{8}$	2-port DIN 215 D	A6V13089932
VPD115A-135	S55264-V166		$\frac{1}{2}$		

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
VPD120A-135	S55264-V167		¾	2-port, DIN 215 F	
VPD210A-135	S55264-V173		¾		
VPD215A-135	S55264-V174		½		
VPD220A-135	S55264-V175		¾		
VPE110A-135	S55264-V168	Radiator valves PICV (Angle)	¾	2-port DIN 215 D	
VPE115A-135	S55264-V169		½		
VPE120A-135	S55264-V170		¾		
VPE210A-135	S55264-V176		¾	2-port, DIN 215 F	
VPE215A-135	S55264-V177		½		
VPE220A-135	S55264-V178		¾		
VPU110A-135	S55264-V171	Radiator valves PICV (Axial)	¾	2-port DIN 215 D	
VPU115A-135	S55264-V172		½		

Accessories

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
ADN10	BPZ:ADN10	Radiator lockshield valves	¾	2-port	N2107
ADN15	BPZ:ADN15		½		
ADN20	BPZ:ADN20		¾		
AEN10	BPZ:AEN10		¾	angle	
AEN15	BPZ:AEN15		½		
AEN20	BPZ:AEN20		¾		
ALE10	BPZ:ALE10	Electronic Δp manometer, 7 bar	M30 × 1.5	-	A6V13089932
ALE12	S55264-V188	Tool for measuring differential pressure, Adapter with tube			
ASA04H	S55845-Z304	Adapters for third-party radiator valves			
ASA10	S55845-Z305				
ASA26	S55845-Z299				
ASA59	S55845-Z300				
ASA72	S55845-Z301				
ASA78	S55845-Z302				
ASA80	S55845-Z303				
ATN4	BPZ:ATN4				Manual adjuster
ATN6	S55264-V187			A6V13089932	
AV52	BPZ:AV52	Adapters for third-party radiator valves	M28 × 1.5		N2100
AV53	PBZ:AV53		-		
AV54	PBZ:AV54				
AV55	PBZ:AV55				

Type	Stock number	Brief description	Thread Inch ¹⁾	Technical design	Data sheet
AV57	PBZ:AV57		M28 x 1.5		
AV58	PBZ:AV58		M30 x 1.5		
AV59	PBZ:AV59		-		
AV60	PBZ:AV60		M28 x 1.5		
AV61	PBZ:AV61				
AVN15-15	BPZ:AVN15-15	Compression fittings for copper and soft steel pipes	½	Connection, valve side Tube ø 15 mm	
AVN15A16 ²⁾	BPZ:AVN15A16	Compression fittings for plastic pipes with aluminum foil		Connection, valve side Tube ø 16 x 2 mm	

¹⁾ Connection, valve side

²⁾ Phased-out model

Technical notes

NO, NC valves

NO valves	<ul style="list-style-type: none"> Valve is opened when de-energized (Normally Open) The valve stem is fully extended Radiator valves such as VDN., VEN., VUN., VPD., VPE.. or VPU.. are normally NO valves.
NC valves	<ul style="list-style-type: none"> Valve is closed when de-energized (Normally Closed) The valve stem is fully extended Small valves such as V..P47.. are normally NC valves.

Valve and actuator combination

NO function	<ul style="list-style-type: none"> Actuator stem is retracted when de-energized. Valve is open.
NC function	<ul style="list-style-type: none"> Actuator stem is extended when de-energized. Valve is closed.

RTN..

Thermostatic RTN.. actuators control heat demand. They control the water flow by opening and closing the radiator valves.

- The actuator stem retracts as heat demand increases and steadily opens the radiator valve.
- The actuator stem extends as heat demand decreases and steadily closes the radiator valve.

STA..

Radiator valves (NO valves)	STA.. De-energized actuator
<ul style="list-style-type: none">• VDN.., VEN.., VUN..• VPD.., VPE.., VPU..	closed (NC function)

SSA..

The electromotive actuator is driven by a DC 0...10 V (SSA61) positioning signal or 3-position signal (SSA31, SSA81). The description of operation in this document applies to the valve versions which are fully open when de-energized (NO).

3-position control signal

- Voltage at Y1: Stem retracts: Valve opens
- Voltage at Y2: Stem extends: Valve closes
- No voltage at Y1 and Y2: Actuator maintains its current position

DC 0...10 V

- The valve opens / closes in proportion to the control signal at Y.
- At DC 0 V, the valve is fully closed.
- The actuator maintains its current position when power is switched off.

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