

**AXT201, 211: Thermal actuator for unit valves, with stroke indicator****How energy efficiency is improved**

Safe operation within the scope of efficient closed-loop control

**Areas of application**

Operating through and 3-way unit valves of the VUL, BUL, VXL and BXL series or other popular makes of unit valves. For controllers with a switching output, 2-point control quasi-continuous control with 'pulse-pause' signal, in combination with intelligent unitary control systems.

**Features**

- Easy to fit onto the valve using the Low-Force-Locking® (LFL) connector
- Fitted to valve via M30 x 1.5 thread with automatic adaptation
- Pushing force up to 125 N
- With 230 V or 24 V thermal expansion element
- Large, tangible and visible position indicator
- NC (normally closed) and NO (normally open) versions (with and without auxiliary contacts)
- Version with manual adjuster
- Silent and maintenance-free
- With modular plug for electrical connection (with various functions, cable lengths and cable types)
- Modern design

**Technical description**

- Housing made of high-quality, self-extinguishing plastic, pure white (RAL 9010) or jet black (RAL 9005), high-gloss finish (fire protection according to EN 60695-2-11, EN 60695-10-2)
- Connected to valve with plastic bayonet connection
- Bayonet nuts for connection to popular valves with threads M30 x 1.5 (black, included) M28 x 1.5 (grey) or M30 x 1.0 (white)
- Incl. white or black power cable, standard length 1 m, H03..., PVC or halogen-free, Ø 0.5 mm
- Run time for 'warm-up' for 4.5 mm stroke at 21 °C: min. 3.5 minutes (230 V), min. 4.5 minutes (24 V)
- Installation position: any, including upside-down

**Products**

Type	Power supply	Max. stroke (mm)	Closing force <sup>1)</sup> (N)	NC/NO	Min. run-time (min)	Weight (kg)
<b>White version, neutral, incl. bayonet nut M30 x 1.5, cable 1 m, pack of one</b>						
AXT201F110	230 V	4.5	90	NC	3.5	0.18
AXT201F112	24 V	4.5	90	NC	4.5	0.18
<b>White version, incl. bayonet nut M30 x 1.5, cable 1 m, pack of one</b>						
AXT211F110	230 V	4.5	115	NC	3.5	0.18
AXT211F210	230 V	4.5	110	NO	3.5	0.18
AXT211F112	24 V	4.5	115	NC	4.5	0.18
AXT211F212	24 V	4.5	110	NO	4.5	0.18
<b>Black version, incl. bayonet nut M30 x 1.5, cable 1 m, pack of one</b>						
AXT211F110B	230 V	4.5	115	NC	3.5	0.18
AXT211F112B	24 V	4.5	115	NC	4.5	0.18
<b>White version, with auxiliary contacts, incl. bayonet nut M30 x 1.5, cable 1 m, pack of one</b>						
AXT211HF110	230 V	4.5	115	NC	3.5	0.21
AXT211HF210	230 V	4.5	110	NO	3.5	0.21
AXT211HF112	24 V	4.5	115	NC	4.5	0.21
AXT211HF212	24 V	4.5	110	NO	4.5	0.21
<b>White version, with manual adjuster, incl. bayonet nut M30 x 1.5, cable 1 m, pack of one</b>						
AXT211F110M	230 V	4.5	115	NC	3.5	0.18
AXT211F112M	24 V	4.5	115	NC	4.5	0.18
<b>White version, packing unit 50 pcs., incl. 50 bayonet nuts M30 x 1.5, without cable</b>						
AXT211F190	230 V	4.5	115	NC	3.5	0.10
AXT211F192	24 V	4.5	115	NC	4.5	0.10

1) Closing force in combination with SAUTER valves

Products (continued)

Type	Power supply	Max. stroke (mm)	Closing force <sup>1)</sup> (N)	NC/NO	Min. run-time (min)	Weight (kg)
<b>White version, incl. bayonet nut M30 x 1.5, without cable, pack of one</b>						
AXT211F100	230 V	4,5	115	NC	3,5	0,10
AXT211F200	230 V	4,5	110	NO	3,5	0,10
AXT211F102	24 V	4,5	115	NC	4,5	0,10
AXT211F202	24 V	4,5	110	NO	4,5	0,10
<b>Black version, incl. bayonet nut M30 x 1.5, without cable, pack of one</b>						
AXT211F100B	230 V	4,5	115	NC	3,5	0,10
AXT211F102B	24 V	4,5	115	NC	4,5	0,10

Technical data

Electrical supply

Power supply	230 V ~ ±15%	24 V -/± ±20%
	50...60 Hz	50...60 Hz
Power consumption		
during operation	2.5 W	3 W
Activation power	approx. 40 W / 40 VA	5 W / 5 VA
Activation current	150 mA	220 mA

Closing force in closing-dimension range

NC AXT201 (8.5...13.5 mm)	84...102 N ±5 N
NC AXT211 (8.5...13.5 mm)	108...122 N ±5 N
NO AXT211 (12.5...17.5 mm)	110 N ±5 N

Permitted ambient conditions

Operating temperature	0...50 °C
Storage and transport temperature	-25...70 °C

Permitted ambient conditions (continuation)

Humidity	< 85% rh, no condensation
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Standards, guidelines and directives

Protection type	IP 54 (EN 60730-1, -2, -14)
Protection class (230 V)	II (EN 60730-1)
Protection class (24 V)	III (EN 60730-1)

Additional information

Fitting instructions	
with auxiliary contacts	MV P100002547
Material declaration	MD 55.100/M/HK
Dimension drawing	<a href="#">M10503</a> , <a href="#">M11422</a>
Wiring diagram	<a href="#">A10525</a> , <a href="#">A10524</a>
with auxiliary contacts	<a href="#">A10560</a>

Accessories

Type	Description
<b>Connectors with different cable lengths for thermal actuator</b>	
0550602801	Connector with 0.8 m cable, white, PVC H03VV, Ø 0.50 x 2
0550602011	Connector with 1 m cable, white, PVC H03VV, Ø 0.50 x 2
0550602011B	Connector with 1 m cable, black, PVC H03VV, Ø 0.50 x 2
0550602021	Connector with 2 m cable, white, PVC H03VV, Ø 0.50 x 2
0550602021B	Connector with 2 m cable, black, PVC H03VV, Ø 0.50 x 2
0550602032	Connector with 3 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602032B	Connector with 3 m cable, black, PVC H05VV, Ø 0.75 x 2
0550602042	Connector with 4 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602052	Connector with 5 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602052B	Connector with 5 m cable, black, PVC H05VV, Ø 0.75 x 2
0550602062	Connector with 6 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602072	Connector with 7 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602102	Connector with 10 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602102B	Connector with 10 m cable, black, PVC H05VV, Ø 0.75 x 2
0550602152	Connector with 15 m cable, white, PVC H05VV, Ø 0.75 x 2
0550602152B	Connector with 15 m cable, black, PVC H05VV, Ø 0.75 x 2
0550602013	Connector with 1 m halogen-free cable, white, Hal F H05Z1Z1, Ø 0.50 x 2
0550602023	Connector with 2 m halogen-free cable, white, Hal F H05Z1Z1, Ø 0.75 x 2
0550602053	Connector with 5 m halogen-free cable, white, Hal F H05Z1Z1, Ø 0.75 x 2
0550602103	Connector with 10 m halogen-free cable, white, Hal F H05Z1Z1, Ø 0.75 x 2

<b>Connectors with integrated auxiliary contacts</b>	
0550484111	Connector, white with integrated auxiliary contacts for NC actuator, 1 m cable, PVC H03VV, Ø 0.5 x 4
0550484121*	Connector, white with integrated auxiliary contacts for NC actuator, 2 m cable, PVC H03VV, Ø 0.5 x 4
0550484121B	Connector, black with integrated auxiliary contacts for NC actuator, 2 m cable, PVC H03VV, Ø 0.5 x 4
0550484211	Connector, white with integrated auxiliary contacts for NO actuator, 1 m cable, PVC H03VV, Ø 0.5 x 4
0550484221*	Connector, white with integrated auxiliary contacts for NO actuator, 2 m cable, PVC H03VV, Ø 0.5 x 4
<b>Plug with integrated LED, lights up in blue</b>	
0550120022	White plug with integrated LED, lights up in blue, cable 2 m, PVC H03VV, Ø 0.5 x 2
0550120052	White plug with integrated LED, lights up in blue, cable 5 m, PVC H03VV, Ø 0.75 x 2
<b>Adaptors &amp; adaptor sets</b>	
0550390001	Raised bayonet nut, M30 x 1.5 (black), with N (standard, black) and S (reduced, white) insert, for all valves with M30 x 1.5 thread plus corner valves or valves with measurement fitting. Dimensions of actuator +5 mm. Closing dimension depending on use: NC 4.5 mm to 18.5 mm and NO 8.5 mm to 22.5 mm
0550390101	Raised bayonet nut, M28 x 1.5 (grey), with N (standard, black) and S (reduced, white) insert, for all valves with M28 x 1.5 thread plus corner valves or valves with measurement fitting. Dimensions of actuator +5 mm. Closing dimension depending on use: NC 4.5 mm to 18.5 mm and NO 8.5 mm to 22.5 mm, e.g. Pettinaroli
0550390201	Raised bayonet nut, M30 x 1.0 (white), with N (standard, black) and S (reduced, white) insert, for all valves with M30 x 1.0 thread plus corner valves or valves of various makes. Dimensions of actuator +5 mm. Closing dimension depending on use: NC 4.5 mm to 18.5 mm and NO 8.5 mm to 22.5 mm, e.g. Oventrop (old), Beulco (old)
0550393004	Adaptateur pour montage sur vanne Danfoss type RA 2000, 22 mm
0550393002	Adaptor for fitting to Danfoss valves type RAVL, 26 mm
0550393003	Adaptor for fitting to Danfoss valves type RAV, 34 mm
0550394001	Adaptor for fitting to Giacomini valves type R450, R452, R456 and programme 60
0550399001	Adaptor set consisting of raised bayonet nut, black, M30 x 1.5 (all makes, M30 x 1.5), raised bayonet nut, grey M28 x 1.5 (all makes, M28 x 1.5), raised bayonet nut, white M30 x 1.0 (e.g. Oventrop, Beulco), 2x insert N (black) and 2x insert S (white), Danfoss adaptor RA 2000 (Ø 22 mm), Giacomini adaptor
0550395001	Adaptor set comprising: 10 pcs M28 x 1.5 raised with labelling
<b>Connectors with continuous actuation (for 24 V version only)</b>	
0550423121	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 2 m cable, white, PVC H03, Ø 0.22 x 3
0550423121B	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 2 m cable, black, PVC H03, Ø 0.22 x 3
0550423221	Continuous activation <b>NO</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 2 m cable, white, PVC H03, Ø 0.22 x 3
0550423221B	Continuous activation <b>NO</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 2 m cable, white, PVC H03, Ø 0.22 x 3
0550423151	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 5 m cable, white, PVC H03, Ø 0.22 x 3
0550423151B	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 5 m cable, black, PVC H03, Ø 0.22 x 3
0550423251	Continuous activation <b>NO</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 5 m cable, white, PVC H03, Ø 0.22 x 3
0550423171	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 7 m cable, white, PVC H03, Ø 0.22 x 3
0550423171B	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 7 m cable, white, PVC H03, Ø 0.22 x 3
0550423271	Continuous activation <b>NO</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 7 m cable, white, PVC H03, Ø 0.22 x 3
0550423123	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 2 m halogen-free cable, white, H03, Ø 0.22 x 3
0550423153	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 5 m halogen-free cable, white, H03, Ø 0.22 x 3

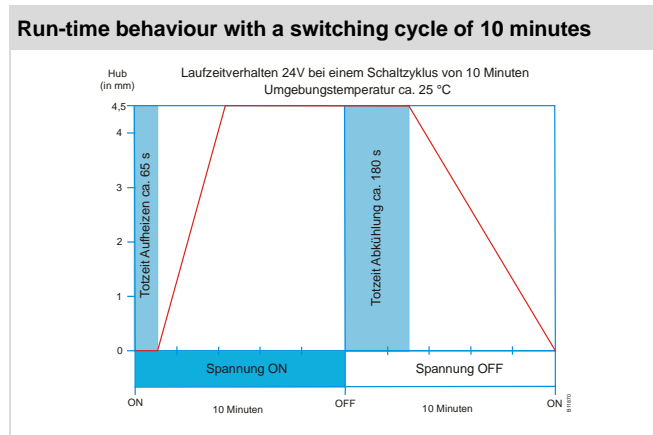
0550423173	Continuous activation <b>NC</b> can be set: 0 (2)...10 / 10...0 (2) V, split range 0...4.5 V or 5.5...10 V, for stroke of 4.5 mm or 3.2 mm, 7 m halogen-free cable, white, H03, Ø 0.22 x 3
	<b>Miscellaneous</b>
0550240 001	Disassembly protection, white for AXT201/211 and AXS215 (prevents unauthorised disassembly of plug and actuator)

\*) Wiring diagram available using the same number

**Operation**

The actuator has an electrically heated expansion element which transfers its stroke directly to the attached valve. It works silently and is maintenance-free. If, when it is cold (ambient temperature of about 21°C), the heating element is turned on, the valve begins opening after a warming-up time of about 1.5 min (230 V and 24 V versions). After an additional period of approx. 2.5 min. (230 V) or 3 min. (24 V), the valve has carried out a stroke of 4.5 mm. If the heating element is turned off, the expansion element cools, and the valve is closed by spring force.

Quasi-continuous control is achieved by using a 'pulse-pause' timing signal, which causes a periodic open/closed position.



The runtime behaviour for the 230 V version is slightly shorter than the 24 V version, taking 2.5 min. (to achieve a stroke of 4.5 mm).

The thermal SAUTER actuators are suitable for efficient controls with medium-inertia systems, such as radiators or chilled beams and radiant cooling ceilings, as well as for inert systems, such as panel heating and cooling systems or thermo-active building systems (TABS). With the proper control strategy, the actuators contribute to energy savings.

The following control strategies are recommended:

- Medium-inertia systems: quasi-continuous control with pulse width modulation, PWM period > 14 min.
- Inert systems: quasi-continuous control with pulse width modulation, PWM period > 27 min.
- Alternatively: 2-point control

**Control with thermal actuator**

**Controller type**

For control with AXT2, there are basically two options: the quasi-continuous and discontinuous (2-point) controller. The quasi-continuous controller can be used whenever the section has linear behaviour, as is usually the case with room temperature control. The control performance using a quasi-continuous controller is better than with a discontinuous controller.

Discontinuous controllers (2-point) are recommended for control of non-linear sections.

Continuous control is not possible with AXT2 actuators; AXS215S and AXM117S actuators exist for this purpose.

**Position control**

The ability to move to any desired position of the AXT2 actuator cannot be ensured with a controller. Only the actuator positions

“extended” and “retracted” are ensured with a controller, so this actuator is also called a 2-point actuator.

**Energy limiter**

The AXT2 can consume more energy than needed for opening. The result is that the cooling and thus the closing time are increased unnecessarily. There should be an element between the controller output terminal and the actuator that ensures that the supplied energy is limited. Reduction of the supplied energy helps shorten the closing time. This element is called an energy limiter and is independent of the controller parameters. The only dependency arises through the ambient temperature of the AXT2. Consequently, fixed parameters can be set for the energy limiter and used unchanged for each controller setting. (For more details on the energy limiter, see the manual SAUTER AXT211 Control Guidelines – 7010082001)

**Definition of NC and NO**

**NC version (normally closed)**

After the actuator has been installed, the VUL/BUL valves or normal commercial radiator valves are closed when idle. When power is applied to the actuator, the actuator spindle retracts, so the valve stem extends and opens the valve.

Valve status when actuator is without power: closed.

**NO version (normally open)**

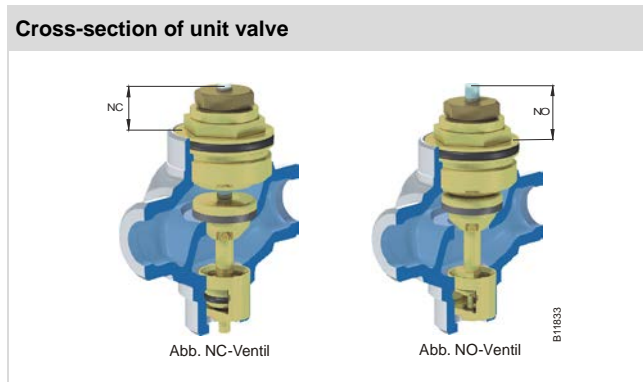
After the actuator has been installed, the VUL/BUL valves or normal commercial radiator valves are open when idle. When power is applied to the actuator, the actuator spindle extends, thereby pressing the valve stem and closing the valve.

Valve status when actuator is without power: open.

**Closing dimension definition**

**NC version (normally closed)**

The closing dimension of a valve is the distance between the face of the stem (pushed in with pre-tension of < 100 N) and contact surface of the lower thread. The actuator or the bayonet nut supports itself on this surface.



**NO version (normally open)**

The closing dimension of a valve is the distance between the face of the stem (not pushed in) and the contact surface of the lower thread. The actuator or the bayonet nut supports itself on this surface.

**Installation**

Thanks to the Low-Force-Locking® (LFL) technology, no force is needed in order to fit the actuator to the valve. If the actuator is removed from the valve, the closing dimension and the pre-tension are relieved again. The actuator returns to the ex-works condition and can be refitted with LFL functionality.

First screw the bayonet nut to the valve and tighten with 2 N. Then fit the actuator to the valve, using no force. Three grooves on the actuator ring indicate the correct position opposite the three ribs on the bayonet nut. Turn the bayonet ring clockwise until a click is heard. The valve plug is pre-tensioned. When a second click is heard, the actuator is operable. This position is the safety position to prevent slackening caused by vibrations.

Whilst the bayonet nut is being rotated, the actuator adapts itself to the closing dimension of the valve.

For the NO version to work properly, the pressure spring in the valve should have a force of  $F_v \geq 30$  N. Furthermore, the NO version should not be removed from the valve until it has cooled down.

**Closing dimension compensation**

The closing dimension compensation is mechanical. Whilst the bayonet nut is being rotated, the compensation pin in the actuator is released. On the NC version, a force is exerted on the valve stem (locked condition) with a minimum force of 105 N (AXT211) and 90 N (AXT201) by the built-in spring. The closing dimension is therefore set between this compensation pin and the compensation sleeve and fixed by toothing. The toothing is designed such that the compensation pin automatically engages in the next row of teeth further down. This ensures that there is always pre-tension acting on the valve cone, making the valve close reliably. Valves may leak due to ageing or because the cone seal has become defective. Simply slacken the bayonet ring and turn it clockwise again until two clicks are heard. The actuator has taken on the new closing dimension and the valve is sealed again. On the NO version, the compensation pin positions itself without force on the valve stem.

**Closing dimension compensation (normally closed)**

If the standard bayonet nut that is provided is used, the actuator can compensate for a closing dimension of 8.5 mm to 13.5 mm.

**Closing dimension compensation (normally open)**

If the standard bayonet nut that is provided is used, the actuator can compensate for a closing dimension of 12.5 mm to 17.5 mm.

**Closing dimension compensation with raised bayonet nut**

The raised bayonet nut is used if the diameter of the standard bayonet nut of 42.5 mm cannot be fitted, e.g. with corner valves or valves with measuring brackets or distributors for underfloor heating. The above-mentioned standard closing dimension is attained when the raised bayonet nut is combined with the insert N (normal, black). If the raised bayonet nut is combined with the insert S (reduced, white), the closing dimension is reduced by 5 mm. If the raised bayonet nut without insert is combined with the valve, the closing dimension is raised by 5 mm:

<b>Closing dimension</b>				
NC (mm)	4,5...9,5	8,5...13,5	8,5...13,5	13,5...18,5
NO (mm)	8,5...13,5	12,5...17,5	12,5...17,5	17,5...22,5
<b>Bayonet nut</b>				
	<b>Raised</b>	<b>Standard</b>	<b>Raised</b>	<b>Raised</b>
M30 x 1,5 <sup>1)</sup>	Yes, black	Yes, black	Yes, black	Yes, black
M28 x 1,5 <sup>1)</sup>	Yes, grey	Yes, grey	Yes, grey	Yes, grey
M30 x 1,0 <sup>1)</sup>	Yes, white		Yes, white	Yes, white
N-/S-Insert	S (reduced, white)	not required	N (standard, black)	no Insert

<sup>1)</sup> Valve thread

**Position indicator**

The cover acts as the largest-possible position indicator. It is visible in all directions and is noticeable in dark installation locations.

On the 'normally closed' version, the cover rises and the grey stroke part becomes visible. At full stroke, the cover stands up to 5 mm above the upper edge of the plug.

On the 'normally open' version, the cover falls until it is at the same level as the upper edge of the plug. The grey lower part is no longer visible.

**Version with manual adjuster**

The version with manual adjuster is available only with the 'normally closed' function. The valve can be opened manually using the manual adjusting facility. Two positions are available: a stroke of approx. 2.4 mm and approx. 3.3 mm. This is not automatically reset when the actuator is actuated. The actuator must be reset to automatic manually. The valve can be secured in the closed position by removing the connecting plug.

This function ensures that operation is not interrupted in the event of a power failure, and makes it possible to rinse and vent the system during commissioning when there is no mains supply.

**Modular plug module for changing the type**

The actuator gets its type function from the plug used, i.e. the basic unit remains unchanged with regard to its basic operation, which offers some advantages. For instance, after it has been used in one way, the actuator can be converted into a new type at a later stage. To do so, it is necessary merely to fit the new type plug onto the lower part of the housing and, if need be, an additional part onto the stroke part. Before fitting, it should be checked that the plug module and the actuator are compatible with respect to the power supply.

The following changes are possible:

- Two-point type into the type with auxiliary contacts and vice versa.
- Two-point type into the type with continuous 0...10 V and vice versa (24 V only).

The following changes are not possible:

- Type with auxiliary contacts to continuous type (because of the cam, which cannot be removed after fitting).
- Continuous type (due to metal part on the travel-measuring system that cannot be removed after fitting) to type with auxiliary contacts.

The plug module can be removed by hand from the actuator by pressing (at about 30 N), without having to use any tools.

**Engineering and fitting notes**

The starting current of the heating element must be taken into account when choosing the switching contacts and the mains fuses. In order to adhere to the technical specifications, the voltage loss due to the electric wires should not exceed 10%.

The light-blue wire should not be switched and must be connected locally with the neutral wire. The controller must always switch the brown wire.

**Standards and directives**

The actuator is tested to standards, i.e. the necessary EN standards (see table) are taken into account.

The area of use of the devices determines the correct choice of power cable. Cables of type H03 are suitable for use in the home, such as underfloor heating/cooling. Cables of type H05 are suitable for applications in the home, in shops, in industry and agriculture. For the electrical installation, the applicable building installation standards must be observed.

**CE conformity**

	230 V	24 V
Electrical safety 2006/95/EC		
Devices (with cable type H03)	EN 60335-1	
Devices (with cable type H05)	EN 60730-1, -2, -14	
EMC Directive 2004/108/EC	EN 61000-6-1 / EN 61000-6-2 EN 61000-6-3 / EN 61000-6-4	

**Accessories**

**Auxiliary contacts**

The auxiliary contacts (which are available as an accessory for subsequent fitting) can be used to switch, for instance, a circulation pump or a heat meter. The auxiliary contacts cut in at between 35% and 50% stroke. The rating of these auxiliary contacts is 3 A for resistive load and 2 A for inductive load. The rating for d.c. is: 4...30 V, 1...100 mA, 1 A, 48 V=.

The circuits for the auxiliary contacts and the actuator must come from the same phase. It is not permitted to apply 400 V~ to the 4 x 0.5 mm<sup>2</sup> cable. Different circuits, such as low and extra-low voltage, should not be operated on this cable.

Before the plug is fitted, the cam should be clicked in the actuator. This cam can not be removed again. It is still possible, however, to fit a 2-point plug subsequently, if needed.

Accessory for NC (normally closed) operation:

When the actuator opens, the internal contacts close. If normally closed contacts are needed, an accessory (normally open auxiliary contacts) can be used. These contacts open when the actuator opens.

Accessory for NO (normally open) operation:

When the actuator falls, the internal contacts close. If normally closed contacts are needed, an accessory (normally closed auxiliary contacts) can be used. These contacts open when the actuator falls.


**LED indicator**

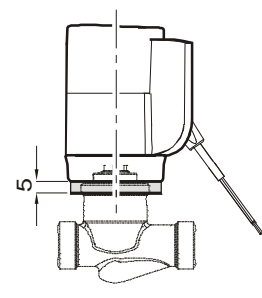
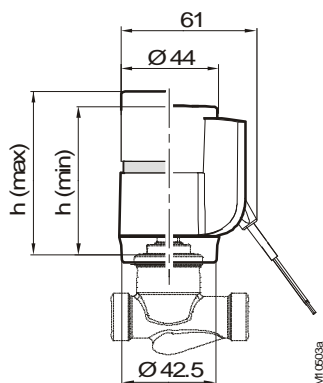
The blue LED indicates the activation of the actuator, as it lights up synchronously with the 2-point control signal. It is helpful during commissioning and maintenance.

**Disassembly protection**

The disassembly protection consists of a sleeve that is fitted to the actuator. When this sleeve is closed, it can be removed only by destroying it. The disassembly protection prevents the actuator from being removed from the valve and the electrical plug from being disassembled. The position indicator remains visible and tangible.

**Dimension drawing**

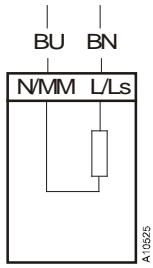
	h (min.)	h (max.)
NC	59	66
NO	59	64
	66,5	73,5



**Accessory**  
055090\*01

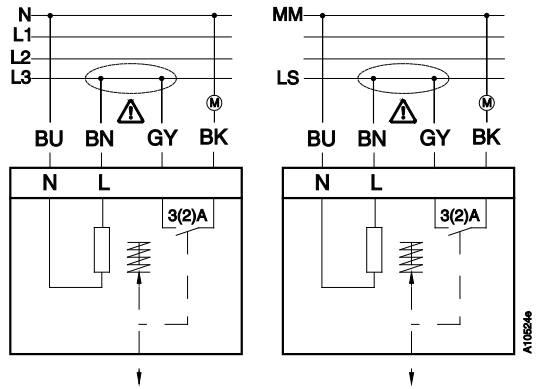
Wiring diagram

AXT201/AXT211



BN	BU	BK	GY
Braun	Blau	Schwarz	Grau
Brown	Blue	Black	Grey
Brun	Bleu	Noir	Gris

Accessory 0550484\*\*\*



Accessory 05501200\*2

