



ABB i-bus® EIB / KNX

Thermoelectric Valve Drive

TSA/K 230.1, TSA/K 24.1



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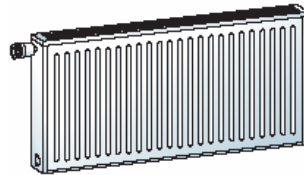


Application

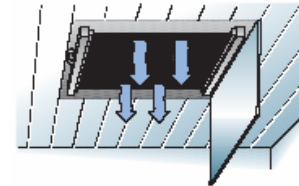


- Opens and closes valves in HVAC systems, e.g.:

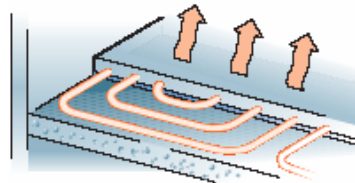
Radiators



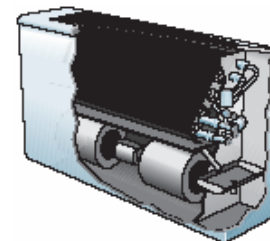
Cooling Ceilings



Floor Heatings



Fan-Coil Units



Device and Accessory

- Thermoelectric Valve Drive TSA/K



- TSA/K 230.1 (230 V)

- TSA/K 24.1 (24 V)

- Valve Adapter VA/Z for all common valves



- VA/Z 10.1



- VA/Z 50.1

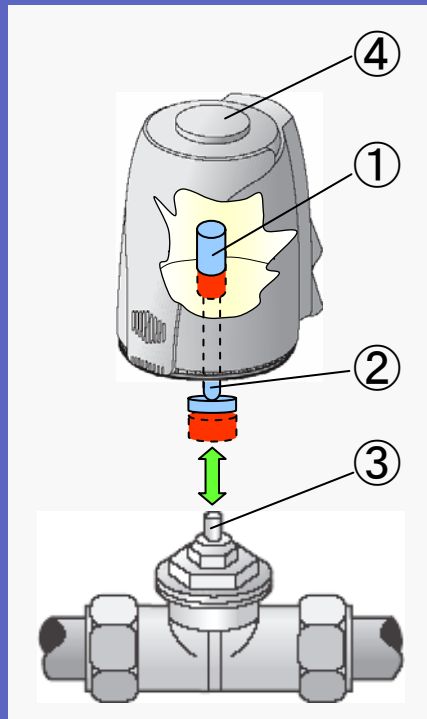


- VA/Z 78.1



- VA/Z 80.1

Function



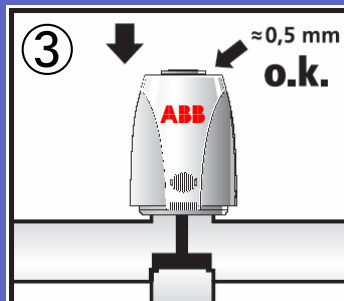
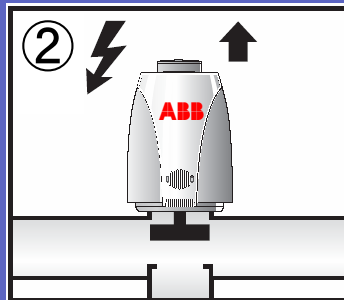
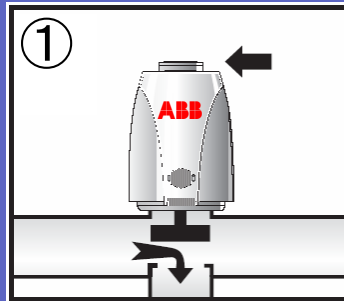
- The resistor-heated elastic element ① is heated and expands by applying the operating power
- The integrated ram ② performs the adjustment travel
- The adjustment travel (approx. 4 mm) is transformed to the valve lifter ③
- The valve will be opened or closed.
The function display ④ shows valve status

Data I



- Two versions:
 - TSA/K 230.1 (230 V AC)
 - TSA/K 24.1 (24 V AC/DC)
- Normally Closed (NC)
- Improved over voltage protection (2.5 KV)
- 360° mounting **NEW!**
- 100 % water protection (IP 54) **NEW!**
- Mounting and demounting without tools
- Pluggable connection cable (1 m)
- Demounting protection

Data II



■ First-Open function

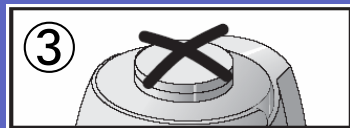
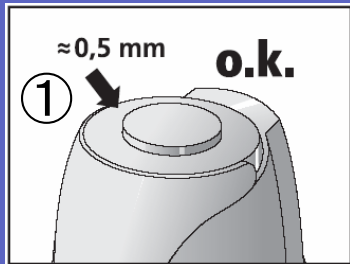
Enables heating operation even when the electric wiring is not yet complete

① Delivery state normally open

② First-Open function will be unlocked after applying the operating voltage (> 6 min.)

③ The Valve Drive is fully operable

Data III



■ Adjustment-control

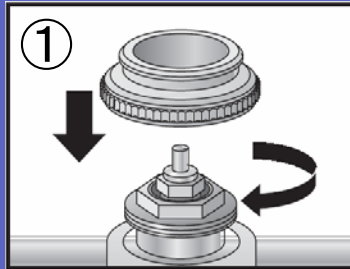
To control adjustment TSA/K ↔ VA/Z

① With the proper Valve Adapter the function display is approx. 0.5 mm extended (after First-Open function is unlocked)

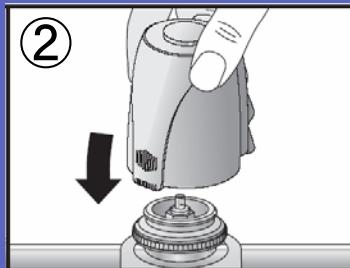
② ③ False Valve Adapter

⚠ Important: Chose Valve Adapter properly!

Mounting



- ① Screw Valve Adapter VA/Z on valve base

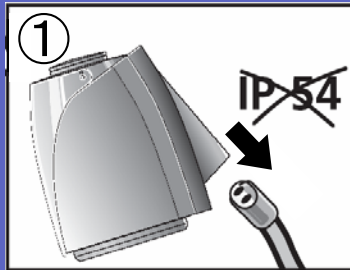


- ② Snap-on TSA/K on Valve Adapter



- ③ Plug connection cable into TSA/K and remove demounting clip

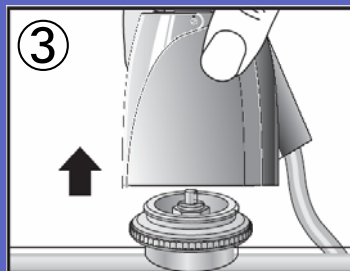
Demounting



① Remove connection cable



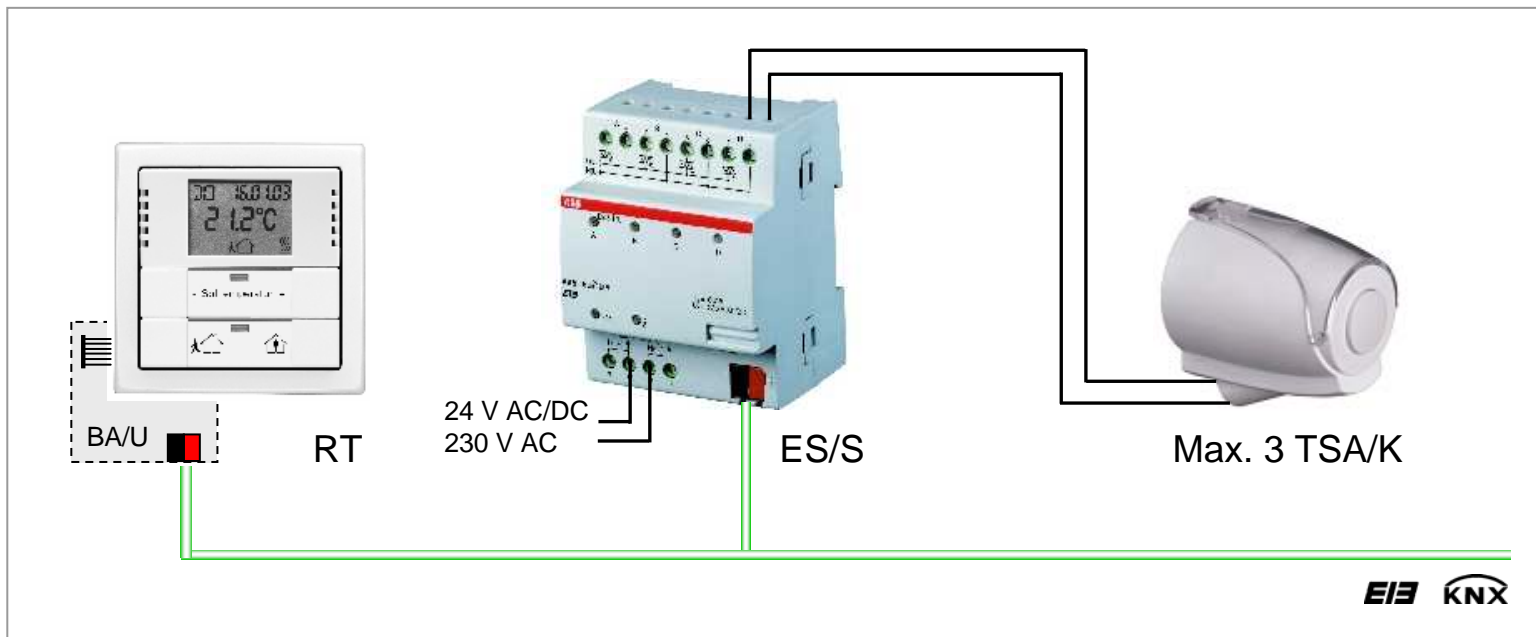
② Press demounting clip



③ Remove Valve Drive TSA/K

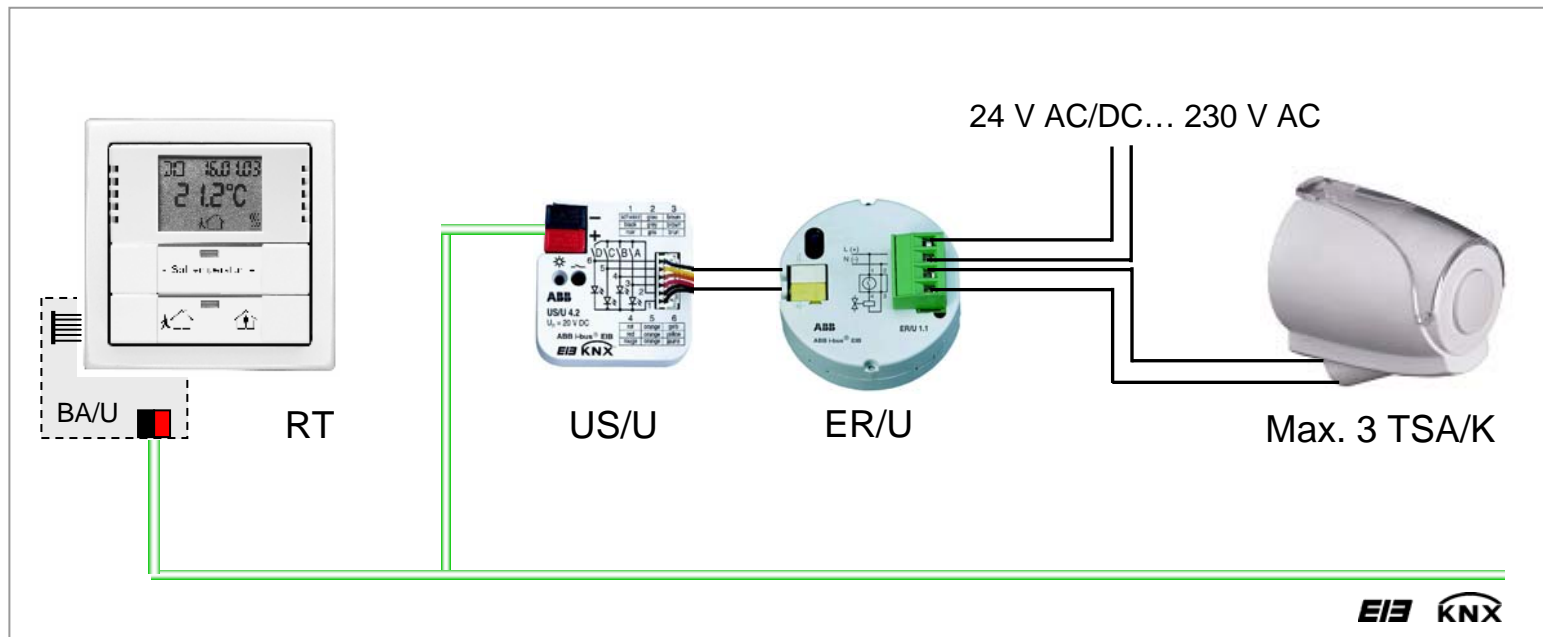
Control

- With Room Thermostat and Electronic Switch Actuator ES/S



Control

- With Room Thermostat, Universal Interface US/U and Electronic Relay ER/U



Ordering Details



Type	Designation	Order-No.
TSA/K 230.1	Thermoelectric Valve Drive, 230 V	2CDG 120 007 R0011
TSA/K 24.1	Thermoelectric Valve Drive, 24 V	2CDG 120 008 R0011

Accessory

VA/Z 10.1	Valve Adapter (M 30 x 1.5) for KaMo, Dumser, Chronatherm, Vescal	2CDG 120 009 R0011
VA/Z 50.1	Valve Adapter (M 30 x 1.5) for Reich Honeywell, Cazzaniga, Landis & Gyr., MNG	2CDG 120 010 R0011
VA/Z 78.1	Valve Adapter (Flange) for Danfoss RA	2CDG 120 011 R0011
VA/Z 80.1	Valve Adapter (M 30 x 1.5) for Herb, Heimeier, Onda, Schlösser (from 93), Oventrop	2CDG 120 012 R0011

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