

Smart Valve[®]

The radiator valve without a battery
and power connection



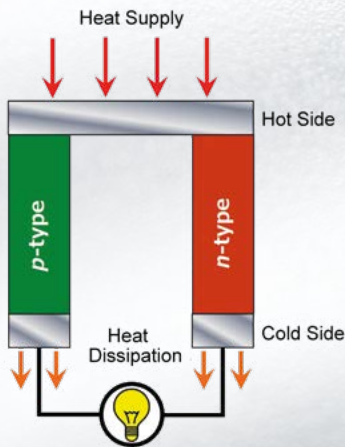
Smart Valve

ENERGY SELF-SUFFICIENT AND INNOVATIVE

The SmartValve electronic radiator valve eliminates the need to change batteries and lay cables. It produces the electrical energy it needs for operation itself. Maintenance is thus unnecessary. The system can be perfectly integrated into smart home solutions on demand. The smartphone then acts as a control centre. The conversion to the energy self-sufficient radiator valve is very easy.

TECHNOLOGY

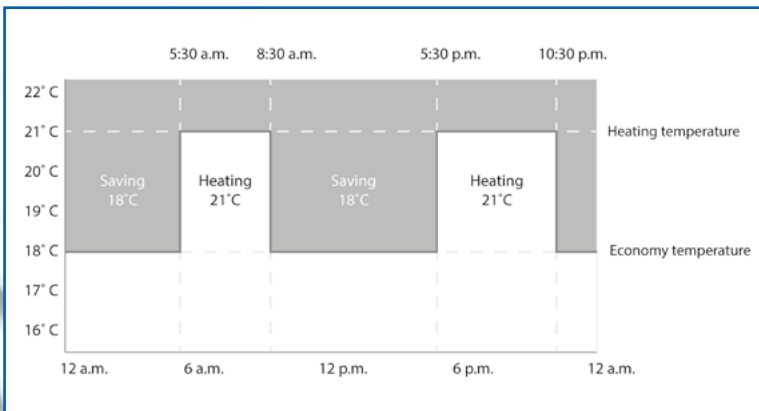
The thermoelectric generator uses the temperature difference between the heating installation and the room air to generate an electrical voltage. A flow temperature in the radiator of more than 30 degrees Celsius and a room temperature of 20 degrees



Celsius results in a temperature difference of more than 10 K. This difference is vastly sufficient for the generator to build up a sufficient supply of energy. The process is called “Energy Harvesting”. The energy harvested from the environment is temporarily stored in a buffer, so that the system can be permanently supplied with power. The SmartValve communicates by radio with a room control unit that monitors the temperature and controls the system. Service operations caused by battery-related failures are thus completely eliminated.

APPLICATIONS

The SmartValve is particularly useful and attractive in large functional buildings or in the hotel industry. The simple installation and the wireless integration into the building automation enable heating on demand. This does not only save heating costs, but the maintenance-free operation eliminates all other expenses as well. This makes SmartValve an efficient and sustainable supporter in private households too.



PREPARED FOR THE FUTURE

On demand, our efficient drive is available as a battery version too. It has a much longer operating time per battery change than previously available electric thermostatic valves. The SmartValve housing colour can be adapted to your corporate identity. The communication with the room control unit uses EnOcean as a standard. Other protocols are also possible.





Advantages for original equipment manufacturers

- Technological advantage
- High-tech device for your customers
- Individual housing design
- Easy integration into your system
- MinebeaMitsumi as your supporting partner

Advantages for customers

- Heating costs savings
- Easy installation
- Wireless control via room controller
- Flexible individual room control
- Maintenance-free use
- Frost protection
- No need to change batteries and no battery waste



MinebeaMitsumi
Passion to Create Value through Difference

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