



PELLET BURNERS



PRODUCTS  
CATALOGUE

# X.APPLICATION

## Biomass:

Continuous, significant increase in prices of liquid fuels causes increase of interest in a lot cheaper, alternative sources of energy. Offered by our range of burners **BurnPellet®X** allows you to effectively burn renewable fuels - **pellets, oats** and **dry pits**. The relatively low price of biofuels can **save up to 60% in fuel costs**.

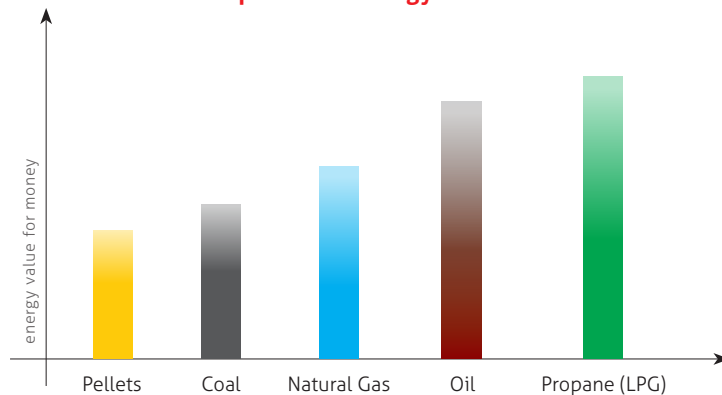
## Pellets?

Pellets are formed by pressing the sawdust under high pressure, without any chemical adhesives. Pellet fuel is environmentally friendly and also easy for transport, storage and distribution. They are characterized by a low moisture content, ash and they are not harmful to the environment and they have got high energy value.

## Application:

Due to patented technology for high pressure combustion burners **BurnPellet®X** can be used in almost every central heating boiler, steam boiler, furnace blowing and bakery oven.

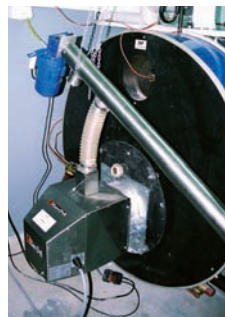
## Comparison of energy fuels



\* data for 2011



oil boilers



steam boiler



bakery oven

# BurnPell X.CONTROL

## Controller BurnPell®X.control:

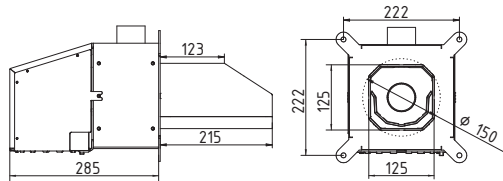
- **Graphical display** – large graphic display the ensures intuitive operation of the unit.
- **Large fonts and icons** – increases easiness of controller's service by elderly people.
- **Two types of menu** – simple and advance menu. In the course of everyday operation of the unit it is possible to control from easily available simple menu.
- **Info key** – controller has been equipped with the intelligent assistance function. Each parameter has been described, description call by pressing the info button.
- **Modular design of the CAN controller** – thanks to the application of the CAN industrial data exchange bus (used mainly in a very demanding automobile industry) the control system may be extended. Maximum extension available: 16 circuits, 4 hot tap water preparation circuits, 4 power buffers.
- **Efficient advanced 32-bit ARM processor** (the ARM family is widely used in mobile phones) -enables advanced control of Fuzzy Logic II algorithm.
- **Alarms and errors history** – the controller stores the history of 20 last errors and alarms with description, date of occurrence and date of confirmation.
- **Clock with an integrated calendar** – the clock enables programming in weekly cycles the required room temperatures and the temperature of hot tap water and thereby helps to reduce the charges.



- **Statistics** – the controller stores in its memory statistical data about system operation and thus it is possible to observe the operation and to reduce fuel consumption. For instance, observation of the boiler temperature and the burner's output and fuel feeder operation time.
- **Sound signaling** – integrated piezoelectric speaker signalizes alarm situations in the boiler and thus enhances safe operation of the unit.
- **Restoration of factory presets** – this function enables restoration of factory presets of the controller.

## Device properties:

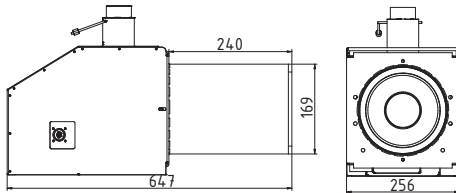
- **Patented technology of high-pressure combustion**
- Patented system of fuel mixing in the furnace chamber - significantly prolongs the duration of maintenance-free operation
- Made of superior materials based on latest technology
- Automatic operation: firing, cleaning, flame control
- Stepless (electronic) power adjustment
- Low CO and CO<sub>2</sub> emission
- Low thermal inertia
- Burner's temperature control
- Automatic start after voltage loss – memory of last settings
- High combustion efficiency - up to 99%!
- The furnace made of superior heat resisting steel
- Possibility to control the incineration process using a broadband lambda sensor (option)
- Flame detector precisely detecting its level
- Removable furnace
- Low power consumption
- Fully compatible with the instrumentation of oil and gas boiler and bakery oven



<b>Type:</b>	BurnPell®X Minor
<b>Output:</b>	5 - 26 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	60 W
<b>Weight:</b>	11 kg
<b>Feeder length:</b>	2 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES (option)
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES (option)
<b>All-weather automatic control:</b>	YES (option)
<b>Solar panels handling:</b>	YES (option)

### Device properties:

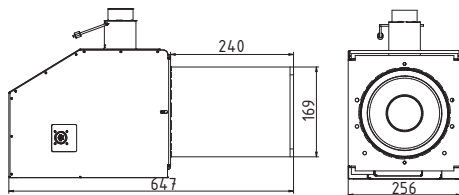
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- Patented system of fuel mixing in the furnace chamber - significantly prolongs the duration of maintenance-free operation
- Made of superior materials based on latest technology
- Automatic operation: firing, cleaning, flame control
- Made of over 80% of stainless steel with a housing of acid - resistant steel
- High-quality connection – ensures reliable communication between the burner and the controller
- Stepless (electronic) power adjustment
- Low CO and CO<sub>2</sub> emission
- Low thermal inertia
- Burner's temperature control
- Possibility to install a particulate filter!
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- High combustion efficiency - up to 99%!
- The furnace made of superior heat resisting steel
- Possibility to control the incineration process using a broadband lambda sensor (option)
- Flame detector precisely detecting its level
- Integrated steel firewall with a counterbalance to prevent backfiring
- Low power consumption
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<b>Type:</b>	BurnPel®X 40
<b>Output:</b>	10 - 40 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	60 W
<b>Weight:</b>	19 kg
<b>Feeder length:</b>	2 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES (option)
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES (option)
<b>All-weather automatic control:</b>	YES (option)
<b>Solar panels handling:</b>	YES (option)

## Device properties:

- **Patented technology of high-pressure combustion**
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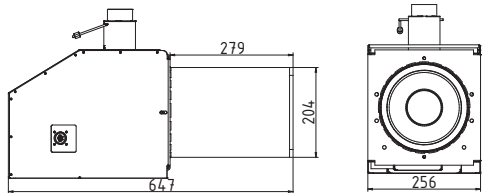


<b>Type:</b>	BurnPell®X 70
<b>Output:</b>	15 - 70 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	75 W
<b>Weight:</b>	20 kg
<b>Feeder length:</b>	2 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES (option)
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES (option)
<b>All-weather automatic control:</b>	YES (option)
<b>Solar panels handling:</b>	YES (option)



## Device properties:

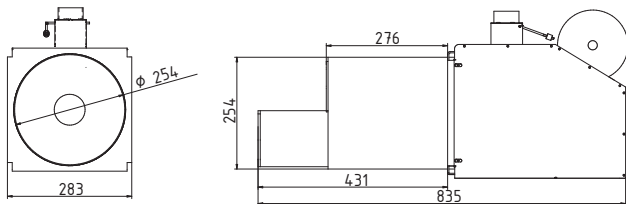
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- Low CO and CO<sub>2</sub> emission
- Low thermal inertia
- Burner's temperature control
- Possibility to install a particulate filter!
- Automatic start after voltage loss – memory of last settings
- High combustion efficiency - up to 99%!
- The furnace made of superior heat resisting steel
- Possibility to control the incineration process using a broadband lambda sensor (option)
- Flame detector precisely detecting its level
- Integrated steel firewall with a counterbalance to prevent backfiring
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<b>Type:</b>	BurnPel®X 150
<b>Output:</b>	50 - 150 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	75 W
<b>Weight:</b>	25 kg
<b>Feeder length:</b>	2 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES (option)
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES (option)
<b>All-weather automatic control:</b>	YES (option)
<b>Solar panels handling:</b>	YES (option)

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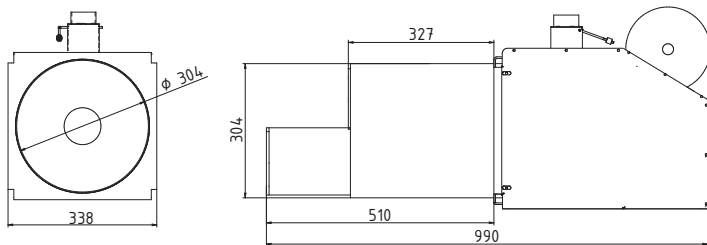


<b>Type:</b>	BurnPel®X 250
<b>Output:</b>	80 - 250 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	120 W
<b>Weight:</b>	32 kg
<b>Feeder length:</b>	3 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES
<b>All-weather automatic control:</b>	YES
<b>Solar panels handling:</b>	YES (option)



### Device properties:

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- Flame detector precisely detecting its level
- Integrated steel firewall with a counterbalance to prevent backfiring
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<b>Type:</b>	BurnPel®X 350
<b>Output:</b>	100 - 350 kW
<b>Power supply:</b>	230 V AC / 50Hz
<b>Average power consumption:</b>	150 W
<b>Weight:</b>	39 kg
<b>Feeder length:</b>	3 m
<b>Fuels:</b>	pellets 6 - 8 mm oats dry pits
<b>Combustion efficiency:</b>	up to 99 %
<b>Efficiency in the furnace:</b>	up to 96 %
<b>Output adjustment:</b>	YES
<b>Lambda probe:</b>	YES
<b>Central heating pump handling:</b>	YES
<b>Hot water pump handling:</b>	YES
<b>Room temperature sensor:</b>	YES
<b>All-weather automatic control:</b>	YES
<b>Solar panels handling:</b>	YES (option)



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