

PELLET HEATING SYSTEMS



Pellet boiler

15kW / 25kW / 35kW



HTSMCS1320/02

Compact – Elemental – Innovative

1996 was the year in which the executive shareholder Peter Winkler constructed his first pellet boiler. A lot has changed since. What looked more like heavy, clumsy machinery in those days (over 300 kg) has now been re-designed through intelligent optimising and almost half of the original weight.

The size is pretty impressive too - a mere surface area of 0,33 m² and a height of 1,14 m makes the HP02 (up to 14,9 kW) HAPERO heating system the most manageable size on the market. When space is of the essence coupled with high prices per square metre, this is a great option for home owners.

Produced and built in the province of upper Austria, near the county-border of Salzburg.

The next few pages will give you an overview of our products and important detailed solutions. Our partners and everyone at HAPERO will be happy to answer any questions that you may have.

Your
HAPERO Team
www.hapero.com





Quality “Made in Austria”

A rapid development of technology in recent years, with innovative solutions, which enables the end customer to heat their homes efficiently, simply and most important – cost effective ! The following certificates are proof of a profound contribution by HAPERO.



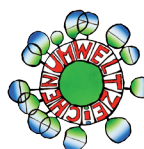
2009

Extensive emission tests carried out by the technical University in Vienna.



2009

International environmental symbol (Blue Angel)



2012

Austrian Environmental Symbol



2014

Certified Quality management system according to ISO 9001:2008



2014

Microgeneration Certification Scheme

HTSMCS1320/02

Touch-Display

Simple – Intuitive – Practical!

The HAPERO Touch Display 1.0 is very easy to use with your heating system and comes as serial standard with each HAPERO pellet boiler!

Commissioning, adjustment and maintenance – all functions are presented in a logical form and will provide all the information about your boiler.

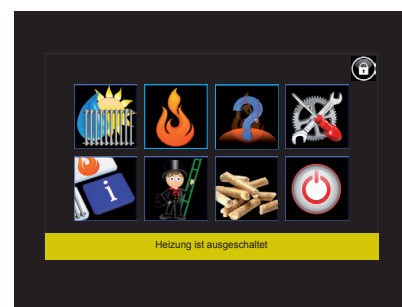
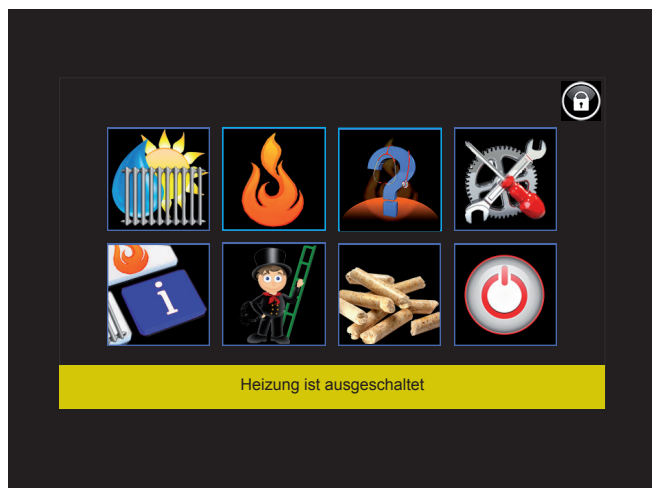
The Touch Display Exclusive 2.0 is optional, with a 7" display and the possibility for internet connection.

Your benefits:

- Intuitive, easy to understand user instructions
- Clear information system
- USB connection

Touch-Display Exklusiv 2.0 (optional):

- Internet connection possible
- Extended energy management
- Remote error detection / parametrisation
- Integrated cascade regulation



Service display

Like with every car, a pellet boiler requires a regular service and has the following advantages: optimal efficiency, economical pellets usage, optimum safety during the heating period.

A professionally maintained pellet boiler will provide joy and protects the environment. The HAPERO Touch Display will inform you when a maintenance is due to be carried out.

Your benefits:

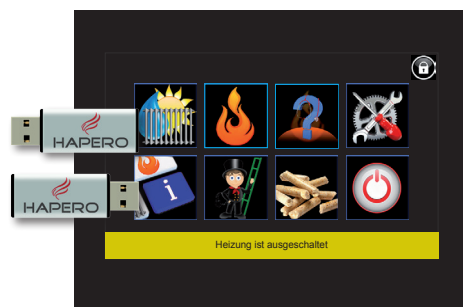
- Up-to-date information
- Maximum efficiency
- Comprehensive warranty

USB connection

Each HAPERO Touch Display has a USB connection, which can be used for analysis, as a saving device or a software up-date.

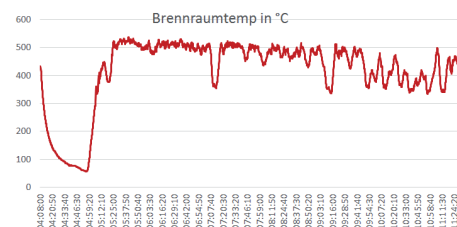
Your benefits:

- Saving the adjustments
- Fast software up-date



Data analysis

A good analysis is the key factor for optimising a heating system. HAPERO can provide this with a serially produced USB connection and a free PC software called Plug & Easy.



HAPERO pellet boiler

Innovations for all sizes!

At HAPERO we wholeheartedly agree with the architect Louis Sullivan's quotation "Form Follows Function".

This interpretation reflects all our products and is guided by our own experiences and your requirements.



HAPERO pellet boiler 15 kW / 15 kW XL

"Less is more" and in our case even more flexible. This practical edition of all HAPERO pellet boilers including energy management and suction unit, is designed to make optimum use of your space!

15 kW – with space-saving ash can.

15 kW XL – with a mobile ash box.



HAPERO pellet boiler 25kW & 35kW

All HAPERO pellet boilers can be operated by using a serial production Touch Display. HAPERO never uses standard products when installing electronic devices for the control board. Space saving construction design enables a perfect cascade combination of 25kW & 35kW pellet boilers.

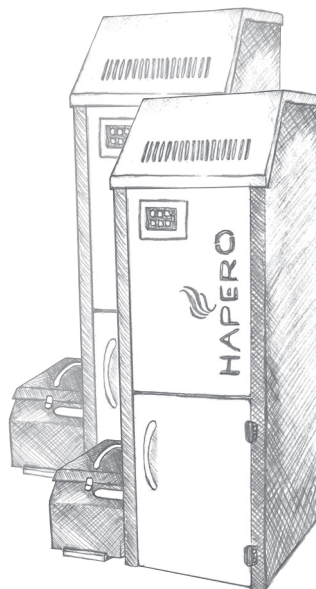
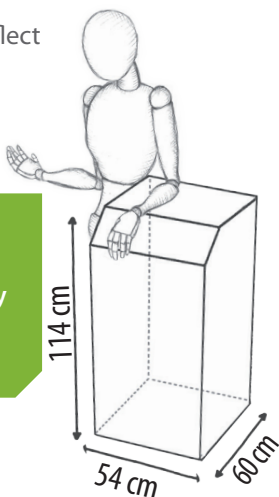
Compact

The size of a pellet boiler does not reflect it's inner strengths.

HAPERO has achieved to combine trendsetting technology within the smallest space possible.

Your benefits:

- Space requirement below 1 m²
- Greater flexibility during assembly
- Touch Display 1.0 serial standard



Cascade:

HAPERO managed to develop a cascade which requires the minimum of space with a high degree of reliability. A further benefit lies within the wide performance spectrum which only a cascade can offer.

Your benefits:

- Space requirement per boiler below 1 m²
- Greater flexibility during assembly
- Touch-Display Exclusive 2.0 serial standard including Cascade controller
- Cascades up-to 105 kW

Values that will ...

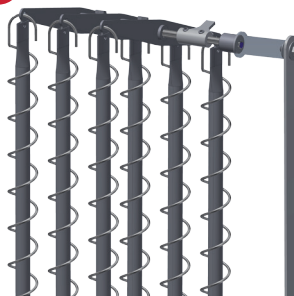
Automatic cleaning

The emptying of the ash can should generally be carried out 3 to 6 times per year. All other cleaning functions are automatic and the boiler continues to burn efficiently. With the optional ash box you could reduce the emptying process normally down to once per year.

Your benefits:

- No labour-intensive boiler and burner cleaning
- Continued efficiency during the pellet burning process

1



4 safety features

Safety is of the utmost importance at HAPERO. The back-fire safety measures are achieved through 4 independent features: Mechanical division of the pellets feeding hose and the return air flow hose to the store room. Shut off device from the daily container to the combustion chamber using a steel flap. Monitoring of the pellets conveyance auger into the combustion chamber via a temperature sensor. Metal slide for pellets directly into the burner.

Your benefits:

- 100 % fire protection
- No safety technical „wear and tear“ parts

2



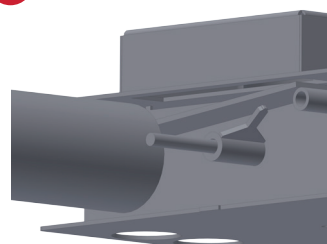
Chimney shut off device and air mass sensor

Saving energy at the highest level! The chimney shut off device avoids rapid temperature loss whilst the burner of the boiler is in standby mode. Even the following day the boiler is still warm and you will need fewer pellets when re-starting your boiler.

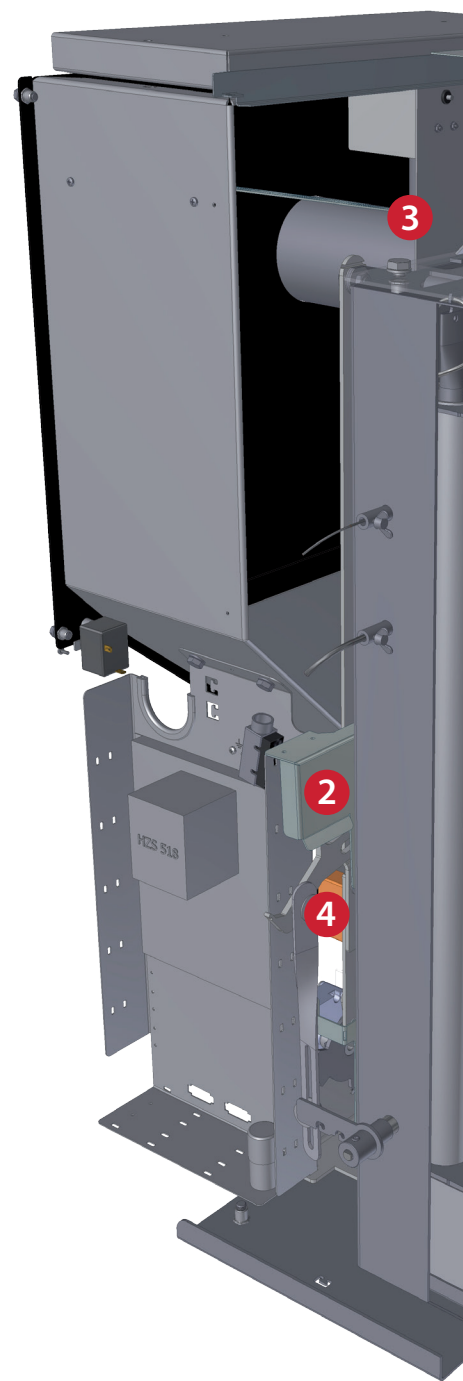
Your benefits:

- No heat loss due to chimney draught during stand by periods of the boiler.
- Reduced pellets requirement when re-starting the boiler.

3



3

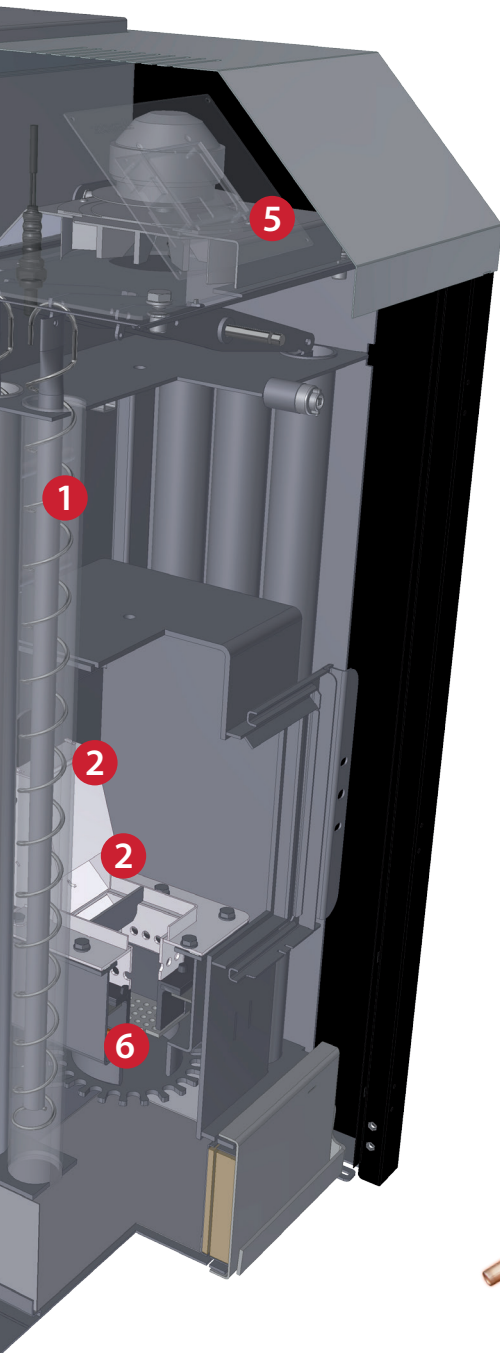


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4

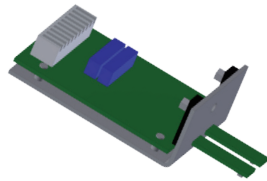
- + Modern, external energy management via BUS connection for mixer and pump regulator
- + Optional connection for room-independent air supply
- + Air mass sensor for automatic chimney draught detection

- + High performance “whisper” burner, self cleaning and maintenance free stainless steel burner
- + Processor controlled main board with optional connection to the external energy management system



4 REAF Management

Optimum fuel detection via a HAPERO-designed self calibrating fuel management system. An air mass sensor works in connection with a self cleaning combustion chamber sensor. The burning process occurs in the correct air and pellets ratio and is good for the environment and your wallet.

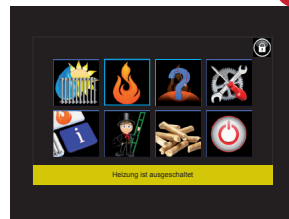


Your benefits:

- Optimal, low emission burning of pellets and no time consuming or expensive adjustments to be carried out.

5 Touch Display

A modern design, serially produced and a very logical operation enables an easy and simple installation of your pellet boiler. Two internal and one external storage device offer the best possible protection against loss of data.



Your benefits:

- Intuitive user friendly options
- Software up-date with USB stick
- Any potential errors and analysis a USB-stick can be used

6 Ignition

The ignition is extremely reliable and very quiet with minimal electricity demand, approx. 20 watt per ignition.



Your benefits:

- silent ignition
- only 20 Watt electricity demand per ignition

- + Optional ash box offers space for up-to 4000kg of burned pellets per ash emptying process
- + Optimum ash compression during operation with an ash volume compression of up-to 1000kg per burned pellets

- + Optional manual filling, the storage container can hold up-to 33kg of pellets
- + Lambda-sensor for fuel monitoring
- + Sound-optimised, high performance fan avoids operating sounds by installing quality components

Energy distribution

Energy distribution at it's best!

With HAPER0's energy distribution system up to 6 heating circuits can be controlled, as well as 2 buffers, 2 boilers and a solar system.

A modern BUS-system enables a simple and cost effective control system via a 4-pole cable for your boiler (included in the order). Fewer cables are required therefore savings can be made on electrical installation costs.

Your benefits:

- Convenient location through compact design
- Less cabling and wiring
- Reduced assembly time
- Up-to 6 heating circuits



Always the desired room temperature!

Your heating circuits and the pellet boiler can be controlled with a wireless or wired room regulator. Simply to use and adjust – one can choose 2 different weekly programmes. Furthermore, you have the option to choose up-to 4 variable temperature settings.

Your benefits:

- Fast switch-overs between heating/and transition periods
- Day time temperature zones
- Fuel reduction



Always enough hot water!

An intelligent loading management fuels your domestic hot water tank at the correct time, whatever the season.

Your benefits:

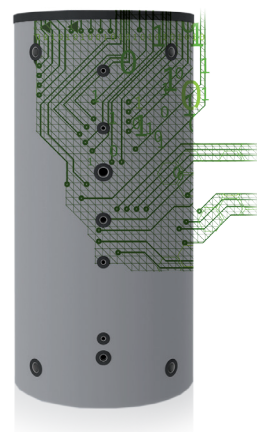
- Hot water any time of the day
- Low energy costs (night tariffs)
- Anti Legionella switch function

Buffer management

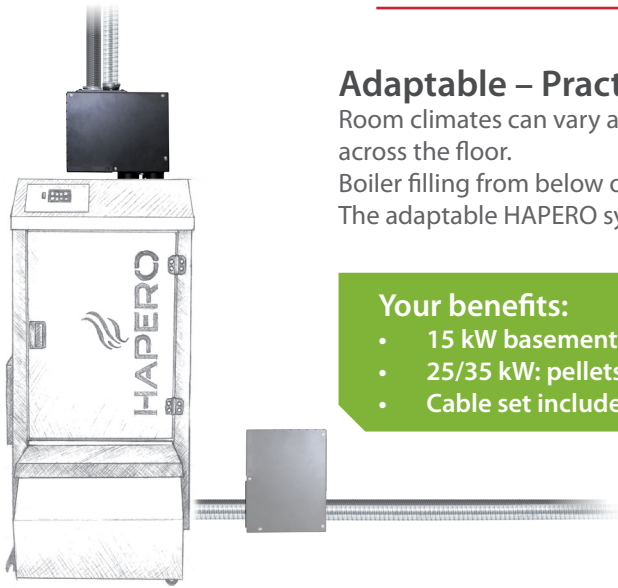
Developed by HAPER0, this cleverly controlled management system always supplies your buffer with optimum temperature. An intelligent pump management system very quickly helps to regulate the correct temperature setting and if necessary, activates your solar system to fully utilise our solar energy.

Your benefits:

- Fast loading at the optimum time
- Optimised buffer temperatures for your heating system reduces the heat losses to a minimum
- Intelligent support for your solar system



Pellets loading options



Adaptable – Practical – Clever!

Room climates can vary a great deal – connecting hoses fixed on the wall, over the ceiling or across the floor.

Boiler filling from below or above (with 15 kW) or from left to right (with 25/35 kW).

The adaptable HAPERO system offers you this option if required.

Your benefits:

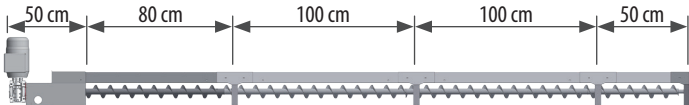
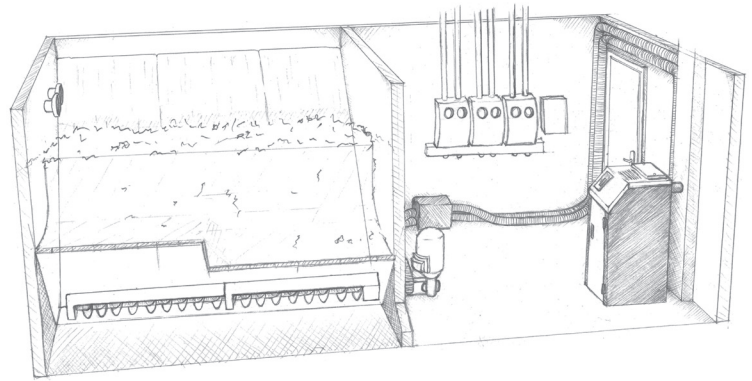
- 15 kW basement model: varied pellets loading options
- 25/35 kW: pellets loading from left to right
- Cable set included in your order

Separable store room auger

To optimise store room emptying, the pellets transport should be encompassing the whole length. The HAPERO store room auger can be adapted to every room situation. It is up to 4 m long and available in 50/100cm lengths.

Your benefits:

- Easy to transport and assemble
- Optimum utilisation of store room

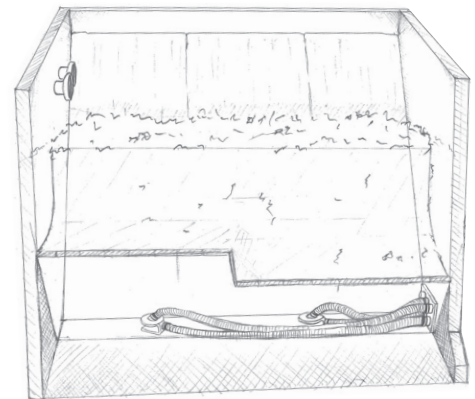


3 suction points with manual switching unit

Suction points are an alternative to store room augers, an excellent solution if the store room is asymmetrical in shape. With the HAPERO switching unit upto 3 suction points can be connected as well as several additional switching units.

Your benefits:

- Optimum utilisation of asymmetrical store rooms
- Can be installed anywhere in the room
- Maximum flexibility



Why HAPERO?

HAPERO has managed to combine modern technology in a very small space. We do not use standard products when producing our electronic devices, but we set standards for futuristic pellet boiler generations within the heating system market.

Convince yourself of our technical highlights and our products.

	Touch Display, various data (USB), remote diagnosis/parametrisation (optional)	✓
	Chimney shut-off flap - less energy demand when heating	✓
	Plug and Fire Certification for a fast and simple commissioning	✓
	Automatic heat exchanger cleaning	✓
	Automatic burner cleaning	✓
	Room independant air supply	✓
	Wireless or wired, userfriendly room regulator	✓
	Automatic pellets transport up to 20 metres	✓
	Manual filling (15 kW)	✓
	Chimney draught detection via air mass sensor	✓
	REAF-MANAGEMENT – automatic pellets detection (radiation energy and air flow management)	✓
	Ash compression (15 kW), Ash removal auger (15 kW XL / 25 kW / 35 kW)	✓
	Integrated return flow riser	✓
	Intelligent domestic water management for up to 2 domestic water tanks	✓
	Intelligent heating circuit management for up to 6 heating circuits	✓
	Intelligent buffer management for up to 2 buffers	✓
	Solar management	✓
	Control via external regulation (potentially free contact) possible	✓
	Control via external regulation (0-10 Volt) possible	✓

Technical specifications

Many years of experience have contributed to HAPERO being at the top of their game – in other words – the pellet heating system design, development and technology. The quality of the product is guaranteed by means of a rigid quality management process and a continued evolution of new technologies.



Technical specifications	Basement 15 kW	25 kW	35 kW
Name	Balance K / Type HP02 / K	Flash K / Type HP03	Flash K / Type HP04
Standard	EN 303 - 5	EN 303 - 5	EN 303 - 5
Nominal output [kW]	3,8 - 14,5	6,7 - 25	6,7 - 35
Nominal load [%]	95,7	95,4	95,4
Adjustable boiler temperature [°C]	55 - 83	55 - 83	55 - 83
Min. return flow temperature [°C]	25	25	25
CO nominal load/ part load [mg/Nm ³]	42 / 111	54 / 138	54 / 138
Emission temperature nominal - / part load [°C]	115 / 70	140 / 80	140 / 80
Emission nominal - / part temperature [g/s]	7,9 / 3,5	15 / 7,2	15 / 7,2
Necessary minimal gauge pressure [Pa]	1	1	1

Dimensions			
Total widths / -heights / -depths [cm]	54 / 114 / 60	58+31 / 180 / 75	
Chimney flue height [cm]	94	138	138
chimney flue connection diameter [mm]	80	130	130
Height flow / return flow [cm]	18,5	127	127
Total weight [kg]	158	330	330
Flow / return flow [inch]	3/4	5/4	5/4

Electrical performance			
Electrical connection	230 V 13 A	230 V 13 A	230 V 13 A
Standby / nominal load [W]	7 / 38	7 / 45	7 / 45

Chimney calculation	
We are listed with „kesa aladin“	http://www.kesa-aladin.de/

PELLET HEATING SYSTEMS



HAPERO pellet living room stove 7kW
Art. no. 1010.00



HAPERO pellet living room boiler 15kW
Art. no. 2030.02



HAPERO pellet living room boiler 15kW
concrete cladding, Art. no. 2030.01



HAPERO pellet boiler 15kW
Art. no. 2020.01



HAPERO pellet boiler 15kW XL
Art. no. 2020.02



HAPERO outdoor Biobox 15kW
Art. no. 2035.00



HAPERO pellet boiler 25kW & 35kW
Art. no. 2040.01 & 2045.01



HAPERO cascade 70kW
Art. no. 2049.01



HAPERO cascade 105kW
Art. no. 2050.01

Article number: 8722, Version 2.0

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