



Energy  
**SAVERS**  
LOW-H<sub>2</sub>O

# DBE RENOVATION SET

Configurator for upgrade  
of existing radiators

When installing a condensing boiler or heat pump, the radiators must normally be enlarged. This is not always possible due to lack of space and rarely leads to aesthetically acceptable solutions. With the new Jaga DBE system this is not necessary. Dynamic Boost Effect is a heat activator that has been developed especially for Jaga Low-H<sub>2</sub>O radiators to increase the capacity with minimal over-dimensioning and negligible energy consumption.



More heat, less radiator





# DBE RENOVATION SET



# RENOVATION TO LOWER WATER TEMPERATURE WITH THE SAME RADIATOR DIMENSIONS

## UPGRADE OF EXISTING LOW-H<sub>2</sub>O RADIATORS

For Jaga Low-H<sub>2</sub>O radiators you can nearly double the capacity with the DBE system. You can reduce the flow temperature from 75 degrees Celsius to 55 degrees Celsius with the same size radiator. You can easily convert existing Low-H<sub>2</sub>O radiators into a lower temperature system with DBE.

## REPLACING OF EXISTING RADIATORS

If you opt for Low-H<sub>2</sub>O with DBE, you will be able to achieve sufficient output within the size limits of the dimensions of your old radiators. So, there is no need to compromise on aesthetics when you convert to a lower water temperature.

## EASY INSTALLATION

DBE can be installed easily and quickly on almost all existing Low-H<sub>2</sub>O radiators, if an electrical connection can be provided, or if there is an electrical socket nearby

## LIFE EXPECTANCY

Because we use high quality ball bearings, the life expectancy of the DBE units is 50000 operating hours in Boost mode, at a temperature of 40°C.

The activators are protected against stalling through blockage. However, blockage should be avoided so as to avoid damage to the activator blades.

## QUALITY MARK

The appliance is CE tested and works in accordance with the valid EMC standards EN55014, EN61000 and security demands. The DBE system is also CEBEC tested

## NEGLIGIBLE ELECTRIC CONSUMPTION

The DBE system is no fan convector, and certainly not an electric radiator! Support from the DBE activators is only needed to boost output when necessary and in operation, the electric consumption is no more than 7 watts/ metre. The annual consumption is negligible and is more than compensated by the energy efficiency of the Low-H<sub>2</sub>O technology in the radiator.

## BEFORE

### WITHOUT DBE



Example for Strada H50 L90 T11

## OUTPUT WITHOUT DBE

75/65



1247 WATTS



55/45



598 WATTS



35/30

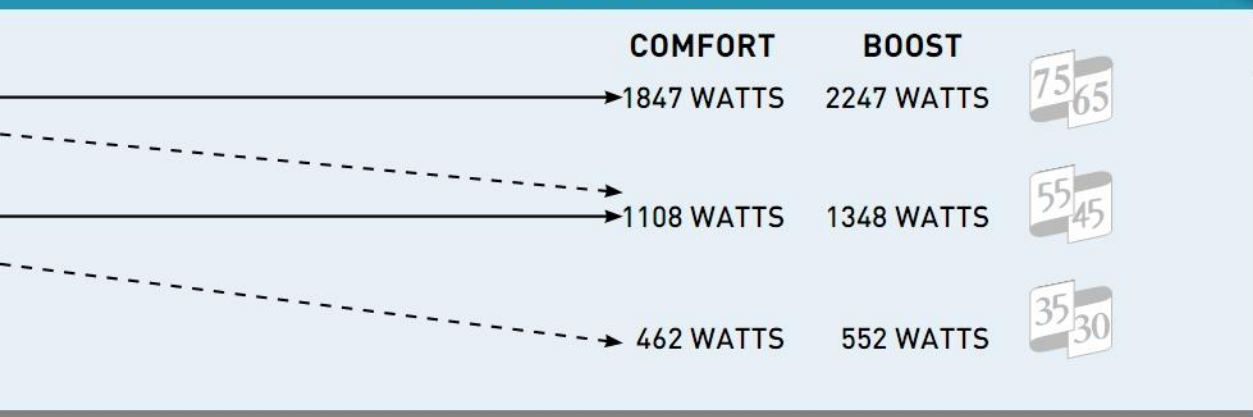


## AFTER

## WITH DBE



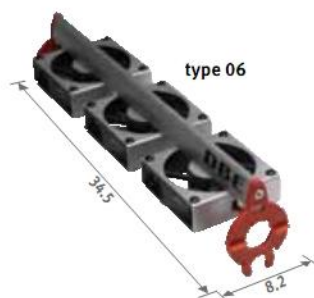
## OUTPUT WITH DBE



# DBE - RENOVATION SET

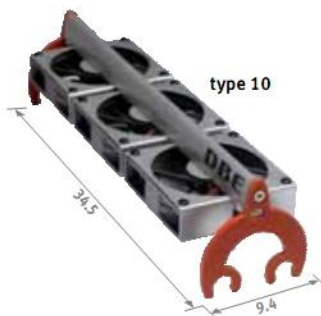
## CONFIGURATOR FOR UPGRADE OF EXISTING RADIATORS

### DBE UNIT DBEU.06



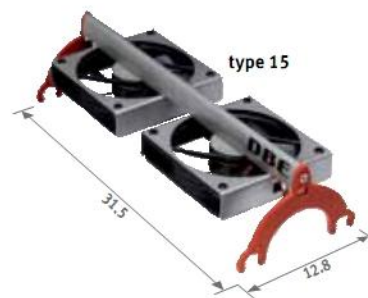
Suitable for:  
 - Strada Type 06 (except H 020)  
 - Knockonwood Type 06

### DBE UNIT DBEU.10

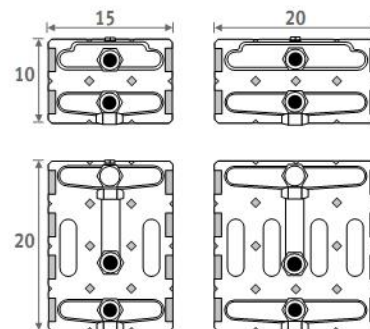
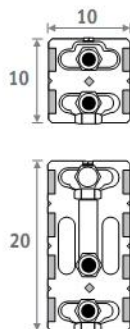
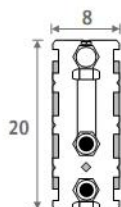


Suitable for:  
 - Strada Type 10 and 11  
 - Linea Plus Type 10 and 11  
 - Tempo Type 10 and 11  
 - Maxi Type 10 and 11  
 - Mini Height 028 Type 11  
 - Knockonwood Type 10 and 11  
 - Play Type 10 and 11  
 - Canal Plus R 2.5, width 35  
 - Canal Plus R 3.0, width 37  
 - Canal Plus R 4.0, width 43  
 - Geo Horizontal  
 - All old Jaga Low-H<sub>2</sub>O radiators with a heat exchanger of 10 cm width

### DBE UNIT DBEU.15



Suitable for:  
 - Strada Type 15, 16, 20 and 21  
 - Linea Type 15, 16, 20 and 21  
 - Tempo Type 15, 16, 20 and 21  
 - Maxi Type 15, 16, 20 and 21  
 - Mini Height 028 Type 16 and 21  
 - Knockonwood Type 15 and 16  
 - Play Type 15, 16, 20 and 21  
 - Canal Compact R 1.5 and R 4.0  
 - Canal Plus R 2.5, width 39 and 51  
 - Canal Plus R 3.0, width 41 and 53  
 - Canal Plus R 4.0, width 47 and 59  
 - All Jaga Low-H<sub>2</sub>O radiators with a heat exchanger of 15 or 20 cm width



### MAX. NUMBER OF DBE UNITS ACCORDING TO THE LENGTH OF THE RADIATOR

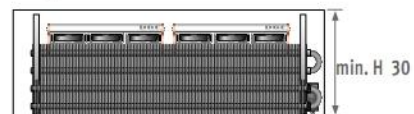
	1	2	3	4	5	6
<b>Strada</b>	L 060 > 080	090 > 140	-	160 > 220	-	240 > 280
<b>Linea Plus</b>	L 060 > 080	090 > 140	-	160 > 220	-	240 > 280
<b>Tempo</b>	L 060 > 080	090 > 140	-	160 > 220	-	240 > 300
<b>Maxi</b>	L 063 > 083	103 > 143	-	163 > 203	-	-
<b>Mini (only H 028)</b>	L 060 > 080	090 > 120	140	160 > 180	200	220 > 300
<b>Knockonwood</b>	L 060 > 080	100 > 140	-	180 > 220	-	-
<b>Play</b>	L 080 > 100	120	-	-	-	-
<b>Canal Plus</b>	-	100 > 149	-	181 > 249	-	261 > 329
<b>Canal Compact</b>	-	-	-	178 > 249	-	258 > 329
<b>Geo Horizontal</b>	100	120	140 > 160	180	-	-
<b>Older devices</b>	L 060 > 080	090 > 140	-	160 > 220	-	240 > 300

### MINIMUM HEIGHT

For type 10 - 15 - 20



For type 06 - 11 - 16 - 21



You can always choose a set with a smaller number of units, but never a bigger set than indicated in the tables.



## What is DBE?

DBE Dynamic Boost Effect is an option especially developed to boost the power of Low-H<sub>2</sub>O radiators by 2 or 3 times.

## Why use DBE?

The increased heat capacity can be used in 3 ways:

- if you install a heat pump in a renovation project, you can maximise efficiency by moving from very high to very low water temperature without having to install bigger radiators
- to let condensing boilers operate in condensing mode during the entire heating season, even on the coldest days.
- to install a smaller radiator to save space or simply to look good

## How to install DBE?

The DBE set consists of:

- one or more activators (depending on the length of the set) that must be clicked to the heat exchanger
- a 220V to 12V power supply, not to be used if a 12 V supply is available.
- control unit to click on to the end of the heat exchanger.
- control panel with on/off and boost function, to be integrated in the grille.



For more information see  
[www.theradiatorfactory.com](http://www.theradiatorfactory.com)

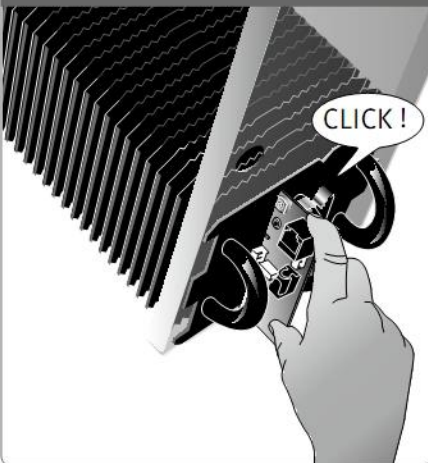
## How does DBE work?

DBE continuously measures the room temperature and water temperature and works entirely autonomously. For the larger part of the heating season the Low-H<sub>2</sub>O heat exchanger will be sufficient to keep you comfortably warm. But the system will automatically switch to comfort mode to provide heat far more quickly any time there is a very high demand for heat, for example when switching from night to day mode, when suddenly starting to use an unheated room or at times of extreme cold. The system modulates whisper-quiet according to the need for heating. With the Boost function the power is even higher, but the noise level is a little higher. The Boost function switches off automatically after approximately 15 minutes.

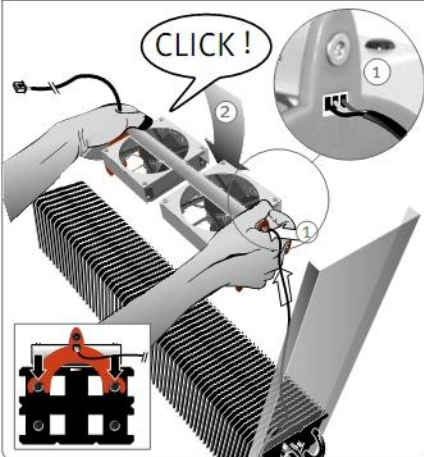
# INSTALLATION OVERVIEW - DBE



## 1 Fixing the control unit

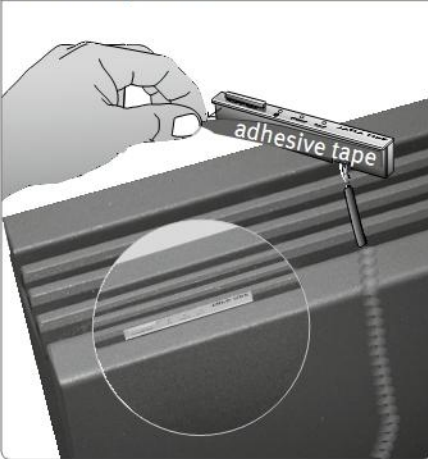


## 2 Assembling and connecting the DBE unit



## 3 Connecting several DBE units

## 4 Connecting and fixing the control panel



## 5 Fixing the power supply and connecting the control unit



Comprehensive mounting instructions are delivered with the set

**!** Provide electrical connection or socket behind or next to the radiator.

For some older radiators, a 10 mm hole must be drilled in the bracket for the transfer of the power supply cable. Other than that, just click, connect the plug and you're done!

# OPERATION - DBE



Standby



If the room temperature is too low and the water temperature is at least 28 C, comfort switches on automatically .



After pressing the boost button, maximum capacity is provided for 15 minutes. After which the DBE unit automatically switches back to comfort mode. To stop the boost mode manually: press the boost button again.