

## BOGE duotherm

External heat recovery – your way to save energy

Get more out of your compressor – with the external BOGE duotherm heat recovery. It saves money because up to 72% of the primary energy used by the compressor can be used for other purposes – in the form of heat that increases the temperature of your heating or service water. This turns your compressor into an energy savings miracle with little effort.

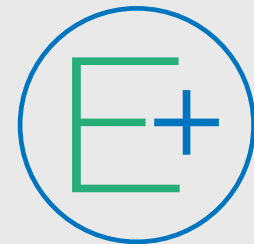
Retrofit new or older machines now – with the license to save energy!

**EXTREMELY  
EASY TO  
RETROFIT!**



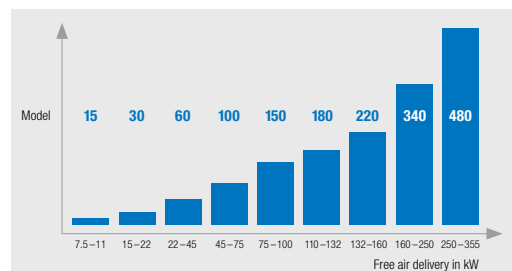
### Maximum efficiency

With this ingenious solution, in addition to compressed air, your compressor will also generate energy to increase the temperature of your heating and service water ... you can therefore use much of the energy used by the compressor for other purposes! BOGE duotherm provides additional value that makes sense ecologically and economically because it reduces the CO<sub>2</sub> footprint in the long term and pays off immediately.



### Can be used anywhere

Our external heat recovery is available in nine versions: This makes it suitable for oil-injection cooled screw compressors with an output between 7.5 and 355 kW. While in addition to the entire BOGE C and S series, compressors from other manufacturers can be retrofitted with this as well, BOGE compressors also benefit from a special kit that allows easy connection.



### Extremely compact solution – with an uncomplicated connection

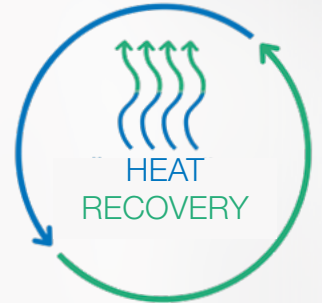
The compact design of the two housing sizes allows space-saving connection of our external heat recovery and makes retrofitting of your new energy savings miracle very easy: First, no external energy is required for operation and second, the BOGE duotherm module can simply be connected to your compressor's oil circuit. As soon as a plumber has connected the water circuit, you can begin to save energy!



# BOGE duotherm

## External heat recovery – your way to save energy

You're in control of taking the sting out of increasing energy costs: Based on the guaranteed savings achieved thanks to the BOGE duotherm external heat recovery, this investment, which is subsidised by BAFA, pays for itself within a short time.



An overview of all benefits:

- **Maximum efficiency**
- **Heat recovery of up to 72% of the energy used**
- **Short payback period**
- **Compact design**
- **Can be used anywhere**
- **Easy retrofitting**
- **No external energy required**
- **Long-term reduction of the CO<sub>2</sub> footprint**

### Cost example: duotherm 220

For a 160 kW system with an S 160-4 L / LF

Rated output	160 kW
Electr. power consumption	179.9 kW
Operating hours per year	6,000 operating hours
Gas price	0.12 €/kWh
Usable heat	72%

#### Usable energy in the oil cooler:

$$179.9 \text{ kW} \times 72\% = 129.5 \text{ kW}$$

#### Potential savings:

$$= \text{Usable energy} \times \text{operating hours} \times \text{gas price}$$

$$= 129.5 \text{ kW} \times 6,000 \text{ operating hours} \times 0.12 \text{ €/kWh}$$

Over 6,000 operating hours, you will save

**93,200 Euros**

payback with an investment of 30,000 Euros

**< 4 months**

### BOGE duotherm at a glance:

duotherm 15	duotherm 30	duotherm 60	duotherm 100	duotherm 150	duotherm 180	duotherm 220	duotherm 340	duotherm 480
Maximum possible heat in kW								
6.1... 8.9	12.1... 17.8	17.8 ... 36.3	36.3 ... 60.6	60.6 ... 88.8	88.8 ... 106.6	106.6 ... 129.2	129.2 ... 201.9	201.9 ... 286.7
Associated drive power in kW								
7.5 ... 11	15 ... 22	22 ... 45	45 ... 75	75 ... 110	110 ... 132	132 ... 160	160 ... 250	250 ... 355
<b>BOGE C and S series</b>								
S 10 ... S 15 C 9 ... C 16 C 9 LF ... C 15 L C 12-2	S 20/-2 ... S 29/-2 C 20 ... C 30 C 20 L C 15-2 ... C 22-2	S 31/-2... S 50/-2 S 31-3 ... S 50-3 SL 31-3 S 60/-2 S 60-3	S 61/-2 ... S 75/-2 S 61-3 ... S 75-3 SL 75-3 S 90/-2 ... S 100/-2 S 90-3 ... S 100-3 S 46-4 ... S 75-4 S 56-4 ... S 76-4	S 101 ... S 150 S 101-3...S 150-3 SL 101-3 SG 101-3 ... SG 150-3 S 90-4 ... S 110-4	S 91-4 L / LF S 111-4 L / LF S 132-4 L / LF	S 160-4 L / LF	upon request	upon request
<b>Compressors by other manufacturers</b>								
•	•	•	•	•	•	•	•	•

BOGE duotherm BPT, dt 50 K, tmaxAUS = 70 °C, in external housing