



**The perfect dual fuel burner solution for combustion of gas and heavy fuel oil.**

- Well proven burner design over many years
- Reliability is a key-word
- Easy and low cost maintenance
- Minimum installation requirements/costs
- Burning of heavy fuel oil up to 700 cSt at 50°C
- Turn down ratio up to 10:1
- Versatile air inlet flange on windbox

# Combined burner for gas and oil

## KBGO 150 - 3400 RS

### Description

The KBGO RS rotary cup burner design is based on Aalborg Industries' longterm experience in combustion technology, hence ensuring optimum burner performance for demanding customers.

The burner has been designed to burn gas and heavy fuel oils.

Gas is supplied from the control valve to an internal gas distribution on the bur-

ner. Gas nozzles are placed on the distribution ring to ensure good mixture with the combustion air.

Atomisation by centrifugal force where the cup is rotated at high speed is the working principle of rotary cup burners. The oil is positioned at low pressure inside the spinning cup, and forced by the centrifugal action of the cup, it flows to the rim of the cup where it is thrown off as very fine filaments, which break

up into fine drops of uniform size.

The high-velocity primary - air supplied from a primary air fan - is discharged around the cup and strikes the oil film, breaks it up and converts it into a mist of fine particles to be introduced into the combustion zone of the burner. The secondary air - supplied from a combustion air fan - is necessary for complete combustion. It is supplied through the windbox and burner air register.

## STANDARD PRODUCT RANGE

## Capacity and dimensions

Burner type	Burner Capacity		Burner motor max (50-60 Hz)		Primary air fan, motor size (50-60 Hz)	
	MW (net CV)	MW (gross CV)	Oil kg/h	N-gas Nm <sup>3</sup> /h	kW	
KBGO 150 RS	1.7	1.9	152	150	2.2/2.6	Combined with burner motor
KBGO 250 RS	2.8	3.1	251	250	2.2/2.6	Combined with burner motor
KBGO 350 RS	3.9	4.3	349	350	3.0/3.6	Combined with burner motor
KBGO 450 RS	5.0	5.5	447	450	3.0/3.6	Combined with burner motor
KBGO 550 RS	6.2	6.9	554	550	5.5/6.6	Combined with burner motor
KBGO 650 RS	7.3	8.1	653	660	5.5/6.6	Combined with burner motor
KBGO 750 RS	8.4	9.3	751	755	5.5/6.6	Combined with burner motor
KBGO 850 RS	9.5	10.5	850	860	7.5/9.0	Combined with burner motor
KBGO 1000 RS	11.2	12.4	1,002	1,010	7.5/9.0	Combined with burner motor
KBGO 1100 RS	12.3	13.6	1,100	1,106	7.5/9.0	Combined with burner motor
KBGO 1300 RS	14.5	16.1	1,297	1,305	7.5/9.0	Combined with burner motor
KBGO 1600 RS <sup>1)</sup>	17.9	19.8	1,601	1,610	3.0/3.6	12.8
KBGO 1800 RS <sup>1)</sup>	20.0	22.1	1,789	1,799	3.0/3.6	12.8
KBGO 2000 RS <sup>1)</sup>	22.3	24.7	1,995	2,005	3.0/3.6	17.5
KBGO 2200 RS <sup>1)</sup>	24.6	27.2	2,200	2,210	3.0/3.6	17.5
KBGO 2600 RS <sup>1)</sup>	29.0	32.1	2,594	2,610	3.0/3.6	17.5
KBGO 3000 RS <sup>1)</sup>	33.5	37.1	2,996	3,010	3.0/3.6	17.5
KBGO 3400 RS <sup>1)</sup>	38.0	42.1	3,399	3,415	3.0/3.6	21.6

<sup>1)</sup> Not applicable for shell and tube boilers

### General burner data

Heavy fuel oil data	General data		
Max. viscosity at 50°C	700	cSt	Combustion air temperature, design 45 °C
Max. viscosity at burner inlet	45	cSt	Fuel oil delivery pressure 2 - 3 bar (g)
Calorific value	40.2	MJ/kg	
N-gas data			
Calorific value	40.0	MJ/Nm <sup>3</sup>	
Gas delivery pressure	1-4	barg	

### DATA SHEET series

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