

Program overview

DUNGSWhirlWindSystem®

9 - 1 000 kW

7.60

DUNGS®
Combustion Controls

Just the right mix!



Technical Description

Integrated gas-air system with high power density based on DUNGS zero pressure multiple actuator MBC to EN 161 for modulating or multi-stage mode:

- Pneumatic integrated system comprising zero pressure mode and integrated signal gain possible
- Inlet pressure
 - MBC-WND 65:
 p_{\max} 65 mbar (6.5 kPa)
 - MBC-WND 120 - 1 200:
 p_{\max} 100 mbar (10 kPa)
- Modulation range up to 1:10
- Breaks up flow pattern and reduces resonances
- Offset correction of gas/air ratio at servo regulator

- Limits maximum flow by a low hysteresis flow restrictor, injector requires no replacement for different gas families
- Implemented by adapting system components and optimising to specific application and design requirements.

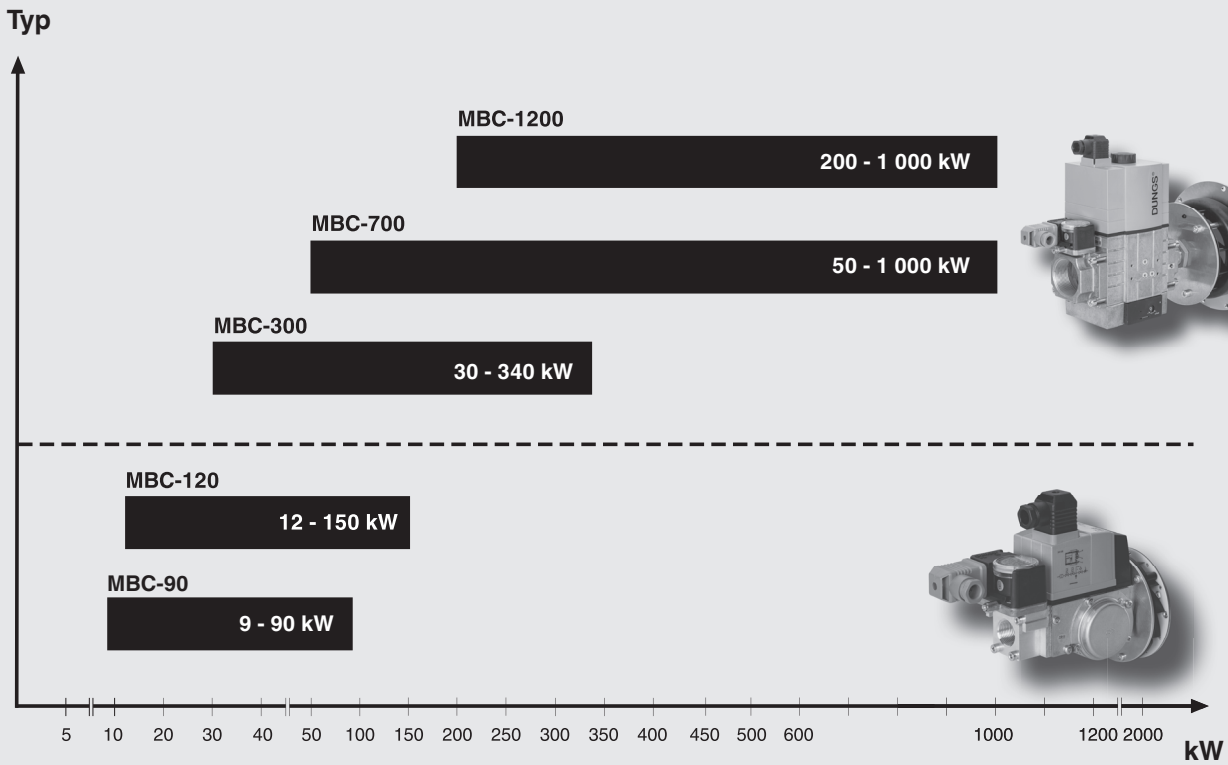
Application

For pre-mix burners and forced-draft burners.

Suitable for gases to EN 437 and other gaseous inert media.

WhirlWind Family from 9 kW up to 1 000 kW						
Product	kW	Swirlplate	Accessories	Valve class	EU design CE	US design CSA
MBC-65-WND	30	white	Without	2 x A	✓	—
	60	red			✓	—
	90	grey			✓	—
MBC-120-WND	90	black	Air and gas pressure switch LGW, GW		✓	—
	120				✓	—
	150				✓	—
MBC-300-WND	175		Air and gas pressure switch LGW, GW		✓	✓
	340				✓	✓
MBC-700-WND	550		Air and gas pressure switch LGW, GW		✓	✓
	700				✓	✓
	1 000			✓	✓	
MBC-1200-WND	1 000		Valve proving system VPS	✓	✓	

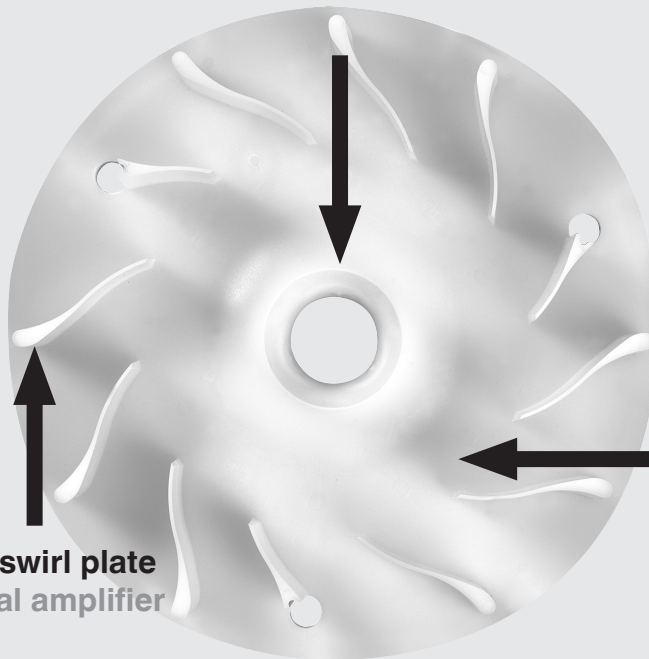
Power ranges



Swirlplate - The heart of the WhirlWind system



Integrated Venturi 2. Signal amplifier



Swirlplate

- + Patented
- + Two stage cascaded signal amplification
- + Breaks up uniform flow pattern and reduces resonances

Spiral swirl plate
1. Signal amplifier

Silencer pocket

Specifications	MBC-65-WND	MBC-120-WND	MBC-300-WND	MBC-700-WND	MBC-1200-WND
$p_{max.}$	65 mbar (6.5 kPa)	100 mbar (10 kPa)			
Nominal diameter Rp	Rp 1/2	Rp 3/4	Rp 1/2, 3/4, 1, 1 1/4	Rp 1, 1 1/4, 1 1/2, 2	Rp 2
Nominal diameter NPT	—	—	NPT 1/2, 3/4, 1, 1 1/4	NPT 1, 1 1/4, 1 1/2, 2	NPT 2
Electrical connection	Plug-in connection as per DIN EN 175301-803				
Installation position	Vertical with upright solenoid				
Ambient temperature	-15 °C to +70 °C 0 °C to +70 °C (LPG)				
Voltage	~(AC) 50 - 60 Hz 230 V +10 % / -15 % Further voltages on request				
Approvals	CE		CE, CSA		

For further information, refer to Datasheets

7.01 MBC-...-SE/N

7.10 MBC-65/120-...

We reserve the right to make any changes in the interest of technical progress.

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