

**G SERIES** 

# TECHNICAL DATA

			G60	G75	G90	G120
Machine Performance*	Batch	(kg)	20-65	25-80	30-95	60–120
	Roasting Time	(min)	10-20	10–20	10-20	10-20
	Capacity	(kg/h)	100–195	125–240	150-285	240–360
Power Supply (Three-Phase Current)	Voltage	(V)	230/400	230/400	230/400	230/400
	Frequency	(Hz)	50	50	50	50
	Power	(kW)	13	13	15	15
Burner Output	Natural Gas/Propane	(kW)	160	200	230	280
		(kcal/h)	121,000	152,000	174,000	212,000
		(MJ/h)	496	620	714	870
Gas Consumption – Natural Gas	Calorific Value	(MJ/mn³)	37	37	37	37
	Flow Pressure	(mbar)	20	20	20	20
	Full Load	(mn³/h)	16	20	23	28
	Roasting Operation	(mn³/h)	8.8	11	12.6	15
Gas Consumption – Propane	Calorific Value	(MJ/mn³)	100	100	100	100
	Flow Pressure	(mbar)	50	50	50	50
	Full Load	(mn³/h)	5.2	6.5	7.4	9
	Roasting Operation	(mn³/h)	2.9	3.6	4	4.9
Roasting Exhaust Air (Without afterburner)	Flow Rate	(mn³/h)	1,100	1,400	1,800	2,200
	Temperature	(°C)	150–250	150–250	150–250	150–250
Roasting Exhaust Air (With afterburner)	Flow Rate	(mn³/h)	1,100	1,400	1,800	2,200
	Temperature	(°C)	400–500	400–500	400–500	400–500
Cooling Exhaust Air	Flow Rate	(mn³/h)	3,200	3,600	3,800	4,100
	Temperature	(°C)	30–70	30–70	30–70	30–70

<sup>\*</sup> Depending on desired color intensity, residual moisture, roasting time, negative pressure, roasting supply air temperature, green coffee moisture, type, etc.

# **VERSIONS**

The roasters of the G series are equipped with state-of-the-art drive, burner, and control technology, as well as a cyclone both for the roasting and cooling exhaust air. The following models are available:

	Batch Size (kg)	Roasting Time (min)	Roasting Capacity (kg/h)
G60	20–65	10–20	100–195
G75	25–80	10–20	125–240
G90	30–95	10–20	150–285
G120	60–120	10-20	240–360



### **CONTROL**

The G roasters are equipped with thermocouples as standard to document the supply-air, product, and exhaust-air temperature. The basic version is controlled manually. Optionally, the G roasters can be equipped with a semi- or fully automatic control solution with a touch panel.

- Recipe management with up to 20 user-definable recipes; saved settings can be reproduced safely and automatically (semi- and fully automatic control solution)
- Visualization of the roasting curve on the touch screen (semi- and fully automatic control solution)
- Burner output can be selected manually or automatically from a recipe (semi- and fully automatic control solution)
- Interface for external software systems from Artisan and Cropster (semi- and fully automatic control
- Process safety through pneumatic opening flaps on the bean container, roasting drum, and cooling sieve
  - Additional protective cover on the cooling sieve (fully automatic control solution)
- Emergency water quenching for the roasting drum (fully automatic control solution)
- Additional water quenching for the chaff collection container of the roasting cyclone (fully automatic control solution)
- Automatic heat switch-off when the desired final temperature is reached
- Automatic safety shutdown of the hurner when the temperature limit is reached



Just like any other KIRSCH + MAUSSER roasting machine, the roasters of the G series are also based on the drum roasting method: special shovel blades inside a horizontally lying, rotating roasting drum ensure even mixing of the beans during the roasting process and a homogeneous product. The G roasters, with batch capacities ranging between 60 and 120 kg, are equipped with pneumatic-operated opening flaps on the bean container, roasting drum, and cooling sieve outlet as a standard. These functions allow for reliable processing of green and roasted coffee and are controlled either fully automatically or simply by pressing a button on the control panel.

# BENEFITS FOR YOUR COFFEE

The ideal diameter-length ratio of the roasting drum of the G roasters guarantees a homogeneous heat transfer onto the beans during the roasting process. In addition, the G roasters offer the following benefits:

- Even mixing of the coffee beans inside the roasting drum
- Roasting air volume can be adjusted due to the integration of a frequency converter into the roasting fan
- Precise air flow thanks to the traditional flavor wheel
- Intensive cooling
- Powerful fans
- Reproducible product quality
- Independent drives for the drum and mixer, as well as for the roasting and cooling fan
- Additional separate cooling sieve outlet
- Easy to clean thanks to large maintenance openings
- Reduced emissions thanks to additional cooling exhaust air cyclone

# FEATURES



#### BURNER

The burner used in the G roasters can be configured for use with natural gas or propane, depending on customer requirements, and stands out due to the following features:

- High capacity
- Continuously adjustable for a more flexible roasting process
- State-of-the-art safety technology, including gas and flame monitoring



## **ROASTING EXHAUST-AIR CYCLONE**

The G roasting exhaust-air cyclone features a large, wheeled chaff collection container made of aluminum, making it light and easy to empty. In addition, the cyclone offers the following features:

- Individually adjustable
- Manual, emergency water quenching for the chaff collection container



#### **COOLING EXHAUST-AIR CYCLONE**

The G roasters come standard with an additional cyclone for the cooling exhaust air. This extra exhaust-air treatment keeps the amount of dust particles that enter the environment to a minimum.



## **ROASTING FAN**

Even in the basic version, the roasting fan of the G roasters is equipped with a frequency converter. Furthermore, the roasting fan stands out due to its particularly high performance and can be connected to an exhaust-air treatment system.

# **ACCESSOIRES**



### **GREEN COFFEE CONVEYOR**

KIRSCH + MAUSSER green coffee conveyors make it extremely easy to feed green coffee into the feed hoppers of the roasters of the G series.



### **AFTERBURNER**

To further treat the visible exhaust gases released during roasting, the roasters of the G series can be equipped with an afterburner specially designed for this process.



# **DESTONER**

KIRSCH + MAUSSER destoners reliably remove foreign objects with a higher specific weight than roasted coffee.



PROBAT Ladenröster GmbH Reeser Str. 91 46446 Emmerich am Rhein Germany

P +49 2822 97660-0 info.ladenroester@probat.com www.kirschundmausser.de