

# SKF TMBH 5

A light and compact solution for bearing heating



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## Portable induction heater TMBH 5

The SKF Portable induction heater TMBH 5 is designed for use in maintenance, to heat roller bearings that are mounted onto a shaft with an interference fit. Heat causes the bearing to expand, which removes the need to use force during installation. The TMBH 5 generates a temperature difference between bearing and shaft – enough to enable installation. It can also be used to heat other ring-shaped, metallic components. A reduced power setting allows sensitive components to be heated more slowly.



The TMBH 5 relies on an induction clamp that contains internal coils. A current in the coils generates a fluctuating magnetic field. This induces currents within the component, which are converted to heat. Because this heat is generated within the component – and not the clamp – the process is highly energy-efficient.

The unit's LED interface is intuitive to use, allowing the user to select either Temperature Mode or Time Mode. An LED indicates when the TMBH 5 is in operation – as it hardly makes any noise.

### TMBH 5 benefits:

- Highly portable, compact and light in weight
- Automatic temperature monitoring
- No need to choose separate yoke for each component
- Use of advanced medium frequency electronics
- Choice of power settings
- User-friendly control panel
- Silent operation



The TMBH 5 portable induction heater package includes:

- Portable induction heater TMBH 5
- Magnetic K-type 600 mm (23.6 in.) temperature probe TMBH 5-3
- Clamp TMBH 5-4
- Bearing stand TMBH 5-5
- Heat resistant gloves TMBA G11
- Operating instructions

### TMBH 5 features

#### Operation

The TMBH 5 runs in two modes: Temperature Mode, where the operator selects the desired bearing temperature; and Time Mode, allowing a bearing or component to be heated for a specified length of time.

#### Portable

Sophisticated medium-frequency technology and the use of appropriate materials make the heater lightweight and portable. A built-in handle, and storage pockets for ancillary equipment, add to its portability and convenience.



#### Versatile

The induction clamp's thin fingers mean the user does not need to choose a different yoke for each component. This increases the number of different components that can be heated – while reducing the number of accessories needed.

#### Power regulation

TMBH 5 has a variety of power settings, so can heat sensitive components (such as bearings with shields, or metallic inserts in the seals) more slowly if required.

#### Noise level

The medium frequency technology that heats the components operates silently. Because it is so quiet, an LED indicator is needed, to show that the heater is operating.

#### Technical data

Designations	TMBH 5/230V, TMBH 5/120V		
<b>Application <sup>1)</sup></b>		<b>Voltage and frequency</b>	TMBH 5/230V: 230 V ±10%, 50/60Hz TMBH 5/120V: 120 V ±10%, 50/60Hz
Bearing weight <sup>2)</sup>	up to 5 kg (11 lb)	<b>Max. current consumption</b>	TMBH 5/230V: 2A TMBH 5/120V: 4A
Min. bearing bore diameter	20 mm (0.8 in.)	<b>Temperature control</b>	40-200 °C (104-392 °F)
Max. bearing bore diameter	100 mm (4 in.)	<b>Time control</b>	5 seconds – 60 minutes
Max. bearing width	50 mm (2 in.)	<b>Demagnetisation</b>	The heater does not magnetise
Operating space heating clamp	50 x 50 mm (2 x 2 in.)	<b>Dimensions (l x w x h)</b>	275 x 180 x 270 mm (10.8 x 7.09 x 10.6 in.)
<b>Maximum power</b>	TMBH 5/230V: 350W TMBH 5/120V: 350W	<b>Total weight</b>	3 kg (6.6 lb)

<sup>1)</sup> SKF does not recommend heating bearings capped with seals or shields above 80 °C (175 °F). However, if higher temperatures are necessary, please contact SKF. The heater is designed for maintenance operations where some cooling in between jobs is allowed.

<sup>2)</sup> Depending on the geometry of the bearing, maximum heating temperature.

Light and portable enough to be carried by its handle

## TMBH 5

The TMBH 5 is versatile enough to be used in a range of situations – including at a work bench, on the factory floor or out in the field. Typical applications include maintenance and service jobs on gearboxes, pumps, fans and blowers.

It includes a carrying handle, weighs only 3 kg (6.6 lb) and is very compact. This makes it one of the smallest, most portable induction heaters on the market. The light weight and built-in handle make it portable to use in a variety of locations, while it can easily be stored in a locked place such as the trunk of a car or small storeroom.

The heater can handle bearings up to 5 kg (11 lb) in weight, with a minimum bore diameter of 20 mm (0.8 in.), a maximum of 100 mm (3.9 in.) and a maximum width of 50 mm (1.97 in.).

The TMBH 5 incorporates extra equipment to ensure safe, efficient heating. This includes: a 600 mm (23.6 in.) temperature probe; a heater clamp; and protective gloves. All this can be stored in an external compartment, which further enhances the unit's portability and convenience.

### Features:

- Accessories fit into convenient side compartments
- Carrying handle boosts portability
- Weighs only 3 kg (6.6 lb)
- Compact enough to fit in small spaces, such as the trunk of a car
- Designed to handle bearings up to 5 kg (11 lb) in weight



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