

# SKFTWIM 15

A portable solution for bearing heating



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# Portable induction heater TWIM 15

The SKF portable induction heater TWIM 15 is designed for applications in maintenance jobs to heat up bearings that are mounted with an interference fit onto a shaft. Heating the bearing causes it to expand, which eliminates the need to use force during installation. Generally, using the TWIM 15 to generate a 90 °C (162 °F) temperature difference between the bearing and shaft is sufficient to enable installation. In addition, the TWIM 15 can be used to heat other ring-shaped, metallic components, providing flexibility of use.



Utilizing electrical power, the TWIM 15 features glass-fiber, hightemperature-resistant plastic construction that allows a low temperature difference between the inner and outer rings of the bearing. This helps to reduce internal tensions that are generated due to excessive thermal expansion of the inner ring compared to the outer ring.

The unit has a user-friendly LED control panel that requires no special training and is simple to understand. The panel is used to regulate temperature and also indicates that the TWIM 15 is operational.

TWIM 15 advantages:

- Innovative heating of bearings
- · Portable, compact and lightweight
- No support yokes required
- Automatic temperature monitoring
- Detects bearing size and heats appropriately
- Different power levels
- User-friendly LED control panel
- Quiet operation



The TWIM 15 portable induction heater package includes:

- Portable induction heater TWIM 15
- Magnetic K-type 400 mm temperature probe TWIM 15-3
- Temperature-resistant gloves TMBA G11
- Instructions for use

#### Versatile

Because of the induction plate's flat shape, a support yoke is not needed. This increases the type of components that can be heated on the plate and also reduces the number of required accessories.

## Portable

Due to the medium-frequency technology used and choice of materials, the heater is lightweight. Also, the built-in handle makes it convenient to transport, and it can be stored easily.

## Innovative heating

Utilizing smart construction and operating software, the heater produces a low temperature difference between the inner and outer ring of the bearing. This reduces the internal tensions generated due to excessive thermal expansion

of the inner ring compared to the outer ring.



## Power regulation

Featuring different power settings, the TWIM 15 can heat sensitive components at a slower pace. Also, a non-bearing power configuration is possible where most of the power is focused on the bore of the component.

#### Quiet

Using medium-frequency technology to heat components does not generate noise. An LED indicates when the TWIM 15 is heating, even if you cannot hear it! In parallel, a cooling fan might be heard to help the heater's electronics to stay cool.

| Technical data  |  |                          |  |
|---|--|--------------------------|--|
| Designation   | TWIM 15  |                          |  |
| Application 1)  |  | Maximum power            | TWIM 15/230 V: 2.3 kVA                     |
| Bearing weight range <sup>2)</sup>                              | 0.5 kg (1,1 lb) - 20 kg (44 lb)  |                          | TWIM 15/110 V: 1.8 kVA                     |
| Min. bearing bore diameter                                      | 30 mm (1.18 in.)   | Voltage and frequency    | TWIM 15/230 V: 230 V, ±10%, 50/60 Hz       |
| Max bearing outer diameter                                      | 320 mm (12 6 in )  | Max. current consumption | I WIM 15/110 V: 110 V, ±10%, 50/60 Hz      |
| Max. bearing width  | 85 mm (3.35 in.)   |                          | TWIM 15/230 V: 10 A<br>TWIM 15/110 V: 16 A |
| Performance examples<br>(bearing, weight,<br>temperature, time) | 6320: 7.1 kg (15.7 lb), 110 °C (230 °F),<br>5 min 20 s<br>22320 CC/W33: 12.8 kg (28.2 lb), 110 °C (230<br>°F), 12 min 35 s | Temperature control      | 40-200 °C (104-392 °F)                     |
|   |  | Demagnetisation          | The heater does not magnetise              |
|   |  | Dimensions (w x d x h)   | 450 x 500 x 100 mm (17.7 x 19.7 x 3.9 in.) |
|   |  | Total weight             | 6.6 kg (14.6 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 and power availability.

# Carry your TWIM 15 induction heater in a convenient way

# TWIM 15-BAG

The bag provides extra portability to the TWIM 15 induction heater. It has two pockets to provide space for your heat resistant gloves, the temperature probe and the instructions for use – having the heater and all its accessories together. Like the induction heater, the TWIM 15-BAG has a compact design.

The bag helps you to maintain your heater clean and protected. For example, the bag provides shelter to the heater keeping it free from dust and industrial pollution while stored. The sturdy material of which the bag is made, protects it against scratches from other tools and mishandling. Easy and safe to carry it in the trunk of a car.

It also features a shoulder strap which facilitates bringing the heater into the field. You can carry it now hands free!

# Features:

- Excellent fit for the TWIM 15
- Made of sturdy materials
- Inner pockets for accessory storage
- Shoulder strap for easy carrying
- Compact design

The SKFTWIM 15-BAG is optional to the TWIM 15 heater. The heater and bag can also be ordered as a kit, designation: TWIM 15K.



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