UHLIG Kiln U 42: heated from four sides
SQ: 1 pce.
Firing chamber: 5.27 l
Maximum temperature: 1,200° C
Wattage: 230 V~/2,50 kW
Overall size H x W x D: 450 x 440 x 450 mm
Firing chamber H x W x D: 120 x 195 x 225 mm
Weight: 43.40 kg

UHLIG Kiln U 82: heated from four sides
SQ: 1 pce.
Firing chamber: 10.00 l
Maximum temperature: 1,200° C
Wattage: 230 V~/3,00 kW
Overall size H x W x D: 525 x 420 x 480 mm
Firing chamber H x W x D: 200 x 200 x 250 mm
Weight: 53.80 kg

Ranges of operation:
The Uhlig kilns “U 42” and “U 82” are high-quality kilns. They were tested for 2 years under heavy-duty professional conditions in practice before being introduced on the market. Their ranges of application are hobbies, trade, industrial, laboratory and dental purposes.

Features:
Both kilns are heated in the same manner and have the same firing chamber floor area. Kiln type “U 82”, however, has a higher firing chamber and a higher connected wattage. The top, bottom and both sides are heated by a new type of high-temperature modular system, developed by Uhlig for this purpose. This HT modular system consists of 4 individual heating modules, combined into a muffle (allround heating). Each of the four modules consists of a co-ordinated insulating compound with heat conductors that are sealed in the side of the firing chamber. This new system has many advantages over the conventional technique.

Special features:
- Higher protection of the sensitive heat conductors against an aggressive environment in the firing chamber.
- No direct deposits on the heat conductors possible.
- Guaranteed stability of form and at the same time possibility to expand the heating spirals.
- High degree of efficiency in heat transmission by direct contact between the heating spirals and the packing material.
- Protection against any mechanical strain on heat conductors, which break easily.
- High serviceable life of the heating, even under heavy-duty operation.
- Very homogeneous heat distribution due to the effective heating surfaces.
- Quick and easy replacement of the heating modules.

Further equipment features of the “U 42” and “U 82” kilns:
- Ventilation at the rear of the kiln casing, so the insulation at the rear can always dry out and does not lose its insulating capacity. The surface temperature is reduced, so the casing of the kiln will not rust through from the inside.
- The door of the kiln swings to the side, to prevent anyone touching the hot inside.
- The door can be customized to open to the right or to the left for right- or left-handed people.
- Quick acting closure of the kiln door with one hand.
- Inspection hole in kiln door.
- Venting of the firing chamber via a vent connection.
- Screen in stainless steel above the opening of the door to prevent corrosion caused by vapours rising up out of the kiln.
- Monitoring switch to switch off the heating.

IMPORTANT: The kilns on this page may not be operated without a temperature controlling device! We recommend our TRP008, TRP010 or TRC1 controlling device with adapter (page 14 + 16).
Variant U 42 and U 82:
This labour kiln series is individual configurable!

Options / peripheral equipment for U 42 and U 82:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 000 30</td>
<td>Control line access for temperature controlling device TRC1</td>
<td>1 pce.</td>
</tr>
<tr>
<td>43 000 31</td>
<td>Outlet and condensate collector</td>
<td>1 pce.</td>
</tr>
<tr>
<td>43 000 32</td>
<td>Programm regulator TRP010 Art.-No. 43 000 03</td>
<td>1 pce.</td>
</tr>
<tr>
<td></td>
<td>TRP010 programm regulator is an automatic process controlling device with a digital display for actual and set values. Three ramps are programmable (heating-up, full load, maintaining temperature). A thermocouple in accordance with DIN 43 710 serves as a sensor (supplied with the device).</td>
<td></td>
</tr>
<tr>
<td>43 000 33</td>
<td>Programm regulator TRP011 Art.-No. 43 000 02</td>
<td>1 pce.</td>
</tr>
<tr>
<td></td>
<td>TRP011 programm regulator is an automatic process controlling device with a digital display for actual and set values. Three ramps are programmable (heating-up, full load, maintaining temperature). A thermocouple in accordance with DIN 43 710 serves as a sensor (supplied with the device + a built-in 7 day time switch).</td>
<td></td>
</tr>
</tbody>
</table>

There may be colour deviations due to the printing process. Subjects may change.
Uhlig Kiln U 5: fully heated
43 000 11
Firing chamber: 1,10 l
Maximum temperature: 920° C
Wattage: 230 V~ / 0,90 kW
Overall size H x W x D: 205 x 225 x 275 mm
Firing chamber H x W x D: 70 x 120 x 130 mm
Weight: 4,90 kg

IMPORTANT: The "U 5" and "U 5 T" type kilns may be operated without a temperature controlling device!

Uhlig Kiln U 5 T: fully heated
43 000 10 with door switch
Firing chamber: 1,10 l
Maximum temperature: 920° C
Wattage: 230 V~ / 0,90 kW
Overall size H x W x D: 245 x 225 x 245 mm
Firing chamber H x W x D: 70 x 120 x 130 mm
Weight: 5,80 kg

Uhlig Kiln U 15: heated from two sides
43 000 12
Firing chamber: 1,27 l
Maximum temperature: 1,000° C
Wattage: 230 V~ / 0,95 kW
Overall size H x W x D: 190 x 275 x 265 mm
Firing chamber H x W x D: 75 x 130 x 130 mm
Weight: 6,20 kg

IMPORTANT: The "U 15" and "U 17" type kilns may not be operated without a temperature controlling device!

Uhlig Kiln U 17: heated from two sides
43 000 50
Firing chamber: 1,22 l
Maximum temperature: 1,000° C
Wattage: 230 V~ / 0,70 kW
Overall size H x W x D: 280 x 330 x 295 mm
Firing chamber H x W x D: 75 x 130 x 125 mm
Weight: 9,50 kg
Uhlig Kiln U 24: fully heated
43 000 15

Firing chamber: 2.09 l
Maximum temperature: 1.100° C
Wattage: 230 V~/ 1.20 kW
Overall size H x W x D: 310 x 355 x 375 mm
Firing chamber H x W x D: 95 x 155 x 170 mm
Weight: 18.30 kg

Uhlig Kiln U 24 ST: fully heated with temperature controller
43 000 16

Firing chamber: 2.09 l
Maximum temperature: 1.100° C
Wattage: 230 V~/ 1.20 kW
Overall size H x W x D: 310 x 425 x 375 mm
Firing chamber H x W x D: 95 x 155 x 170 mm
Weight: 19.50 kg

Ranges of application:
The "U 24" and "U 24 ST" kilns are multi-purpose kilns. They are used for hobbies, trade, industrial, laboratory and dental purposes. The firing chamber is not provided with any venting device. A connection for a control line can be supplied on request.

Features:
Both types of kilns are equipped with the same heating and firing chamber. The top, bottom and both sides are heated by a robust muffle made of high-quality ceramics. The muffle is provided with purpose-made duct bore holes with inserted heavy-duty heat conductors. This system ensures a uniform heat distribution and a long serviceable life. There is a bore hole for the insertion of a probe in the rear wall of the kiln.

Special features:
The "U 24 ST" type (ST for 'step switch') is equipped with a switch box with a clock switch and signal lamp that is installed on the side. The clock switch can be set at levels 1 to 10 and works with a bimetal. It controls the current supply and thus the temperature and heating rate of the kiln with the aid of switching pulses. The higher the level, the longer the pulse, so the temperature will rise more quickly and the final temperature will be higher. At level 10, the kiln is supplied with current continuously. The signal lamp on the switch box lights up according to the current feeding cycle.

The step switch is neither a thermostat, nor a regulator! It may, however, be used together with a temperature indicator for manual control. If the "U 24 ST" is operated with the aid of a regulator, the step switch may be used to control the heating-up rate, the final temperature being automatically monitored by the regulator.

IMPORTANT: The kilns on this page may not be operated without a temperature controlling device!
Laboratory and Workshop Kilns

ArtClay firing kiln:

43 000 20 silver with programm regulator TRP010 SQ: 1 pce.
Art.-No. 43 000 03 and temperature probe
Maximum temperature: 900° C
Wattage: 230 V~/ 0.90 kW
Overall size H x B x T: 275 x 225 x 245 mm
Firing chamber H x B x T: 70 x 120 x 130 mm
Weight: 6 kg

43 000 21 gold with programm regulator TRP010 SQ: 1 pce.
Art.-No. 43 000 03 and temperature probe
Maximum temperature: 1,100° C
Wattage: 230 V~/ 1.20 kW
Overall size H x B x T: 365 x 245 x 320 mm
Firing chamber H x B x T: 140 x 90 x 155 mm
Weight: 11 kg

These kilns are produced especially for ArtClay, a unique silver colour using for jewellery production. The high-capacity kilns meet all demands also in workshops and laboratories. TRP010 programm regulator is an automatic process controlling device with a digital display for actual and set values. Three ramps are programmable (heating-up, full load, maintaining temperature). A thermocouple in accordance with DIN 43 710 serves as a sensor (supplied with the device).

Our high-performance muffle kilns U 5 and "EFCO 135" combined with the programm regulator TRP010. Solid, easy transportable and compact. Ideally for small working groups and workshops.
LABORATORY AND WORKSHOP KILNS

There may be colour deviations due to the printing process. Subjects may change.

The high-performance muffle kiln EFCO 135 in compact design is heated from all sides and is provided with an insulating board in the swing door, a ceramic firing insert and a heat-resisting metal painting.

The high heating capacity of the device allows for all firing techniques in a firing range between 400°C and 1100°C, as well as for firing glass, ceramics and enamelling, and for annealing and hardening metals and tools too.

**Appropriate controls:**

- for "EFCO 110", "EFCO 135" and "EFCO 135 D"
  - 99 501 91 temperature control device  SQ: 1 pce.
  - 99 502 41 thermometer  SQ: 1 pce.
  - 99 502 51 2-point regulator digital  SQ: 1 pce.
  - 43 000 08 Temperature regulator TRP008  SQ: 1 pce.
  - 43 000 09 Temperature regulator TRP009  SQ: 1 pce.
  - 43 000 03 Temperature controller TRP010  SQ: 1 pce.
  - 43 000 02 Temperature controller TRP011  SQ: 1 pce.

You can find these devices on the pages 14 - 15.

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Kiln type “EFCO 110”

- **99 500 51**  SQ: 1 pce.

**Technical data:**

- **Overall size:** W 200 x H 210 x D 250 mm
- **Firing chamber:** W 120 x H 70 x D 130 mm, equivalent to 1100 ccm
- **Net weight:** ca. 4.1 kg
- **Max. operating temperature:** ca. 1000 °C
- **Wattage:** 230 V~, 900 W, 6 A

**Spare parts:**

- 99 520 12 muffle with heating spiral  SQ: 1 pce.
- 99 520 21 mica plate 70 x 110 mm  SQ: 1 pce.
- 99 401 31 firing insert 95 x 115 mm  SQ: 1 pce.

**EFCO 110** - the all around heatable muffle kiln is the ideal introduction kiln. Fast heating as well as a big sight window are other features, which jewellery designer appreciate.

Firing capacity approx. 900 °C after 30 minutes.

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Kiln type “EFCO 135”

- **99 500 31**  SQ: 1 pce.

**Technical data:**

- **Overall size:** W 260 x H 250 x D 300 mm
- **Firing chamber:** W 140 x H 90 x D 155 mm, equivalent to 1950 ccm
- **Net weight:** ca. 6.3 kg
- **Max. operating temperature:** ca. 1100 °C
- **Wattage:** 230 V~, 1200 W, 6 A

**Kiln type “EFCO 135 D”: no picture**

- **99 500 33** EFCO 135 with door switch  SQ: 1 pce.

**Spare parts:**

- 99 522 31 mica plate 45 x 110 mm  SQ: 1 pce.
- 99 524 62 muffle with heating spiral  SQ: 1 pce.
- 99 524 71 jamb brick  SQ: 1 pce.
- 99 404 01 firing insert 115 x 130 mm  SQ: 1 pce.

The high-performance muffle kiln EFCO 135 in compact design is heated from all sides and is provided with an insulating board in the swing door, a ceramic firing insert and a heat-resisting metal painting.

You can find these devices on the pages 14 - 15.
Kiln type “EFCO 150”

99 500 61

SQ: 1 pce.

Technical data:

Overall size: W 260 x H 300 x D 375 mm
Firing chamber: W 160 x H 85 x D 195 mm,
Net weight: ca. 8.0 kg
Max. operating temperature: ca. 1100 °C
Wattage: 230 V~, 1200 W, 6 A

Kiln type “EFCO 150 D”: no picture

99 500 66  EFCO 150 with door switch  SQ: 1 pce.

Spare parts:

99 523 21 mica plate  SQ: 1 pce.
99 521 21 muffle with heating spiral  SQ: 1 pce.
99 521 31 jamb brick  SQ: 1 pce.
99 404 01 firing insert  SQ: 1 pce.

High-performance muffle kilns in compact design, heated from all sides. The high heating capacity of the devices allows for all firing techniques in a firing range between 400°C and 1100°C, such as for firing glass, ceramics and enamelling, as well as for annealing and hardening metals and tools.

Kiln type “EFCO 180”

99 500 81

SQ: 1 pce.

Technical data:

Overall size: W 300 x H 320 x D 410 mm
Firing chamber: W 190 x H 115 x D 225 mm,
Net weight: ca. 14.1 kg
Max. operating temperature: ca. 1100 °C
Wattage: 230 V~, 2000 W, 10 A

Kiln type “EFCO 180 D”: no picture

99 500 88  EFCO 180 with door switch  SQ: 1 pce.

Spare parts:

99 522 21 mica plate  SQ: 1 pce.
99 521 52 muffle with heating spiral  SQ: 1 pce.
99 521 71 jamb brick  SQ: 1 pce.
99 404 91 firing insert  SQ: 1 pce.

Appropriate controls:

for “EFCO 150”, “EFCO 150 D”, “EFCO 180” and “EFCO 180 D”

99 501 91 temperature control device  SQ: 1 pce.
99 502 41 thermometer  SQ: 1 pce.
99 502 51 measuring and controlling device  SQ: 1 pce.
43 000 08 Temperature regulator TRP008  SQ: 1 pce.
43 000 09 Temperature regulator TRP009  SQ: 1 pce.
43 000 03 Temperature controller TRP010  SQ: 1 pce.
43 000 02 Temperature controller TRP011  SQ: 1 pce.

You can find these devices on the pages 14 - 15.
### Technical data

**180 RT**
- Overall size [mm]: W 270 x H 370 x D 400
- Firing chamber [mm]: W 190 x H 115 x D 225
- Net weight: approx. 16 kg
- Max. operating temperature: 1100 °C
- Wattage: 230 V~/2000 W
- Order number: 99 502 71

### RT series:

Robust kilns for industrial and laboratory purposes with a thermorelay and an analogue thermometer, signal lamp, door switch and ceramic insert plat. Suitable for all firing techniques between 400°C and 1100°C.

### Ranges of operation:

The kilns of the “RT” series are versatile and may be used for example for dental techniques or sewage treatment purposes. Moreover, they may be used for enamelling or as laboratory kilns.

### Features:

The kilns of the “RT” series are provided with door switches and step controls (adjustable from 1 to 10). The control sets the current supply to the kiln with the aid of interval pulses. If the control is switched to 10, the current is supplied continuously. The current carrying time is indicated by a signal lamp. The temperature inside the kiln is measured directly inside the kiln and indicated on the integrated analogue thermometer.

### TH series:

Solid industrial and labour kilns with in-built programm regulator TRP010 for an exactly temperature control.

### Ranges of operation:

The kilns of the “TH” series can be used as laboratory and enamelling kilns, for sewage treatment purposes and as dental kilns for Speed embedding material.

### Features:

The kilns of the “TH” series are provided with a door switch, a digital two-position control and a selector switch for two programs.

### Technical data

**180 TH**
- Overall size [mm]: W 270 x H 370 x D 400
- Firing chamber [mm]: W 190 x H 115 x D 225
- Net weight: approx. 16 kg
- Max. operating temperature: 1100 °C
- Wattage: 230 V~/2000 W
- Order number: 99 502 61
Electric Efco Kilns

with open spirals
for industry, hobbies, schools and workshops
for annealing, melting, hardening, firing, glazing,
fusing and for firing painting on ceramics and porcelain

Appropriate controls:
- 99 501 91 temperature control device SQ: 1 pce.
- 99 502 41 thermometer SQ: 1 pce.
- 99 502 51 measuring and controlling device SQ: 1 pce.
- 43 000 08 Temperature regulator TRP008 SQ: 1 pce.
- 43 000 09 Temperature regulator TRP009 SQ: 1 pce.
- 43 000 03 Temperature controller TRP010 SQ: 1 pce.
- 43 000 02 Temperature controller TRP011 SQ: 1 pce.
- 43 001 01 Temperature controller TRC1 in connexion with adapter 43 001 11 (240 V) or 43 001 10 (400 V)

You can find these devices on the pages 14 - 16.

Enamelling kilns:

High-capacity kiln with door switch, the professional kiln for schools, workshops, industry and laboratories for enamelling, pottery, painting porcelain and other firing techniques.

Enamelling kiln, type 18 E:
- 99 504 81 SQ: 1 pce.

Technical data:
- Overall size: B 490 x H 520 x T 500 mm
- Firing chamber: B 300 x H 200 x T 300 mm, equivalent to 18000 cm³
- Net weight: approx. 48.80 kg
- Max. operating temperature: approx. 1250 °C
- Wattage: 230 V~, 2.8 kW

Accessories
- 99 507 03 fitted plate 27 x 27 cm MSQ: 1
- 99 525 02 spare spirals MSQ: 1

Appropriate controls:
- 99 501 91 temperature control device SQ: 1 pce.
- 99 502 41 thermometer SQ: 1 pce.
- 99 502 51 measuring and controlling device SQ: 1 pce.
- 43 000 08 Temperature regulator TRP008 SQ: 1 pce.
- 43 000 09 Temperature regulator TRP009 SQ: 1 pce.
- 43 000 03 Temperature controller TRP010 SQ: 1 pce.
- 43 000 02 Temperature controller TRP011 SQ: 1 pce.
- 43 001 01 Temperature controller TRC1 in connexion with adapter 43 001 11 (240 V) or 43 001 10 (400 V)

You can find these devices on the pages 14 - 16.

IMPORTANT: The kilns on this page may not be operated without a temperature controlling device!

There may be colour deviations due to the printing process.
Subjects may change.
Digital two-position control TRP008:
Description: The control device TRP 008 is an automatic 2 point regulator with digital display and set point indicator. A NiCr-Ni thermo element sensor compliant with DIN 43 710 is fitted to the device. Regulator TRP 008 is ideal for controlling temperature settings for enameling, glazes, annealing and tempering, as well as for firing ceramic paints etc. The regulator is ideal for use where a constant temperature over long periods of time is required. The kiln power lead plugs directly into the output socket of the regulator. Suitable for use up to 3,500 watt at 230 volt (Ohm resistive load).

Programme regulator TRP010: 3 ramps programmable
43 000 03 1200 °C for NiCr-Ni sensor SQ: 1 pce.
230 V / 50 Hz / 3500 W
Description: The control device TRP 010 is a programme regulator with digital actual value and set point indication. A thermo element serves as a sensor according to DIN 43 710 (is enclosed to the device). The control device TRP 010 is used especially for the temperature regulation by enamel, glaze, annealing and tempering kilns, as well as for burning of ceramic, porcelain etc. The regulator will be everywhere applicable, where above three steps (light a fire, full load, heat saving), a temperature is demanded. The kiln is pocketed directly in the socket of the regulator and is switched by this up to a power of 3,500 watt with 230 volt (Ohm resistive load).

Temperature controller TRP011: 3 ramps programmable
43 000 02 1200 °C for NiCr-Ni sensor SQ: 1 pce.
230 V / 50 Hz / 3500 W
The same features as TRP010 but with an attached built-in 7 day time switch.
CONTROLS

These temperature measuring instruments can be connected to all EFCO electric kilns and serve to determine the temperature inside the kiln (except model number EFCO 110). The connection of the measuring instruments is very simple. At the back of the kiln is a connection device, into which the temperature sensors of the measuring instrument is inserted. Via a thermo element, this instrument transfers a temperature range of 20 degrees Celsius to 1200 degrees Celsius is clearly marked. For regulating the desired temperature, we recommend that the EFCO temperature regulator be switched on before the kiln.

Technical data:
- Wattage: 230 V~, 16 A
- Ohm resistive load: up to 3,500 Watt

EFCO energy regulators thermostatically control the power input to the kiln, enabling precise control of the firing temperature. This is ideal for melting glass and firing painted ceramics. We strongly recommend the use of a regulator on all kilns, not only for greater versatility in firing settings, but also to help extend the life of the heating elements.

Thermal element:
- 99 524 01 160 mm NICR-NI without diode plug
  - for 99 502 41
- 99 524 02 160 mm NICR-NI with diode plug
  - MAS 40 (4-pole) for 99 502 51
  - (old style, grey devices)
  - Therm IV, Therm V
- 99 524 03 200 mm NICR-NI without diode plug
  - for bigger EFCO kilns or for 99 502 41
- 99 524 04 200 mm NICR-NI with diode plug
  - MAS 40 (4-pole) for bigger EFCO kilns
  - from 27 L upside, 99 502 51
  - (old style, grey devices)
  - Therm IV, Therm V
- 99 524 06 160 mm NICR-NI with diode plug
  - MAS 30 (3-pole) standard probes for TRP008, TRP009, TRP010, TRP011, 99 502 51 (new style, brown devices), 43 000 21, 99 500 39, 99 502 71, 99 502 61
- 99 524 07 80 mm NICR-NI with diode plug
  - MAS 30 (3-pole) for 43 000 20
- 99 524 08 200 mm NICR-NI with diode plug
  - MAS 30 (3-pole) for TRP008, TRP009, TRP010, TRP011 and TRC1 in connexion with EFCO kilns from 27 L upside and new type 135TH HE

See more thermocouples on the following page 16.
Our recently developed TRC1 temperature controlling computer fulfills the wish of many users to have a microprocessor system with professional equipment features that is easy to control.

With the TRC 1 you can program temperature profiles in up to 15 ramps! So it is possible for you to program your computer in 15 steps (upwards and downwards), to store the data and to load it just by striking a key. This transforms a device produced in series into a very personal tool, designed to suit your own very personal requirements.

Nine overwritable storage locations are available for this purpose, so you can always adjust the storage to your personal requirements.

The time data always refer to the ramp you put in or load from the storage locations. The firing time results from the addition of all ramps and the time that is required to reach the final temperature. The last factor (final temperature phase) directly depends on the performance of your kiln and the volume of objects to be fired. In this phase of the firing process, the TRC 1 sets the kiln at full power.

If you control your kiln with a high connected wattage, the final temperature phase is shorter than it would be for a kiln with a low connected wattage.

The second factor that influences the final temperature phase is the volume of objects to be fired. A full kiln works longer than a kiln with a firing chamber which is only partially filled. The TRC 1 is freely programmable. The input sequence does not matter. You may set any number of preheating times, final temperatures and holding times. In addition to this, the TRC 1 provides a controlled cooling time, as it can also be set downwards.

At any time the Start/Stop key may be used to stop a running program, and to continue either with another memorized program or a manual setting.

Upon request and against extra charges, the TRC 1 can be equipped with a Centronics interface for the connection of a printer, so you can record the total firing procedure. The TRC 1 is supplied ready for installation.
CRUCIBLE MELTING KILNS / FIRING ACCESSORIES

EFCO “AM2” Crucible Melting Kiln
99 501 71
Technical data:
- Overall size: B 250 x H 410 x T 250 mm
- Firing chamber: ø 55 x H 120 mm
- Net weight: ca. 4.1 kg
- Max. operating temperature: ca. 1200°C
- Wattage: 230 V~, 1000 W, 6 A

The “AM2” Crucible Melting Kiln is a kiln for melting at an automatically constant temperature. It is especially suitable for melting small quantities of metal in industry and in workshops. The device heats up to the operating temperature in a very short time. The maximum melting temperature is approx. 1200°C. The temperature is kept at the set level automatically and constantly.

Soft fiber cloth:
99 401 00 until 900°C, 15 x 22,5 cm x 20 mm SQ: 1 pce.
99 401 01 until 900°C, 10 x 15 x 0,5 cm, SS SQ: 1 pce.
99 401 02 until 900°C, 15 x 22,5 x 0,5 cm, SS SQ: 1 pce.

Firing sieve:
99 411 41 80 x 70 mm, SS SQ: 1 pce.
99 411 51 120 x 80 mm, SS SQ: 1 pce.
99 411 53 180 x 120 mm, SS SQ: 1 pce.