Future-proof CO$_2$ solutions
Close to the customer
Our first subcritical CO2 systems in the food retail sector were installed in 2004. This was followed in 2006 by transcritical systems. Today several thousand TEKO CO2 systems are successfully in operation.

Standardised CO2 series
All components of our ROXSTA series are subjected to thorough long-time tests. Like this, you can be sure that all components and controls of your system are tested, functional and safe to use.

- Long-standing experience with transcritical CO2 systems
- System solutions for every application, including matching controls technology
- High degree of hermetic sealing
- Short delivery times
- TÜV-compliant technology

Safety and quality
- Reduced soldering joints due to bent K65 pipes via fully automated bending machines and extruded piping
- Leak and pressure testing of every system before delivery (up to 180 bar)
- Fine leak tests with a helium/nitrogen mixture can detect a leakage rate as small as 1 g/year.

Training options for you
In our in-house training centre in Altenstadt we train over 300 experts every year, including installers, planners and operators. With this, we are actively driving innovation in the HVAC&R sector.
**TEKO-Patent EVALIFT**

EVALIFT is our efficient, simple and safe solution to raise the efficiency of the system significantly.

This innovative technology allows evaporation free of superheat directly at the refrigeration points, taking advantage of the full evaporator surface for evaporation.

This is possible via a specially designed heat exchanger in combination with a smart control system.

Also higher system stability leads to a better operational safety and a longer lifetime of your refrigeration system.

**Advantages at a glance**

- An alternative to an ejector, with technology that users understand more easily
- Available for MT and LT application
- Improved operational safety, system oil budget and system stability.

**TEKOJET**

TEKOJET technology combines the EVALIFT patent with a continuous ejector. This results in a further increase in efficiency (approx. +5%), especially in systems with 150 kW cooling capacity or more.
ROXSTA RANGE
AT A GLANCE

ROXSTA series

micro
- ROXSTAmicro up to 5 kW

air
- ROXSTAir up to 20 kW

cube mini

cube
- ROXSTAcube mini up to 50 kW

smart

2.0

G6

medium temperature
low temperature
R 744
ROXSTAsmart
up to 150 kW

ROXSTA2.0
up to 360 kW

ROXSTAG6
up to 550 kW
ROXSTAmicro

ROXSTAmicro is the small and compact CO2 box for direct connection with MT and LT plug & play units.

**Air or water-cooled condensing unit**
- Air-cooled version for food retail, commercial kitchens, cold rooms, ice making
- Water-cooled version for combination with water chillers, dry coolers

**Compressor**
The speed-controlled, two-stage rotary compressor offers optimal adaptation to the cooling needs with the lowest possible energy consumption.

**Capacities**
(to MT -7 °C / to LT -30 °C / tGC 30 °C)
- MT 0.8...5.4 kW. 1 two-stage CO2 rotary compressor
- LT 0.3...2.5 kW. 1 two-stage CO2 rotary compressor

**Design pressure**
- 45 bar suction line (MT / LT)
- 80 bar medium pressure
- 120 bar high pressure side

**Scope of delivery**
- Two-stage speed controlled BLDC Panasonic rotary compressor
- Medium pressure vessel
- High pressure valve
- Filter dryer incl. sight glass
- 2 lockable service valves
- Isolated from the middle pressure points
- Air-cooled for gas cooler / desuperheater combination
- Water-cooled with plate heat exchanger
- Including controls technology
- Powder-coated frame
- Pre-installed M8 mounts to apply feet
- Speed-controlled gas cooler ventilation (optional)

**Dimensions & weight**

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Weight (kg)</th>
<th>Length</th>
<th>Depth</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>air-cooled</td>
<td>ROXSTAmicro 63</td>
<td>30</td>
<td>790</td>
<td>495</td>
<td>310</td>
</tr>
<tr>
<td></td>
<td>ROXSTAmicro 163</td>
<td>30</td>
<td></td>
<td></td>
<td>365</td>
</tr>
<tr>
<td></td>
<td>ROXSTAmicro 303</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>water-cooled</td>
<td>ROXSTAmicro 63</td>
<td>30</td>
<td>620</td>
<td>356</td>
<td>310</td>
</tr>
<tr>
<td></td>
<td>ROXSTAmicro 163</td>
<td>30</td>
<td></td>
<td></td>
<td>365</td>
</tr>
<tr>
<td></td>
<td>ROXSTAmicro 303</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ROXSTA AIR

ROXSTA air combines machine technology with condenser technology in a space-saving weather proof housing. The unit is suitable for installation with smaller MT systems.

Installation options
Save yourself a separate machine room.
• Indoor installation with 2 EC radial fans
• Outdoor installation with 2 EC axial fans

Plug & Play – little assembly effort
The piping including HP and LP safety valves is located inside the housing. Only the liquid and suction lines need to be piped, which simplifies installation and saves time.

Capacities
(to MT -5 °C / tGC 38 °C)
• MT 11...20 kW. 1 transcritical CO2 compressor

Design pressure
• 45 / 80 bar suction line
• 45 / 80 bar medium pressure
• 120 bar high pressure side

Dimensions & weight

<table>
<thead>
<tr>
<th>Weight (approx. kg)</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>420</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td>1,575</td>
</tr>
</tbody>
</table>

Sound data
54 dB(A) in 10 m
Sound measurements under laboratory conditions (airborne sound at 50 Hz). Despite careful control of the content, we do not assume any liability for the correctness and completeness of the data.

Scope of delivery
• Transcritical compressor (Bitzer or Frascold)
• Frequency converter included
• Safety features comply with DIN EN 378
• Switch panel with electronic control
• Muffler in discharge side
• Flash gas heat exchanger
• Medium pressure tank (20 L)
• Shut-off measuring connections
• Suction side insulation
• Machine tray with integrated safety valves
• Condenser housing (corrosion category C3) with 2 EC radial/axial fans
• Emergency off switch
• Generously dimensioned machine room ventilation
• Antivibration pads for optimal low-vibration positioning

Heat exchanger
• CO2 evaporators
Series solution with CO₂

The system solutions ROXSTAcube mini and ROXSTAcube are ideal for the demands of discount supermarkets, organic shops or smaller supermarkets.

Flexible installation

The Series are available for indoor or outdoor installation.

- Without sound insulation for indoor installation
- With basic sound insulation for indoor and outdoor installation (10 dB(A) sound reduction*)
- With advanced sound insulation for indoor and outdoor installation (15 dB(A) sound reduction*)

* max. values according to the installation situation

Capacities

(to MT -5 °C / to LT -30 °C / tGC 38 °C)

ROXSTAcube mini
- MT 19...50 kW. 2 transcritical CO₂ compressors
- LT 0...7 kW. 0...1 subcritical CO₂ compressors

ROXSTAcube
- MT 28...100 kW. 3 transcritical CO₂ compressors
- LT 0...14 kW. 0...2 subcritical CO₂ compressors

Design pressure

- 30 bar suction line (LT)
- 45 bar suction line (MT)
- 45 / 60 bar medium pressure
- 120 bar high pressure side
Scope of delivery

- Transcritical and subcritical compressors (Bitzer / Frascold)
- Frequency converter included (per lead compressor)
- Oil regulation system
- Safety devices conform to DIN EN 378
- Switch cabinet with electronic control
- Medium pressure collector (ROXSTAcube mini 60 / 80 L) (ROXSTAcube 80 / 100 L)
- Ball stop valve before and after high and medium pressure valve (before HP valve loosely enclosed)
- Flash gas heat exchanger
- Ball stop valve for the common discharge line of the medium temperature cooling (loosely enclosed)
- Suction filter in combination with ball stop valve (loosely enclosed) on suction line (MT)
- Liquid set consisting of two ball stop valves, liquid filter and sight glass
- Insulation on suction side
- Antivibration pads for optimal positioning with low vibration
- Safety valve station

Optional

- Weather proof and sound insulation housing for indoor or outdoor installation
- Basic sound insulation (40 mm insulation)
- Advanced sound insulation (100 mm insulation)
- HR incl. 3-way ball motor valve and temperature sensor

Heat exchanger

- CO2 evaporators
- Gas cooler

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Installation options</th>
<th>Weight (approx. kg)</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Length*</td>
<td>Depth</td>
</tr>
<tr>
<td>ROXSTAcube mini</td>
<td>mounted switch cabinet</td>
<td>800</td>
<td>1,710</td>
</tr>
<tr>
<td></td>
<td>indoor</td>
<td>1,100</td>
<td>1,785</td>
</tr>
<tr>
<td></td>
<td>outdoor</td>
<td>1,700</td>
<td>2,200</td>
</tr>
<tr>
<td></td>
<td>indoor &amp; outdoor</td>
<td>1,150</td>
<td>1,230</td>
</tr>
<tr>
<td></td>
<td>sound insulation 40 mm</td>
<td>1,300</td>
<td>1,350</td>
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<tr>
<td></td>
<td>advanced sound insulation 100 mm</td>
<td>1,500</td>
<td>1,775</td>
</tr>
<tr>
<td></td>
<td>outdoor</td>
<td>1,800</td>
<td>1,785</td>
</tr>
<tr>
<td>ROXSTAcube</td>
<td>separately arranged switch cabinet</td>
<td>1,200</td>
<td>2,200</td>
</tr>
<tr>
<td></td>
<td>indoor</td>
<td>1,150</td>
<td>1,230</td>
</tr>
<tr>
<td></td>
<td>sound insulation 50 mm</td>
<td>1,300</td>
<td>1,350</td>
</tr>
<tr>
<td></td>
<td>advanced sound insulation 100 mm</td>
<td>1,800</td>
<td>1,785</td>
</tr>
</tbody>
</table>
* plus 200 mm pipe connections
** plus 200 mm ventilation cover
ROXSTA smart

The sustainable ROXSTA smart concept fits perfectly to the requirements of small to medium-sized supermarkets, commercial kitchens or smaller warehouses.

**Capacities**

(to MT -5 °C / to LT -30 °C / tGC 38 °C)

- MT 28...150 kW, 3...4 transcritical CO2 compressors
- LT 0...43 kW, 0...3 subcritical CO2 compressors

**Integral system**

ROXSTA smart is used in our integral concept. Commercial refrigeration, air conditioning and building heating are completely realised in just one system.

**Space-saving and easy to install**

- Compact construction
- Easy to install
- Easy to maintain
- Pre-piped and pre-wired
- Tested completely and in full compliance with CE-standards
- Minimal installation effort

**Design pressure**

- 30 bar suction line (low temperature)
- 45 bar suction line (medium temperature)
- 60 bar medium pressure
- 120 bar high pressure side
**Scope of delivery**

- Trans- and subcritical compressors (Bitzer / Frascold)
- Frequency converter included (per lead compressor)
- Oil regulation system
- Safety devices conform to DIN EN 378
- Switch cabinet with electronic control
- Regulated post-injection
- Ball stop valve before and after the high and medium pressure valves
- Ball stop valve for the common discharge line of the medium temperature cooling
- Suction filter in combination with ball stop valve in the suction line – both for MT and LT
- Liquid set consisting of two ball stop valves, liquid filter and sight glass
- Heat exchanger for suction gas superheat in low temperature cooling
- Insulation on suction side
- Antivibration pads for optimal positioning with low vibration
- Safety valve station

**Optional**

- **COOL2HEAT** basic incl. 3-way valve and insulation of the discharge line, oil separator and plate heat exchanger (service or hot water)
- **COOL2HEAT basic** as stand-alone circuit (service or hot water)
- Second control valve for high and medium pressure
- Minimum level control
- Standstill cooling unit (loose at delivery; connections to receiver provided)
- Tandem receiver (2x 165 L)
- Gas cooler bypass
- Pump for heat recovery
- Connections for external desuperheater
- Intermediate pressure 80 bar
- Controlled MT suction gas heat exchanger
- LT suction gas heat exchanger
- Weather proof and sound insulation housing for outdoor installation with heating for oil receiver

**Heat exchanger**

- CO2 evaporators
- Gas cooler

---

### Model Receiver | Weight | Dimensions (mm) | Dimensions (mm) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ROXSTAsmart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/0-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>1,710</td>
<td>2,430</td>
<td></td>
</tr>
<tr>
<td>2 x 165</td>
<td>1,840</td>
<td>3,110</td>
<td></td>
</tr>
<tr>
<td>4/0-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>1,870</td>
<td>2,860</td>
<td></td>
</tr>
<tr>
<td>2 x 165</td>
<td>2,000</td>
<td>3,540</td>
<td></td>
</tr>
</tbody>
</table>

* with heat recovery pump: plus 250 mm in length

---

**Model Receiver Weight Dimensions (mm)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Receiver</th>
<th>Weight</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROXSTAsmart</td>
<td>Receiver</td>
<td>Weight</td>
<td>Dimensions (mm)</td>
</tr>
<tr>
<td>3/0-2</td>
<td>165</td>
<td>1,710</td>
<td>2,430</td>
</tr>
<tr>
<td>2 x 165</td>
<td>1,840</td>
<td>3,110</td>
<td></td>
</tr>
<tr>
<td>4/0-3</td>
<td>165</td>
<td>1,870</td>
<td>2,860</td>
</tr>
<tr>
<td>2 x 165</td>
<td>2,000</td>
<td>3,540</td>
<td></td>
</tr>
</tbody>
</table>

* with heat recovery pump: plus 250 mm in length
ROXSTA 2.0

ROXSTA 2.0 is suitable for larger supermarkets, food production and logistics or warehouses. For difficult placement situations or narrow machine rooms, the machine and medium pressure station can be separated on site.

Capacities
(to MT -5 °C / to LT -30 °C / tGC 38 °C)
- MT 36...360 kW. 3...6 transcritical CO2 compressors
- LT 0...240 kW. 0...5 subcritical CO2 compressors

Freshness first
The quality of chilled goods always is the highest priority. When using heat recovery / heat pump or climate function the first step is to check whether the goods temperature is safe.

Detachable heat pump compressor
During the heating period, the heat pump compressor can be detached from the cooling mode (separate temperature level). The compressors of the medium temperature cooling remain on a constant level of evaporating temperature, the efficiency of the unit remains preserved.

EVALIFT / TEKOJET / Ejektors
We are happy to advise you which efficiency-enhancing technologies are right for your project.

Design pressure
- 30 / 60 bar suction line (low temperature)
- 45 / 60 bar suction line (medium temperature)
- 45 / 60 bar medium pressure
- 120 bar high pressure side
Scope of delivery

- Trans- and subcritical compressors (Bitzer / Frascold)
- Frequency converter included (per lead compressor)
- High and low pressure packages (gauge, LP cut-out, pressure transducer)
- Pressure cut-out for high and safety pressure, non-adjustable, type tested per compressor
- Safety valves for high/medium pressure and suction side (optional redundant)
- Insulation on suction side
- Medium pressure receiver (165 L / 250 L / 420 L / 2 x 165 L / 2 x 250 L)
- Sensor at the outlet of the gas cooler
- Minimum (and maximum – optional) level control
- Insulation of the medium pressure vessel
- Regulated post-injection
- Stop valve after filter-drier and sight glass
- Antivibration pads
- Suction filter (MT/L T)
- Oil sump heater each compressor
- Main switch
- Control transformers
- Independent power supply closes the high and medium pressure valves in case of power failure
- Energy metering MT/L T (optional)

Optional

- Flash gas and suction gas heat exchanger MT/L T
- Sound insulation / weather protection 40 mm incl. heater band on oil receiver

Heating and air conditioning

- Heat exchanger for heating and service water incl. manual bypass & 3-way ball motor valve
- Charge pumps for heating and service water
- Heat pump compressor
- Air conditioning function
- Insulation on pressure side (13 mm)

Improvement in efficiency

- Parallel compression
- Ejectors
- TEKO development EVALIFT & TEKOJET
- CO₂ evaporators
- Gas coolers

Switch cabinet and control

- Switch cabinet with electronic control
- All switching devices which are necessary for fully automatic operation
- Electric components are labelled according to German standards
- Ventilation of the switch cabinet

<table>
<thead>
<tr>
<th>Model</th>
<th>Receiver content (litres)</th>
<th>Weight (kg)</th>
<th>Length* unit</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/0-2</td>
<td>165</td>
<td>3,750</td>
<td>1,100 (165 L / 250 L)</td>
<td>dependent on MP station</td>
</tr>
<tr>
<td>4/0-3</td>
<td>250</td>
<td>4,200</td>
<td>1,233 (420 L)</td>
<td>976</td>
</tr>
<tr>
<td>5/0-4</td>
<td>420</td>
<td>4,900</td>
<td>2,000 (2 x 165 L / 2 x 250 L)</td>
<td>2,030</td>
</tr>
<tr>
<td>6/0-5</td>
<td>2 x 165</td>
<td>5,400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Incl. switch cabinet
ROXSTA G6

TEKO’s new series solution is tailored for large supermarkets and hypermarkets. The ROXSTA G6 covers also many requirements in the field of food production and logistics.

Compact design
The combination of powerful 6-cylinder compressors with frequency controlled 4- or 6-cylinder guide compressors enables an extremely compact design for this size of unit. It does not leave out the optimally matched partial load requirements.

Capacities
(to MT -5 °C / to LT -30 °C / tGC 38 °C)
- MT 207...550 kW, 3...6 transcritical CO2 compressors
- LT 0...490 kW, 0...5 subcritical CO2 compressors

Eco-parallel compression
In larger power ranges (> 80 kW), eco-parallel compression can deliver significant efficiency advantages. In combination with our control concept, it is checked during the operation of the unit whether the ECO-compression is an advantage. Depending on this, the feature is activated or not.

EVALIFT / TEKOJET / Ejectors
We are happy to advise you which efficiency-enhancing technologies are right for your project.

Design pressure
- 30 / 60 bar suction line (low temperature)
- 45 / 60 bar suction line (medium temperature)
- 45 / 60 bar medium pressure
- 130 bar high pressure side
## Scope of delivery

- Trans- and subcritical compressors (Bitzer / Frascold)
- Frequency converter included (per lead compressor)
- High and low pressure packages (gauge, LP cut-out, pressure transducer)
- Pressure cut-out for high and safety pressure, non-adjustable, type tested per compressor
- Safety valves for high/medium pressure and suction side (optional redundant)
- Insulation on suction side
- Medium pressure receiver (165 L / 250 L / 420 L / 2 x 165 L / 2 x 250 L)
- Sensor at the outlet of the gas cooler
- Minimum (and maximum – optional) level control
- Insulation of the medium pressure vessel
- Regulated post-injection
- Stop valve after filter-drier and sight glass
- Antivibration pads
- Suction filter (MT/LT)
- Oil sump heater each compressor
- Control transformers
- Independent power supply closes the high and medium pressure valves in case of power failure
- Energy metering MT/LT (optional)

### Optional

- Flash gas and suction gas heat exchanger MT/LT
- Outdoor installation as container solution

### Heating and air conditioning

- Heat exchanger for heating and service water incl. manual bypass & 3-way ball motor valve
- Insulation on pressure side (13 mm)

### Efficiency enhancement

- Parallel compression
- Ejectors
- TEKO development EVALIFT & TEKOJET

### Heat exchanger

- CO2 evaporators
- Gas coolers

## Model Receiver Weight Dimensions (mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>Receiver (litres)</th>
<th>Weight (kg)</th>
<th>Length Unit</th>
<th>Length MP station</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROXSTA G6</td>
<td>250 / 2 x 250</td>
<td>on request</td>
<td>3,400 inside unit (250 / 420 L)</td>
<td>dependent on unit &amp; MP station &amp; switch cabinet</td>
<td>unit 1,150 switch cabinet 1,200 (up to 400 A)</td>
</tr>
<tr>
<td>3/0-2</td>
<td>420 / 2 x 420</td>
<td>3,950</td>
<td>inside unit (250 / 420 L)</td>
<td>inside unit &amp; MP station &amp; switch cabinet</td>
<td>unit 1,200 switch cabinet 1,600 (up to 630 A)</td>
</tr>
<tr>
<td>4/0-3</td>
<td>4,500</td>
<td>inside unit (250 / 420 L)</td>
<td>inside unit &amp; MP station &amp; switch cabinet</td>
<td>unit 1,200 switch cabinet 1,600 (up to 630 A)</td>
<td></td>
</tr>
<tr>
<td>5/0-4</td>
<td>5,050</td>
<td>inside unit (250 / 420 L)</td>
<td>inside unit &amp; MP station &amp; switch cabinet</td>
<td>unit 1,200 switch cabinet 1,600 (up to 630 A)</td>
<td></td>
</tr>
<tr>
<td>6/0-5</td>
<td>inside unit (250 / 420 L)</td>
<td>inside unit &amp; MP station &amp; switch cabinet</td>
<td>unit 1,200 switch cabinet 1,600 (up to 630 A)</td>
<td>unit 1,150 switch cabinet 1,200 (up to 400 A)</td>
<td></td>
</tr>
</tbody>
</table>

### Switch cabinet and control

- All switching devices which are necessary for fully automatic operation
- Electric components are labelled according to German standards
- Ventilation of the switch cabinet
- Main switch
ROXSTA industrial

CO₂-technology for industrial needs

ROXSTA industrial meets the demands of the industry, food production and logistics perfectly. The transcritical CO₂-series provides a high level of flexibility in order to satisfy customer needs and completely meet the demands within the kinds of use.

Capacities

(to MT -5 °C / to LT -30 °C / t₉C 38 °C)

- MT 390...570 kW. 4...6 transcritical CO₂ compressors
- LT 0...490 kW. 0...5 subcritical CO₂ compressors

Superheat plates heat exchangers for flash and suction gas

Increase in the flash and suction gas temperatures for a safe and stable unit operation.

Active liquid subcooling

For longer piping paths or bigger height differences within the piping network, the ROXSTA-series contains active subcooling of the refrigerant. The differences in temperature within a unit are reduced, the behaviour of the unit also remains stable when distances are longer.

Subcooling plate heat exchanger for gas cooler.

For attachment of an exterior chiller. Especially in southern countries, the additional cooling of the refrigeration circuit can keep a transcritical unit energetically stable. In doing so, sensitive products are protected.

Design pressure

- 30 / 60 bar suction line (low temperature)
- 45 / 60 bar suction line (medium temperature)
- 45 / 60 bar medium pressure
- 120 bar high pressure side
Scope of delivery

- Transcritical and subcritical CO2 piston compressors by Bitzer or Frascold connected as a booster
- Guide compressor with frequency converter
- Ball stop valves
- High and low pressure packages (gauge, LP cut-out, pressure transducer)
- Pressure cut-out for high and safety pressure, non-adjustable, type tested per compressor
- Safety valves for high/medium pressure and suction side (optional redundant)
- Muffler for pulsation damping in the common discharge line (LT)
- Insulation on suction side
- Medium pressure receiver (165 / 250 / 2 x 165 / 2 x 250 L) & (420 / 2 x 420 L)
- Sensor at the outlet of the gas cooler
- Minimum level display
- Insulation of the medium pressure vessel
- Valve for post-injection
- Stop valve after filter-drier and sight glass
- Antivibration pads
- Suction filter (MT/LT)
- Oil sump heater each compressor

Switch cabinet and control

- Switch cabinet with electronic control
- All switching devices which are necessary for fully automatic operation
- Electric components are labelled according to German standards
- Ventilation of the switch cabinet
- Main switch
- Control transformers
- Independent power supply closes the high and medium pressure valves in case of power failure
- Energy metering MT/LT (optional)

Optional

- Maximum level display
- Flash gas and suction line heat exchanger MT/LT
- Active liquid subcooling
- Subcooling plate for gas cooler
- Sound insulation / weather protection 40 mm incl. heater band on oil receiver

Heating and air conditioning

- Heat exchanger for heating and service water incl. manual bypass & 3-way ball motor valve
- Charge pumps for heating and service water
- Heat pump compressor
- Air conditioning function
- Insulation on pressure side (13 mm)

Efficiency enhancement

- Parallel compression
- Ejectors

Heat exchanger

- CO2 evaporators
- Gas coolers

---

<table>
<thead>
<tr>
<th>Modell ROXSTA industrial</th>
<th>Receiver (litres)</th>
<th>Weight (kg)</th>
<th>Length unit</th>
<th>Length MP station</th>
<th>Length switch cabinet</th>
<th>Length total</th>
<th>Depth</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/0-3</td>
<td>165 / 2 x 165 / 250 / 2 x 250 / 420 / 2 x 420</td>
<td>on request</td>
<td>3,100</td>
<td>1,500 (165 / 250 / 420 L)</td>
<td>1,400 (up to 630 A)</td>
<td>dependent on MP station &amp; switch cabinet</td>
<td>1,300</td>
<td>2,300</td>
</tr>
<tr>
<td>5/0-4</td>
<td></td>
<td></td>
<td>3,700</td>
<td>2,200 (2 x 165 / 2 x 250 / 2 x 420 L)</td>
<td>1,800 (up to 800 A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/0-5</td>
<td></td>
<td></td>
<td>4,300</td>
<td></td>
<td>2,600 (up to 1,000 A)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The dimensions may vary depending on the project
** Incl. frame part
What does „integral“ mean?

- Building management, refrigeration and heating technology, air conditioning and ventilation systems optimally coordinated
- Perfect temperatures in any application
- System components fit seamlessly into the overall refrigeration concept of the market

All-in-one solution for food retailers

- Adequate provision of refrigeration, heating and air-conditioning according to customer-specific requirements
- „Freshness First“— in an integral concept, the refrigerated goods are the first priority
- Consistent and complete linking of the building and cooling technology
- CO₂-controlled ventilation technology for a good indoor climate
- All components are precisely matched to one another
- Clean system interfaces
- Energy saving & environmentally friendly
**KEEP IT SIMPLE!**

Commercial refrigeration, air conditioning and heating in one system

**Spring / Autumn**
The recovered waste heat from the refrigeration process is used for the comfort heating of the market.
- Reduction of heating costs

**Winter**
Full utilization of waste heat plus heat pump function on particularly cold days.
- Saving the heating system

**Summer**
Heat is withdrawn from the sales and social rooms and discharged to the outside.
- Saving the air conditioning system