Rittal – The System.

Faster – better – everywhere.

Hygienic Design Enclosures
Superior Cleanability
Rittal – The System.
Faster – better – everywhere.

**Hygienic design compact enclosures** can be wall mounted with the HD system accessories.

**Air to Water Heat Exchangers** keep your systems cool using in-house chilled water or Rittal water chillers. No more clogged filters or replacing dirty filters.

**Climate control outside the hygiene zone**
Rittal Chillers can supply the air/water heat exchangers in the hygiene zone and the LCP in the data center with the required cooling water.

**Hygienic design large system enclosures and accessories**.

**Hygienic design compact enclosures and terminal boxes** can be machine mounted with the HD system accessories.

**Hello - The System.**
Faster – better – everywhere.
One-stop shop for multiple solutions and optimum processes

Different enclosure solutions are needed for the various locations inside a food and beverage production facility. From enclosures that can withstand frequent washdowns on the factory floor to the IT infrastructure in the data center, Rittal has the right solution to protect your sensitive controls and electronic equipment.

**Edge Data Center**
IT infrastructure for maximum computing power with short latencies, located close to the production.

**TS8 Enclosure System**
Enclosures and climate control solutions for outside the washdown or hygienic zone. Available in Stainless Steel or Carbon Steel.
Hygienic standards for high productivity and reliability

“Rittal – The System.” stands for cleverly thought-out system solutions for hygienic production in the food industry. Particularly in open processes, where the resistance of the gasket to detergents and disinfectants is crucial, it is vital for the production plant to be equipped with optimized enclosures, terminal boxes and command panels.
The Rittal Hygienic Design for food safety is based on:

**European standards and directives**
- EN 1672-2-2009-07 Food machinery/General design principles/Part 2: Hygiene requirements
- EN ISO 14 159:2008-07 Safety of machinery – Hygiene requirements for the design of machinery
- EN 16001:2009-06 Energy management to improve energy efficiency
- Machinery directive 2006/42/EC binding
- Document 13 EHEDG guideline on the hygienic design of apparatus for open processes, prepared in collaboration with 3-A and NSF International

**EU regulations**
- 852/2004 on the hygiene of foodstuffs
- 853/2004 specific hygiene rules for food of animal origin
- 854/2004 specific rules for the organization of official controls on products of animal origin intended for human consumption
- 1935/2004 on materials and articles intended to come into contact with food

Decide for yourself what is important.

**Rittal Hygienic Design boosts operational hygiene**
- Reduces the use of C&D agents
- Optimizes cleaning results
- Ensures higher productivity
- Minimizes risks
- Increases energy efficiency (CO2 footprint)

All terminal boxes and compact enclosures are cULus listed.
The DGUV test certificates are valid for following products:
- NV 16201 terminal boxes HD
- NV 13091 compact enclosures HD
- NV 17040 air/water heat exchangers HD
Cleanliness assured

Terminal boxes and compact enclosures in Hygienic Design (HD) are key elements in the design of open processes in the food industry and clean rooms due to their ease of cleaning and inspection. Compatible accessories such as wall spacer brackets and HD-compatible cable glands complete the range. If you have specific requirements, “Rittal – The System.” is sure to have the right solution.

Silicone gasket: Highly resistant to aggressive detergents, hot water, high pressure, and can be easily replaced in minutes.

Inclined roof: Prevents pooling of liquids, and ensures that surfaces are readily visible.

Slot-free design – No hollow spaces between the enclosure and door.

Fine brushed surface finish makes it easier to clean: Fully sealed enclosures with a uniform 400 grain size brushed finish for a uniform surface roughness of < 8 μm.

Easy-to-clean lock system: Tailored to the requirements of the food and consumables industry.

Interior installation:
- Attachment points for fitting interior installation rails, for individual installation in the depth with HD compact enclosures.
- HD terminal boxes can accommodate support rails and KL mounting plates, thanks to the flexible 6.25 mm pitch pattern of installation holes.

Hygienic Design terminal boxes and compact enclosures are crucial elements when designing open processes in the food and beverage industry and for hygienic zones where ease of cleaning is crucial.
Silicone gasket
- The joint free silicon gasket seals the entire perimeter of the door
- Easy to replace and inspect
- Guides and fixes the lid to the screw fasteners
- Compliant with FDA Guideline 21 CFR 177.2600

Interior configuration
- Hole pitch of 6.25 mm for greater flexibility
- KL support rails and mounting plates can be fitted directly

Hinges and gasket
- Hinges that are inside the sealing zone create an exceptionally easy-clean design on the outside
- The joint free silicon gasket seals the entire perimeter of the door
- Installed gaskets are easy to replace
- No external cavity between enclosure and door
- Gasket dyed blue to clearly distinguish it from food particles

Screw fastener
- Captive
- With external gasket
- Hexagon shape for perfect cleanliness

Lock and lock insert
- External parts made of stainless steel
- Material and shape allow easy and reliable cleaning

External Angles
- The roof angled forwards by 30° on compact enclosures prevents objects from being deposited on it
- All-around tilt for terminal boxes
  - Enclosure: 3°
  - Lid: 10°
- Is easily inspected
- Allows fluids to drain off rapidly
Hygienic Design

Design:
- Roof sloped 30° back to front.
- Overhanging roof shields top of gasket
- Gasket fills gap between door and enclosure body
- Internal hinges

Material:
- Enclosure and cover: Stainless steel 1.4301 (AISI 304) 1.5mm
- Mounting bracket: Sheet steel, zinc-plated, passivated, 2.0 mm
- Screw plug: Stainless steel
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600

Surface finish:
- Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Gasket: Blue, dyed (RAL 5010)

Protection category IP to IEC 60 529:
- IP 66
- IPX 9

Protection category IP to DIN 40 050-9:
- IP 69K

Protection category NEMA:
- NEMA 13
- NEMA 4X
- NEMA 3R

Supply includes:
- Enclosure of all-around solid construction
- Door with inserted gasket
- Door hinged on the right, may be swapped to the left
- Mounting plate

Approvals:
- UL
- cUL

Compact enclosure HD

<table>
<thead>
<tr>
<th>Width (B) in. (mm)</th>
<th>Packs of</th>
<th>8.7&quot; (220)</th>
<th>15.4&quot; (390)</th>
<th>15.4&quot; (390)</th>
<th>20&quot; (510)</th>
<th>24&quot; (610)</th>
<th>24&quot; (610)</th>
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</thead>
<tbody>
<tr>
<td>Height (front) (H1) in. (mm)</td>
<td>13.8&quot; (350)</td>
<td>16.9&quot; (430)</td>
<td>25.6&quot; (650)</td>
<td>21.7&quot; (550)</td>
<td>16.9&quot; (430)</td>
<td>25.6&quot; (650)</td>
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</tr>
<tr>
<td>Height (rear) (H2) in. (mm)</td>
<td>17.2&quot; (437)</td>
<td>21.6&quot; (549)</td>
<td>30.3&quot; (769)</td>
<td>26.3&quot; (669)</td>
<td>23.7&quot; (601)</td>
<td>30.3&quot; (769)</td>
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</tr>
<tr>
<td>Depth (T) in. (mm)</td>
<td>6.1&quot; (155)</td>
<td>8.3&quot; (210)</td>
<td>8.3&quot; (210)</td>
<td>8.3&quot; (210)</td>
<td>11.8&quot; (300)</td>
<td>8.3&quot; (210)</td>
<td></td>
</tr>
<tr>
<td>Mounting plate width (F) in. (mm)</td>
<td>6.4&quot; (162)</td>
<td>13.1&quot; (334)</td>
<td>13.1&quot; (334)</td>
<td>17.7&quot; (449)</td>
<td>21.6&quot; (549)</td>
<td>21.6&quot; (549)</td>
<td></td>
</tr>
<tr>
<td>Mounting plate height (G) in. (mm)</td>
<td>10.8&quot; (275)</td>
<td>14.0&quot; (355)</td>
<td>22.4&quot; (570)</td>
<td>18.5&quot; (470)</td>
<td>13.9&quot; (355)</td>
<td>22.4&quot; (570)</td>
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</tr>
<tr>
<td>Model No.</td>
<td>1 pc(s).</td>
<td>1302.600</td>
<td>1306.600</td>
<td>1308.600</td>
<td>1307.600</td>
<td>1320.600</td>
<td>1310.600</td>
</tr>
<tr>
<td>Weight lbs. (kg)</td>
<td>14.6 lbs. (6.6)</td>
<td>32.4 lbs. (14.7)</td>
<td>38.5 lbs. (17.9)</td>
<td>43.4 lbs. (19.7)</td>
<td>47.8 lbs. (21.7)</td>
<td>60.4 lbs. (27.4)</td>
<td></td>
</tr>
</tbody>
</table>

| Width (B) mm | Packs of | 31.9" (810) | 31.9" (810) | 31.9" (810) | 31.9" (810) | 24" (610) | 29.9" (760) |
| Height (front) (H1) in. (mm) | 16.9" (430) | 25.6" (650) | 41.3" (1050) | 49.2" (1250) | 31.9" (810) | 31.9" (810) |
| Height (rear) (H2) in. (mm) | 21.6" (549) | 32.3" (821) | 48.1" (1221) | 55.9" (1421) | 36.6" (929) | 38.6" (981) |
| Depth (T) in. (mm) | 8.3" (210) | 11.8" (300) | 11.8" (300) | 11.8" (300) | 8.3" (210) | 11.8" (300) |
| Mounting plate width (F) in. (mm) | 29.1" (739) | 29.5" (749) | 29.1" (739) | 29.1" (739) | 21.6" (549) | 27.7" (704) |
| Mounting plate height (G) in. (mm) | 14.0" (355) | 22.4" (570) | 37.6" (955) | 45.5" (1155) | 28.7" (730) | 28.7" (730) |
| Model No. | 1 pc(s). | 1314.600 | 1315.600 | 1316.600 | 1317.600 | 4000.012 | 4000.014 |
| Weight lbs. (kg) | 56.2 lbs. (25.5) | 86.0 lbs. (39.0) | 132.5 lbs. (60.1) | 156.5 lbs. (71.0) | 70.5 lbs. (32) | 75.0 lbs. (34) |

Accessories

| HD wall spacer bracket | 1 pc(s). | 4000.100 | 26 |
| HD cable gland | see page |
| HD hinge | 2 pc(s). | 4000.130 | 24 |
| Rails for interior installation | 4 pc(s). | see page |
| HD T-handle | 1 pc(s). | 4000.065 | 23 |
### Hygienic Design

**Design:**
- Roof sloped 30° back to front.
- Overhanging roof shields top of gasket
- Gasket fills gap between door and enclosure body
- Internal hinges

**Material:**
- Enclosure and cover: Stainless steel 1.4301 (AISI 304) 1.5mm
- Mounting bracket: Sheet steel, zinc-plated, passivated, 2.0 mm
- Screw plug: Stainless steel
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600

**Surface finish:**
- Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Gasket: Blue, dyed (RAL 5010)

**Protection category IP to IEC 60 529:**
- IP 66
- IPX 9

**Protection category IP to DIN 40 050-9:**
- IP 69K

**Protection category NEMA:**
- NEMA 13
- NEMA 4X
- NEMA 3R

**Supply includes:**
- Enclosure of all-around solid construction
- Door with inserted gasket
- Door hinged on the right, may be swapped to the left
- Mounting plate

**Approvals:**
- UL
- cUL

### Compact enclosure HD

<table>
<thead>
<tr>
<th>Width (B) in. (mm)</th>
<th>Packs of</th>
<th>37.0&quot; (940)</th>
<th>37.0&quot; (940)</th>
<th>37.0&quot; (940)</th>
<th>37.0&quot; (940)</th>
<th>35.8&quot; (910)</th>
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</thead>
<tbody>
<tr>
<td>Height (front) (H1) in. (mm)</td>
<td>37.4&quot; (950)</td>
<td>43.3&quot; (1100)</td>
<td>50.0&quot; (1270)</td>
<td>56.7&quot; (1440)</td>
<td>62.0&quot; (1575)</td>
<td>610&quot; (1550)</td>
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<tr>
<td>Height (rear) (H2) in. (mm)</td>
<td>44.1&quot; (1120)</td>
<td>50.0&quot; (1270)</td>
<td>56.7&quot; (1440)</td>
<td>68.7 (1745)</td>
<td>71.0&quot; (1804)</td>
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<tr>
<td>Depth (T) in. (mm)</td>
<td>11.8&quot; (300)</td>
<td>11.8&quot; (300)</td>
<td>11.8&quot; (300)</td>
<td>11.8&quot; (300)</td>
<td>11.8&quot; (300)</td>
<td>17.7&quot; (450)</td>
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<tr>
<td>Mounting plate width (F) in. (mm)</td>
<td>34.6&quot; (879)</td>
<td>34.6&quot; (879)</td>
<td>34.6&quot; (879)</td>
<td>34.6&quot; (879)</td>
<td>34.6&quot; (879)</td>
<td>33.1&quot; (840)</td>
</tr>
<tr>
<td>Mounting plate height (G) in. (mm)</td>
<td>34.3&quot; (871)</td>
<td>40.2&quot; (1021)</td>
<td>46.9&quot; (1191)</td>
<td>58.9&quot; (1496)</td>
<td>59.3 (1505)</td>
<td></td>
</tr>
</tbody>
</table>

**Model No.**
- 1 pc(s): 1330.600 1331.600 1332.600 1333.600 1334.600

**Weight lbs. (kg)**
- 132.3 (60.0) 148.8 (67.5) 168.7 (76.5) 276.0 (125.2) 285.0 (129.3)

### Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Pack(s)</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD wall spacer bracket</td>
<td>1 pc(s)</td>
<td>4000.100</td>
</tr>
<tr>
<td>HD cable gland</td>
<td>see page</td>
<td></td>
</tr>
<tr>
<td>HD hinge</td>
<td>2 pc(s)</td>
<td>4000.130</td>
</tr>
<tr>
<td>Rails for interior installation</td>
<td>4 pc(s)</td>
<td>see page</td>
</tr>
<tr>
<td>HD T-handle</td>
<td>1 pc(s)</td>
<td>4000.065</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Pack(s)</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>HD wall spacer bracket</td>
<td>1 pc(s)</td>
<td>4000.100</td>
</tr>
<tr>
<td>HD cable gland</td>
<td>see page</td>
<td></td>
</tr>
<tr>
<td>HD hinge</td>
<td>2 pc(s)</td>
<td>4000.130</td>
</tr>
<tr>
<td>Rails for interior installation</td>
<td>4 pc(s)</td>
<td>see page</td>
</tr>
<tr>
<td>HD T-handle</td>
<td>1 pc(s)</td>
<td>4000.065</td>
</tr>
</tbody>
</table>

---

Rittal Hygienic Design

9
**Hygienic Design**

**Design:**
- Roof sloped 30° back to front.
- Overhanging roof shields top of gasket
- Gasket fills gap between door and enclosure body
- Internal hinges

**Material:**
- Enclosure and cover: Stainless steel 1.4301 (AISI 304) 1.5mm
- Mounting bracket: Sheet steel, zinc-plated, passivated, 2.0 mm
- Screw plug: Stainless steel
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600

**Surface finish:**
- Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Gasket: Blue, dyed (RAL 5010)

**Protection category IP** to IEC 60 529:
- IP 66
- IPX 9

**Protection category IP** to DIN 40 050-9:
- IP 69K

**Protection category NEMA:**
- NEMA 13
- NEMA 4X
- NEMA 3R

**Supply includes:**
- Enclosure of all-around solid construction
- Door with inserted gasket
- Door hinged on the right, may be swapped to the left
- Mounting plate

**Approvals:**
- UL
- cUL

---

### Terminal boxes

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Packs of 39.8&quot; (1010)</th>
<th>Packs of 49.2&quot; (1250)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Width (B) in. (mm)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Height (front) (H1) in. (mm)</strong></td>
<td>41.3&quot; (1050)</td>
<td>49.2&quot; (1250)</td>
</tr>
<tr>
<td><strong>Height (rear) (H2) in. (mm)</strong></td>
<td>50.3&quot; (1277)</td>
<td>58.1&quot; (1477)</td>
</tr>
<tr>
<td><strong>Depth (T) in. (mm)</strong></td>
<td>15.7&quot; (400)</td>
<td>15.7&quot; (400)</td>
</tr>
<tr>
<td><strong>Mounting plate width (F) in. (mm)</strong></td>
<td>37.2&quot; (945)</td>
<td>37.2&quot; (945)</td>
</tr>
<tr>
<td><strong>Mounting plate height (G) in. (mm)</strong></td>
<td>37.2&quot; (945)</td>
<td>46.3&quot; (1175)</td>
</tr>
<tr>
<td><strong>Model No.</strong></td>
<td>1 pc(s).</td>
<td>1 pc(s).</td>
</tr>
<tr>
<td><strong>Weight lbs. (kg)</strong></td>
<td>181.0 (82.1)</td>
<td>204.0 (92.5)</td>
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</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
<th>Reference</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>HD wall spacer bracket</td>
<td>1 pc(s).</td>
<td>4000.100</td>
<td>26</td>
</tr>
<tr>
<td>HD cable gland</td>
<td>see page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HD hinge</td>
<td>2 pc(s).</td>
<td>4000.130</td>
<td>24</td>
</tr>
<tr>
<td>Rails for interior installation</td>
<td>4 pc(s).</td>
<td>see page</td>
<td>29</td>
</tr>
<tr>
<td>HD T-handle</td>
<td>1 pc(s).</td>
<td>4000.065</td>
<td>23</td>
</tr>
</tbody>
</table>
### Design:
- All four sides have 3° slope from back to front
- Captive fasteners keep them from falling out when removing cover

### Material:
- Enclosure and cover: Stainless steel 1.4301 (AISI 304) 1.5mm
- Mounting bracket: Sheet steel, zinc-plated, passivated, 2.0 mm
- Screw plug: Stainless steel
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600

### Surface finish:
- Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Gasket: Blue, dyed (RAL 5010)

### Protection category NEMA:
- NEMA 13
- NEMA 4X
- NEMA 3R

### Protection category IP to IEC 60 529:
- IP 66
- IPX 9

### Protection category IP to DIN 40 050-9:
- IP 69K

### Supply includes:
- Enclosure of all-around solid construction
- Cover
- Mounting bracket (pre-assembled)
- Gasket and screw plug (supplied loose)

### Approvals:
- UL
- cUL

### Terminal boxes

<table>
<thead>
<tr>
<th>Width (front) (B1) in. (mm)</th>
<th>Packs of</th>
<th>5.9” (150)</th>
<th>5.9” (150)</th>
<th>7.8” (200)</th>
<th>11.8” (300)</th>
<th>15.7” (400)</th>
<th>15.7” (400)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (rear) (B2) in. (mm)</td>
<td></td>
<td>6.7” (172)</td>
<td>6.9” (177)</td>
<td>8.9” (227)</td>
<td>12.8” (327)</td>
<td>16.6” (427)</td>
<td>16.8” (427)</td>
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<tr>
<td>Height (front) (H1) in. (mm)</td>
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<td>5.9” (150)</td>
<td>5.9” (150)</td>
<td>7.8” (200)</td>
<td>7.8” (200)</td>
<td>7.8” (200)</td>
<td>11.8” (300)</td>
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<tr>
<td>Height (rear) (H2) in. (mm)</td>
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<td>6.7” (172)</td>
<td>6.9” (177)</td>
<td>8.9” (227)</td>
<td>8.9” (227)</td>
<td>8.9” (227)</td>
<td>12.8” (327)</td>
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<tr>
<td>Depth (T) in. (mm)</td>
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<td>4.7” 120</td>
<td>4.7” 120</td>
<td>4.7” 120</td>
<td>4.7” 120</td>
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<tr>
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<td>1670.600</td>
<td>1671.600</td>
<td>1672.600</td>
<td>1674.600</td>
<td>1675.600</td>
<td>1676.600</td>
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<tr>
<td>Weight lbs. (kg)</td>
<td></td>
<td>3.1 lbs. (1.7)</td>
<td>4.1 lbs (2.2)</td>
<td>6.9 lbs. (3.0)</td>
<td>8.1lbs. (4.0)</td>
<td>11lbs. (5.0)</td>
<td>13lbs. (5.9)</td>
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</tr>
</tbody>
</table>

### Accessories

| HD wall spacer bracket      | 1 pc(s). | 4000.100 | 4000.100 | 4000.100 | 4000.100 | 4000.100 | 4000.100 | 26 |
| Mounting plates             | 1 pc(s). | 1560.700 | 1560.700 | 1562.700 | 1563.700 | 1564.700 | 1568.700 | -  |
| Support rails TS 35/75      | 10 pc(s). | 2314.000 | 2314.000 | 2315.000 | 2316.000 | 2317.000 | 2317.000 | -  |
| HD cable gland              | see page |          |          |          |          |          |          | 30 |

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**Fire extinguisher enclosure HD**

**see page 13**
Hygienic control and monitoring

Command panels and printer enclosures play a key role in the decentralized control and monitoring of open processes in the food and beverage industry. Their functional design means that standard commercially available PC components such as printers, monitors and label printers, are easily and securely integrated into the production process. Can be used together or separately for machine controls, monitoring, programming, creating kiosks, and other applications.
Silicone gasket
- The joint free silicon gasket seals the entire perimeter of the door
- Easy to replace and inspect
- Compliant with FDA Guideline 21 CFR 177.2600
- Gasket dyed blue to clearly distinguish it from food particles

Easy monitoring
- Large visible area with inset and sealed polycarbonate window in the door
- Screwed-fastened mounting plate with holes for VESA 75 and 100 connection
- Attachment of monitors of up to 24”

User-friendly design
- Enclosure tilted forwards by 3° – to allow liquids to drain off reliably whilst cleaning
  – for the support of keyboards during production
- Component shelves with telescopic slides for easy integration of computers or e.g. label printers
- Interior installation rails allow the installation of additional component shelves

Modular combination
- Connection component for combining a command panel and a printer enclosure into a complete PC enclosure
- Integral drilled holes with a diameter of 40 mm for easy cable entry with connectors
Hygienic Design

Material:
- Stainless steel 1.4301 (AISI 304)
- Enclosure: 1.5 mm
- Door: 2.0 mm
- Lock inserts: Stainless steel 1.4301 (AISI 304)
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600
Surface finish:
- Brushed, grain 400, \( R_S < 0.8 \) μm
- Gasket: Blue, dyed (RAL 5010)

Protection category IP to IC 60 529:
- Enclosure top: IP 66
- Enclosure bottom: IP 66
Protection category IP to DIN 40 050-9:
- Enclosure top: IP 59K
- Enclosure bottom: IP 69K

Console supply includes:
- Roof angled forwards by 30°
- Door with integrated polycarbonate pane for monitor; compartment with screw-fastened mounting plate with holes for VESA connection 75 and 100
- Viewing window: polycarbonate
- Mounting plate height-adjustable for screens up to 24”

Pedestal supply includes:
- Roof angled forwards by 3°, suitable as a support rest or for keyboard installation
- Component shelf spray-finished, pull-out and height-adjustable with side punched rails

### HD production data cabinet, modular

<table>
<thead>
<tr>
<th>Packs of</th>
<th>Console</th>
<th>Pedestal</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (B) in. (mm)</td>
<td>Pack of</td>
<td>31.8” (810)</td>
<td>31.8” (810)</td>
</tr>
<tr>
<td>Height (front) (H1) in. (mm)</td>
<td>1 pc(s).</td>
<td>27.2” (692)</td>
<td>33.9” (863)</td>
</tr>
<tr>
<td>Height (rear) (H2) in. (mm)</td>
<td>1 pc(s).</td>
<td>33.3” (848)</td>
<td>34.9” (888)</td>
</tr>
<tr>
<td>Depth (T) in. (mm)</td>
<td>1 pc(s).</td>
<td>10.4” (266)</td>
<td>19.5” (496)</td>
</tr>
<tr>
<td>Model No.</td>
<td>1 pc(s).</td>
<td>4000.062</td>
<td>4000.064</td>
</tr>
<tr>
<td>Weight lbs. (kg)</td>
<td>1 pc(s).</td>
<td>73.3 lbs. (33.2)</td>
<td>119.7 lbs. (54.2)</td>
</tr>
</tbody>
</table>

### Accessories

| HD keyboard support | 1 pc(s). | 4000.072 | – | 27 |
| HD wall spacer bracket | 1 pc(s). | 4000.100 | – | 26 |
| HD hinge | 2 pc(s). | 4000.130 | 4000.130 | 24 |
| HD cable gland | see page | see page | see page | 30 |
| HD connection components (for combining enclosures together) | 1 pc(s). | 4000.066 | 4000.066 | 27 |
| HD T-handle | 1 pc(s). | 4000.065 | 4000.065 | 23 |
| HD flap | 1 pc(s). | 4000.068 | 4000.068 | 27 |
| HD leveling feet | see page | see page | see page | 22 |
### Design:
- Roof angled forwards by 30°

### Benefits:
- Hygienic, hose-proof storage of fire extinguishers
- Time and cost savings thanks to simple, effective cleaning options
- Fire extinguisher is easily removed with one hand thanks to the T-handle
- Quick inventory check with the integral viewing door
- Additional uses include storage of first aid kits and defibrillators

### Material:
- Enclosure and door: Stainless steel 1.4301 (AISI 304)
- Handle and lock: Stainless steel 1.4301 (AISI 304)
- Viewing window: Polycarbonate
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600

### Surface finish:
- Enclosure and door: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Gasket: Blue, dyed (RAL 5010)

### Protection category IP to IEC 60 529:
- IP 66

### Protection category IP to DIN 40 050-9:
- IP 59K

### Supply includes:
- Enclosure of all-around solid construction
- Door with viewing window and inserted gasket
- Interchangeable door hinge
- T-handle with 3-point lock system

### Fire extinguisher enclosure HD

<table>
<thead>
<tr>
<th>Width (B) in. (mm)</th>
<th>Packs of</th>
<th>11.8” (300)</th>
<th>15.3” (390)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (front) (H1) in. (mm)</td>
<td></td>
<td>25.5” (650)</td>
<td>33.0” (840)</td>
<td></td>
</tr>
<tr>
<td>Height (rear) (H2) in. (mm)</td>
<td></td>
<td>30.2” (769)</td>
<td>39.7” (1010)</td>
<td></td>
</tr>
<tr>
<td>Depth (T) in. (mm)</td>
<td></td>
<td>8.2” (210)</td>
<td>11.8” (300)</td>
<td></td>
</tr>
<tr>
<td>Viewing window width in. (mm)</td>
<td></td>
<td>4.7” (120)</td>
<td>7.4” (190)</td>
<td></td>
</tr>
<tr>
<td>Viewing window height in. (mm)</td>
<td></td>
<td>19.0” (482)</td>
<td>26.3” (670)</td>
<td></td>
</tr>
<tr>
<td>Model No.</td>
<td>1 pc(s).</td>
<td>4000.073</td>
<td>4000.075</td>
<td></td>
</tr>
<tr>
<td>Weight lbs. (kg)</td>
<td></td>
<td>30 lbs. (13.5)</td>
<td>48.5 lbs. (22.0)</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories
- HD wall spacer bracket: 1 pc(s). 4000.100 4000.100 26
- HD leveling feet: see page see page 22
- HD hinge: 2 pc(s). 4000.130 4000.130 24
System partner for the food industry

Rittal’s HD System Enclosures are available for larger control systems, can be bayed together for multiple configurations, and are expandable for future growth. Trying to combine multiple systems or not sure about future expansion, the HD System Enclosures can provide infinite possibilities and flexibility.
Gasket
- Replaceable silicone gaskets between doors, side panels, and enclosure
- The joint free silicon gasket seals the entire perimeter of the door
- Gaskets dyed blue to clearly distinguish it from food particles
- Self-adhesive silicon gaskets for the angled roof and baying frame.

Door
- Hinges that are inside the sealing zone create an exceptionally easy-clean design on the outside
- Two locking rods, external parts in stainless steel, for secure and sealed closing
- Easy-to-clean lock insert – can be exchanged for a T-handle

Designing
- Integrated, non-detachable rear panel guarantees reliable hygiene and sealing in an area which is difficult to monitor
- Side panels screw-fastened from the inside
- Door and enclosure with all-round internal system punching for installation of accessories
- Door hinged on the right, may be swapped to the left
- Solid base
- Mounting plate from TS 8 baying system
- Rounded edge folds on the door and side panels as a significant contribution to easy cleaning
- Open top for mounting of angled roof
- A special angled roof can be manufactured upon request for combinations of two 600 or 800 mm wide enclosures
Material:
– Enclosure and cover: Stainless steel 1.4301 (AISI 304)
– Lock inserts HD: Stainless steel 1.4404 (AISI 316L)
– Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600
– Mounting plate: Sheet steel

Surface finish:
– Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
– Mounting plate: Zinc-plated
– Gasket: Blue, dyed (RAL 5010)

Protection category IP to IEC 60 529:
– IP 66

Protection category IP to DIN 40 050-9:
– IP 59K

Protection category NEMA:
– NEMA 4X

Supply includes:
– Enclosure frame with welded rear panel gland plate
– Door with inserted gasket
– R/h door hinge with single-door enclosures, may be swapped to opposite side
– Mounting plate

Please observe the product-specific scope of supply.

Approvals:
– UL

Optional
– HD supporting structure with leveling

Note:
– To achieve a protection category of IP 66/IP 59K, the HD versions of the side panel, roof and (where applicable) baying frame must be selected.

HD System Enclosure

<table>
<thead>
<tr>
<th>Width (B) in. (mm)</th>
<th>Packs of</th>
<th>15.7'' (400)</th>
<th>23.6'' (600)</th>
<th>31.5'' (800)</th>
<th>47.2'' (1200)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (front) (H) in. (mm)</td>
<td></td>
<td>70.8'' (1800)</td>
<td>70.8'' (1800)</td>
<td>70.8'' (1800)</td>
<td>70.8'' (1800)</td>
<td></td>
</tr>
<tr>
<td>Depth (T) in. (mm)</td>
<td></td>
<td>19.6'' (500)</td>
<td>19.6'' (500)</td>
<td>19.6'' (500)</td>
<td>19.6'' (500)</td>
<td></td>
</tr>
<tr>
<td>Mounting plate width (F) in. (mm)</td>
<td></td>
<td>11.7'' (299)</td>
<td>19.6'' (499)</td>
<td>27.5'' (699)</td>
<td>43.2'' (1099)</td>
<td></td>
</tr>
<tr>
<td>Mounting plate height (G) in. (mm)</td>
<td></td>
<td>66.7'' (1696)</td>
<td>66.7'' (1696)</td>
<td>66.7'' (1696)</td>
<td>66.7'' (1696)</td>
<td></td>
</tr>
<tr>
<td>Model No.</td>
<td>1 pc(s.)</td>
<td>4000.485</td>
<td>4000.685</td>
<td>4000.885</td>
<td>4000.285</td>
<td></td>
</tr>
<tr>
<td>Weight lbs (kg)</td>
<td></td>
<td>152.1 lbs. (69.0)</td>
<td>196.3 lbs. (89.0)</td>
<td>238.1 lbs. (108.0)</td>
<td>390.3 lbs. (177.0)</td>
<td></td>
</tr>
</tbody>
</table>

Accessories

| HD side panels | 2 pc(s.) | 4000.185 | 4000.185 | 4000.185 | 4000.185 | |
| HD baying frame | 1 pc(s.) | 4000.785 | 4000.785 | 4000.785 | 4000.785 | |
| HD mounting plate infill | 1 pc(s.) | 4000.508 | 4000.508 | 4000.508 | 4000.508 | |
| HD attachment | 1 pc(s.) | 4000.545 | 4000.565 | 4000.585 | 4000.525 | |
| HD T-handle | 1 pc(s.) | 4000.065 | 4000.065 | 4000.065 | 4000.065 | |
| HD leveling feet | see page | see page | see page | see page | see page | |
| HD hinge | 2 pc(s.) | 4000.130 | 4000.130 | 4000.130 | 4000.130 | |
| HD viewing window | 1 pc(s.) | 4000.080 | 4000.080 | 4000.080 | 4000.080 | |
| LED system light | 1 pc(s.) | 2500.110 | 2500.110 | 2500.110 | 2500.110 | |
Material:
- Enclosure and cover: Stainless steel 1.4301 (AISI 304)
- Seal: Silicone, compliant with FDA Guideline 21 CFR 177.2600

Surface finish:
- Enclosure and cover: Brushed, grain 400, peak-to-valley height < 0.8 μm
- Seal: Blue, dyed (RAL 5010)

Protection category IP to IEC 60 529:
- IP 66

Protection category IP to DIN 40 050-9:
- IP 69K

Protection category NEMA:
- NEMA 13
- NEMA 4X
- NEMA 3R

Supply includes:
- Roof angled forwards by 3°
- Enclosure of all-around solid construction
- Door with inserted seal
- Door hinged on the right, may be swapped to the left

Approvals:
- UL
- cUL

HD Junction Boxes

<table>
<thead>
<tr>
<th>Width (B) in. (mm)</th>
<th>Packs of</th>
<th>8.1&quot; (205)</th>
<th>12.0&quot; (305)</th>
<th>16.1&quot; (460)</th>
<th>28.0&quot; (710)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (front) (H1) in. (mm)</td>
<td></td>
<td>8.6&quot; (219)</td>
<td>11.4&quot; (290)</td>
<td>8.7&quot; (220)</td>
<td>8.7&quot; (220)</td>
</tr>
<tr>
<td>Height (rear) (H2) in. (mm)</td>
<td></td>
<td>9.0 (229)</td>
<td>11.9&quot; (302)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depth (T) in. (mm)</td>
<td></td>
<td>8.3 (210)</td>
<td>10.1&quot; (255)</td>
<td>8.4&quot; (210)</td>
<td>8.4&quot; (210)</td>
</tr>
<tr>
<td>Mounting plate width (F) in. (mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting plate height (G) in. (mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model No.</td>
<td>1 pc(s).</td>
<td>4000.021</td>
<td>4000.022</td>
<td>4000.031</td>
<td>4000.032</td>
</tr>
<tr>
<td>Weight lbs. (kg)</td>
<td></td>
<td>10.0 (4.5)</td>
<td>18.0 (8.2)</td>
<td>38.0 (17.2)</td>
<td>83.0 (37.6)</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>1 pc(s).</th>
<th>4000.100</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD wall spacer bracket</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HD cable gland</td>
<td></td>
<td>see page</td>
<td>30</td>
</tr>
</tbody>
</table>
Air/Water Heat Exchangers
Hygienic Design

An easy-to-clean enclosure climate control solution is now available for hygiene-critical production zones in the food and beverage industry.

- Hygienic design simplifies cleaning procedures and guarantees food safety
- Protection category IP 56/59 if correctly fitted – suitable for high-pressure and steam-jet cleaning
- Enclosure made from 1.4301 (AISI 304) stainless steel with the roof tilted forwards by 30°
- Water connections made from stainless steel 1.4301 (AISI 304)
- Suitable for use in the food industry to DIN EN 1672-2:2009
Air/water heat exchanger for hygienically sensitive production zones in the food and beverage industry – the optimum addition to the Rittal Hygienic Design range. The cleaning-friendly design reduces the risk of contamination and ensures food safety.

**Benefits:**
- Easy-to-clean, hygienic design
- A roof tilt of 30° prevents objects from being deposited on it, and allows liquids to run off quickly.
- All-around external, replaceable silicone gasket prevents the accumulation of dirt between the enclosure and the air/water heat exchanger.

**Material:**
- Enclosure and cover: Stainless steel 1.4301 (AISI 304)

**Surface finish:**
- Enclosure: Brushed, grain 400, peak-to-valley height < 0.8 μm

**Protection category IP to IEC 60 529:**
- IP 56/59

**Protection category NEMA:**
- NEMA 4X

**Cooling medium:**
- Water (see internet for specifications)

**Supply includes:**
- Fully wired ready for connection (plug-in terminal strip)
- Drilling template
- Sealing and assembly parts

**Note:**
- To achieve a protection category of IP 66/59 to IEC 60 529, the ingress of leakage air through the condensate discharge opening must be completely prevented.

---

### HD Air/Water Heat Exchanger

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Packs of</th>
<th>3214.700</th>
<th>3215.700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature control</td>
<td>Thermostat-controlled magnetic valve</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Total cooling output L35 W10, 200 l/h (kW)</td>
<td></td>
<td>2047 BTU (0.6)</td>
<td>3412 BTU (1)</td>
</tr>
<tr>
<td>Total cooling output L35 W10, 400 l/h kW</td>
<td></td>
<td>2217 BTU (0.65)</td>
<td>4095 BTU (1.2)</td>
</tr>
<tr>
<td>Power consumption Pu 50/60 Hz W</td>
<td></td>
<td>36/37</td>
<td>83/85</td>
</tr>
<tr>
<td>Rated operating voltage V, ~, Hz</td>
<td></td>
<td>230, 1~, 50/60</td>
<td>230, 1~, 50/60</td>
</tr>
<tr>
<td>Width in. (mm)</td>
<td></td>
<td>8.6” (220)</td>
<td>8.5” (215)</td>
</tr>
<tr>
<td>Height in. (mm)</td>
<td></td>
<td>20.7” (526)</td>
<td>38.6” (982)</td>
</tr>
<tr>
<td>Depth in. (mm)</td>
<td></td>
<td>3.9” (100)</td>
<td>3.9” (100)</td>
</tr>
<tr>
<td>Rated current max.A</td>
<td></td>
<td>0.16 / 0.14</td>
<td>0.38 / 0.47</td>
</tr>
<tr>
<td>Pre-fuse A</td>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td></td>
<td>+34°F...+158°F (+1°C...+70°C)</td>
<td>+34°F...+158°F (+1°C...+70°C)</td>
</tr>
<tr>
<td>Setting range</td>
<td></td>
<td>+68°F...+140°F (+20°C...+60°C)</td>
<td>+68°F...+140°F (+20°C...+60°C)</td>
</tr>
<tr>
<td>Water inlet temperature</td>
<td></td>
<td>+34°F...+86°F (+1°C...+30°C)</td>
<td>+34°F...+86°F (+1°C...+30°C)</td>
</tr>
<tr>
<td>Water connection</td>
<td></td>
<td>G 3/8” external thread</td>
<td>■</td>
</tr>
<tr>
<td>Permissible operating pressure (p. max.) bar</td>
<td></td>
<td>14-145 PSI (1 - 10)</td>
<td>14-145 PSI (1 - 10)</td>
</tr>
<tr>
<td>Air throughput of fans (unimpeded air flow), Internal circuit 50/60 Hz m³/h</td>
<td></td>
<td>164/182 CFM (280 / 310)</td>
<td>400/432 CFM (680 / 735)</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td></td>
<td>13.3 lbs. (6.0)</td>
<td>30.9 lbs. (14.0)</td>
</tr>
</tbody>
</table>
Hygienic Design

Accessories

**HD leveling feet**
for HD system enclosure and HD compact enclosure

**Benefits:**
- Minimizes cleaning time thanks to fully covered, permanently sealed threads
- Compensation of floor inclines up to an angle of 10° thanks to flexible base
- Baying can even be achieved on sloping floors, thanks to a large leveling range
- Design to EHEDG standards

**Material:**
- Stainless steel 1.4301 (AISI 304)

**Load capacity:**
- Max. 7000 N static per leveling foot

**Supply includes:**
- Assembly parts and seals

<table>
<thead>
<tr>
<th>Design</th>
<th>Thread</th>
<th>Adjustment range in. (mm)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>without base mount</td>
<td>M12</td>
<td>4.8”-6.8” (122-175)</td>
<td>4 pc(s)</td>
<td>4000.240</td>
</tr>
<tr>
<td>with base attachment</td>
<td>M12</td>
<td>4.8”-6.8” (122-175)</td>
<td>4 pc(s)</td>
<td>4000.250</td>
</tr>
</tbody>
</table>

**HD side panels**
for HD system enclosure

**Material:**
- Stainless steel 1.4301 (AISI 301), 2.0mm

**Supply includes:**
- With assembly parts for screw-fastening from the inside

**Note:**
- Depending on the fitted side panel, the overall width of the enclosure is increased by 25 mm

<table>
<thead>
<tr>
<th>For enclosure height in. (mm)</th>
<th>For enclosure depth in. (mm)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.8” (1800)</td>
<td>19.6” (500)</td>
<td>2 pc(s)</td>
<td>4000.185</td>
</tr>
</tbody>
</table>

**HD baying frame**
for HD system enclosure

**Material:**
- Stainless steel 1.4301 (AISI 304)

**Supply includes:**
- Gasket for HD angled roof
- Assembly parts

**Note:**
- Depending on the fitted side panel, the overall width of the enclosure is increased by 44 mm

<table>
<thead>
<tr>
<th>For enclosure height mm</th>
<th>For enclosure depth mm</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.8” (1800)</td>
<td>19.6” (500)</td>
<td>1 pc(s)</td>
<td>4000.785</td>
</tr>
</tbody>
</table>
HD viewing window
for the protection of switches or displays.

Benefits:
- Large viewing panel
- Gap-free transition between the viewing window and the frame
- External hinge
- With T-handle for easy opening without a key

Material:
- Frame: Stainless steel 1.4301 (AISI 304)
- Gasket: Silicone, compliant with FDA Guideline 21 CFR 177.2600
- Viewing window: Polycarbonate

Supply includes:
- 2 hinges
- T-handle

HD T-handle
For easy opening without a key. May be exchanged in all enclosures with cam lock.

Material:
- Stainless steel 1.4301 (AISI 304)

HD cam lock
Hygienic Design variant for easy, safe cleaning.

Applications:
- Compact enclosures AE stainless steel (except AE 1017.XXX and AE 1019.XXX).
- May be integrated into customized applications, e.g. covers of machine panels.

Material:
- Stainless steel 1.4404 (AISI 316L)

Note:
- Not a replacement for HD Compact Enclosure locks.

HD enclosure key
For HD cam lock

Note:
- Enclosure, case and lock systems are supplied as standard with matching keys
# Hygienic Design

## Accessories

### HD bit
- **for universal key 2549.500**
  - Packs of: 1 pc(s).
  - Model No.: 2549.510

### HD hinge
- To be used in exchange in HD enclosures with internal hinges.
  - **Material:** Stainless steel 1.4301 (AISI 304)
  - **Supply includes:** Assembly parts
  - Packs of: 2 pc(s).
  - Model No.: 4000.130

### HD attachment
- **for HD system enclosure**
  - **Design:** Roof angled forwards by 30°
  - **Material:** Stainless steel 1.4301 (AISI 304)
  - **Supply includes:** Assembly parts
  - For enclosure width in. (mm) | For enclosure depth in. (mm) | Packs of | Model No.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.7&quot; (400)</td>
<td>19.6&quot; (500)</td>
<td>1 pc(s).</td>
<td>4000.545</td>
</tr>
<tr>
<td>23.6&quot; (600)</td>
<td>19.6&quot; (500)</td>
<td>1 pc(s).</td>
<td>4000.565</td>
</tr>
<tr>
<td>31.4&quot; (800)</td>
<td>19.6&quot; (500)</td>
<td>1 pc(s).</td>
<td>4000.585</td>
</tr>
<tr>
<td>47.2&quot; (1200)</td>
<td>19.6&quot; (500)</td>
<td>1 pc(s).</td>
<td>4000.525</td>
</tr>
</tbody>
</table>

### HD side parts
- **for HD attachment**
  - **Material:** Stainless steel 1.4301 (AISI 304)
  - **Supply includes:** Assembly parts
  - Packs of: 2 pc(s).
  - Model No.: 4000.505

### HD mounting plate infill
- **for HD system enclosure**
  - For a continuous mounting surface in bayed suites where the mounting plate is set forward.
  - **Material:** Sheet steel, 2 mm
  - **Surface finish:** Zinc-plated
  - **Supply includes:** Assembly parts
  - For enclosure height in. (mm) | Packs of | Model No.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>70.8&quot; (1800)</td>
<td>1 pc(s).</td>
<td>4000.508</td>
</tr>
</tbody>
</table>
# Hygienic Design

## Interior Installation–System Enclosure HD

![Image of system enclosure HD](image)

<table>
<thead>
<tr>
<th>Rail Systems</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PS punched rail 23 x 23 mm with mounting bracket</td>
</tr>
<tr>
<td>2</td>
<td>PS punched rail 23 x 23 mm with support bracket PS (with one or two mounting rails 23 x 23 as an option)</td>
</tr>
<tr>
<td>3</td>
<td>PS punched section without mounting flange 23 x 73 mm with support bracket PS</td>
</tr>
<tr>
<td>4</td>
<td>PS punched section with mounting flange 23 x 73 mm</td>
</tr>
<tr>
<td>5</td>
<td>C rail for TS</td>
</tr>
<tr>
<td>6</td>
<td>TS punched section without mounting flange 45 x 88 mm</td>
</tr>
<tr>
<td>7</td>
<td>PS punched rail 23 x 23 mm with angle bracket PS</td>
</tr>
<tr>
<td>8</td>
<td>C rail 30/15 with bracket/spacer</td>
</tr>
<tr>
<td>9</td>
<td>Support rail, unslotted</td>
</tr>
<tr>
<td>10</td>
<td>Support rail, slotted</td>
</tr>
<tr>
<td>11</td>
<td>System support rail</td>
</tr>
<tr>
<td>12</td>
<td>Cable clamp rail – right-angle section</td>
</tr>
</tbody>
</table>
Hygienic Design

Interior Installation–System Enclosure HD

HD wall spacer bracket

Benefits:
- Creates space for cleaning behind the enclosure.
- Shorter assembly times by eliminating the need for an all-round seal.
- Greater hygiene safety by avoiding an uncontrollable dead space or gap between the enclosure and wall.

Material:
- Stainless steel 1.4301 (AISI 304)

Supply includes:
- Assembly parts and seals

Note:
- Depending on the size of the enclosure, up to 4 wall spacer brackets are required to ensure sufficiently stable wall mounting

Accessories

Wall distance in. (mm) | Packs of | Model No.
--- | --- | ---
1.9” (50) | 1 ps(s) | 9967334

HD wall spacer bracket

Greater distance from the wall to allow cleaning of large surfaces.

Material:
- Console: Stainless steel 1.4301 (AISI 304)
- Spacers: Plastic approved for use with food-stuffs, dyed blue

Supply includes:
- 2 consoles
- Spacer support
- Assembly parts

Wall distance in. (mm) | Packs of | Model No.
--- | --- | ---
5.9” (150) | 1 ps(s) | 4000.110
**HD connection components**

*for command panels HD, printer enclosures HD*

For combining HD command panels (4000.062) and HD printer enclosures (4000.064) into one PC enclosure.

**Material:**
- Stainless steel 1.4301 (AISI 304)

**Supply includes:**
- 2 reinforcement plates for enclosure, top
- 4 reinforcement plates for enclosure, bottom (2 for the roof, 2 for the attachment of leveling feet or supporting structure)
- 2 spacer supports with drilled hole Ø 40 mm for cable entry, height 50/45.8 mm

---

**HD keyboard support**

To support standard keyboards, including water drain hole.

**Material:**
- Sheet steel 1.4301 (AISI 304)

**Supply includes:**
- T-handle
- Silicon gasket included
- Hinges and cam lock

---

**HD flap**

For rapid access e.g. in order to change the labels.

**Material:**
- Sheet steel 1.4301 (AISI 304)

**Supply includes:**
- T-handle
- Silicon gasket included
- Hinges and cam lock

---

**Connector gland, small**

For pre-assembled cables with connectors.
- For use with material thickness of up to 4 mm
- Strain relief of the pre-assembled cables can be achieved with cable ties

**Material:**
- Plastic

**Color:**
- RAL 9005

**Protection category IP to IEC 60 529:**
- IP 65 if installed correctly
  - Rittal Hygienic Design

---

**Packaging information**

- Assembly parts and seals

<table>
<thead>
<tr>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pc(s).</td>
<td>4000.066</td>
</tr>
</tbody>
</table>

---

**Dimensions**

<table>
<thead>
<tr>
<th>Width</th>
<th>Depth</th>
<th>Contact surface, width</th>
<th>Contact surface, depth</th>
<th>Packs of</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.5&quot; (573)</td>
<td>9.8&quot; (250)</td>
<td>22.4&quot; (570)</td>
<td>7.4&quot; (190)</td>
<td>1 pc(s).</td>
</tr>
</tbody>
</table>

---

**Connector gland, small**

<table>
<thead>
<tr>
<th>To fit</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cables</td>
<td>1 pc(s).</td>
<td>2400.300</td>
</tr>
<tr>
<td>AWG 2 – AWG 1 (Ø6 – 8 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 cables</td>
<td>5 pc(s).</td>
<td>2400.500</td>
</tr>
<tr>
<td>AWG 6 – AWG 3 (Ø4 – 6 mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hygienic Design

Accessories

Hose-proof hood
To increase the protection category
For fan-and-filter units/outlet filters. Easy cleaning thanks to exterior silicone gasket compliant with FDA Guidelines 21 CFR 177.2600.

Material:
– Stainless steel
– Silicone

<table>
<thead>
<tr>
<th>To fit Model No.</th>
<th>W x H x D in. (mm)</th>
<th>Protection category</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3237...</td>
<td>5.9” x 9” x 1.5”</td>
<td>NEMA 1, NEMA 12, NEMA 3, NEMA 3R</td>
<td>1 pc(s).</td>
<td>3237.080</td>
</tr>
<tr>
<td>3238...</td>
<td>6.9” x 9.6” x 2.1”</td>
<td>NEMA 1, NEMA 12, NEMA 3, NEMA 3R, NEMA 4</td>
<td>1 pc(s).</td>
<td>3238.080</td>
</tr>
<tr>
<td>3239...</td>
<td>9.1” x 12.9” x 2.1”</td>
<td>NEMA 1, NEMA 12, NEMA 3, NEMA 3R</td>
<td>1 pc(s).</td>
<td>3239.080</td>
</tr>
<tr>
<td>3240.../3241...</td>
<td>11.1” x 15.3” x 3.3”</td>
<td>NEMA 1, NEMA 12, NEMA 3, NEMA 3R, NEMA 4</td>
<td>1 pc(s).</td>
<td>3240.080</td>
</tr>
<tr>
<td>3243.../3244...</td>
<td>13.7” x 18.8” x 4.3”</td>
<td>NEMA 1, NEMA 12, NEMA 3, NEMA 3R</td>
<td>1 pc(s).</td>
<td>3243.080</td>
</tr>
<tr>
<td>3245...</td>
<td>13.7” x 18.8” x 6.2”</td>
<td>NEMA 1, NEMA 12, NEMA 3</td>
<td>1 pc(s).</td>
<td>3245.080</td>
</tr>
</tbody>
</table>

Silicone Gasket
for TS, AE
in exchange for a damaged PU gasket. This makes it more resistant to cleaning agents and disinfectants.

Material:
– Silicone foam profile

Color:
– white

<table>
<thead>
<tr>
<th>Length ft. (m)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>82 ft. (25)</td>
<td>1 pc(s).</td>
<td>5001.380</td>
</tr>
</tbody>
</table>

Assembly:
– The foamed-in PU gasket can be removed without leaving a residue and the surface cleaned. The self-adhesive silicone gasket must be pressed into the exact position, with the top horizontal sealing strip covering the vertical strip without any gap.
Rails for interior installation for HD compact installation
For mounting on the existing threaded bolts. With TS system punchings on three sides.

Material:
– Sheet steel, zinc-plated

Supply includes:
– Assembly parts

<table>
<thead>
<tr>
<th>Length in. (mm)</th>
<th>Packs on</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20” (510)</td>
<td>4 pc(s)</td>
<td>5001.050</td>
</tr>
<tr>
<td>23.9” (710)</td>
<td>4 pc(s)</td>
<td>5001.051</td>
</tr>
<tr>
<td>35.8” (910)</td>
<td>4 pc(s)</td>
<td>5001.052</td>
</tr>
<tr>
<td>43.7” (1110)</td>
<td>4 pc(s)</td>
<td>5001.053</td>
</tr>
</tbody>
</table>

Enclosure

Interior installation, door

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Model No.</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1316.600</td>
<td>5001.052</td>
<td>5001.050</td>
</tr>
<tr>
<td>1317.600</td>
<td>5001.053</td>
<td>5001.051</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Model No.</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1308.600</td>
<td>5001.050</td>
<td>–</td>
</tr>
<tr>
<td>1310.600</td>
<td>5001.050</td>
<td>–</td>
</tr>
<tr>
<td>1315.600</td>
<td>5001.050</td>
<td>–</td>
</tr>
<tr>
<td>1316.600</td>
<td>5001.052</td>
<td>8612.130</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(only on lock side)</td>
</tr>
<tr>
<td>1317.600</td>
<td>5001.053</td>
<td>8612.130</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(only on lock side)</td>
</tr>
</tbody>
</table>
Hygienic Design

Accessories

HD cable gland

Applications:
- Food and beverage production
- Clean room technology (e.g. pharmaceuticals)
- Biotechnology
- Chemical industry

Benefits:
- Smooth, solid exterior surfaces effectively prevent the depositing of harmful micro-organisms
- Much easier, and therefore cheaper, to clean compared with conventional cable glands
- EMC version enables cable shield bonding

Material:
- Lock nut: Stainless steel 1.4305 (AISI 303)
- Gasket: Conforms to FDA 21 CFR 177.2600

Protection category IP to IEC 60 529:
- IP 68 (5 bar, 30 min.)

Protection category IP to DIN 40 050-9:
- IP 69K

Supply includes (per pack):
- 5 cable glands
- 5 lock nuts

Why use hygiene-compatible cable glands

Critical points with conventional solutions
- Cable entry in front of gasket
- No minimum radii on the hexagon
- External threads
- Gap caused by O-ring on the enclosure surface

Hygiene-compatible design features
- Gasket directly at the cable entry
- Compliance with minimum radii on the hexagon
- No external threads
- Flush termination between the cap nut and the enclosure

Assembly tool for HD cable gland

For attaching HD cable glands in an internal thread or using lock nuts. This can be achieved either from the inside or from the outside using an Allen key.

Supply includes:
- 1 pc(s). = Adapter for sizes from M12 – M25

<table>
<thead>
<tr>
<th>Size</th>
<th>Cable diameter in. (mm)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 x 1.5</td>
<td>0.118” – 0.256” (3 – 6.5)</td>
<td>5 pc(s).</td>
<td>2410.001</td>
</tr>
<tr>
<td>M16 x 1.5</td>
<td>0.197” – 0.394” (5 – 10)</td>
<td>5 pc(s).</td>
<td>2410.011</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>0.236” – 0.472” (6 – 12)</td>
<td>5 pc(s).</td>
<td>2410.021</td>
</tr>
<tr>
<td>M25 x 1.5</td>
<td>0.472” – 0.669&quot; (12-17)</td>
<td>5 pc(s).</td>
<td>2410.031</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Cable diameter in. (mm)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M16 x 1.5</td>
<td>0.197” – 0.394” (5 – 10)</td>
<td>5 pc(s).</td>
<td>2410.111</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>0.236” – 0.472” (6 – 12)</td>
<td>5 pc(s).</td>
<td>2410.121</td>
</tr>
<tr>
<td>M25 x 1.5</td>
<td>0.472” – 0.669“ (12-17)</td>
<td>5 pc(s).</td>
<td>2410.131</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Cable diameter in. (mm)</th>
<th>Packs of</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT 1/4&quot;</td>
<td>0.197” – 0.256&quot; (5 - 6.5)</td>
<td>1 pc(s).</td>
<td>9957.640</td>
</tr>
<tr>
<td>NPT 3/8&quot;</td>
<td>0.236” – 0.393” (6 - 10)</td>
<td>1 pc(s).</td>
<td>9957.641</td>
</tr>
<tr>
<td>NPT 1/2&quot;</td>
<td>0.354” – 0.531” (9 - 13.5)</td>
<td>1 pc(s).</td>
<td>9957.642</td>
</tr>
<tr>
<td>NPT 3/4&quot;</td>
<td>0.551” – 0.708” (14 - 18)</td>
<td>1 pc(s).</td>
<td>9957.643</td>
</tr>
</tbody>
</table>

Assembly tool for HD cable gland

For attaching HD cable glands in an internal thread or using lock nuts. This can be achieved either from the inside or from the outside using an Allen key.

Supply includes:
- 1 pc(s.) = Adapter for sizes from M12 – M25
Understanding the concept of “Hygienic Zones”

**Basic Hygiene:**
This area is not an "open processor" where food can be contaminated and there are no "wash down" requirements. Typical applications include:
- Building systems and automation
- Power Infrastructure and Switchgear
- Packaging, Pickling, Storage, and Conveyors (for finished product)
Typical enclosure requirements:
- NEMA 1/2 carbon steel or stainless steel

**Medium Hygiene:**
This area has "open processors" where food is splashed on the machines, floors, and other surfaces. It requires the highest degree of hygiene and the area is sanitized with aggressive cleaning agents plus high temperature & high pressure water Equipment must have the highest degree of water & chemical resistance. Typical applications include:
- Food processing equipment
- Chillers & emulsifiers
Typical enclosure requirements:
- IP66, Slope-top, brushed stainless steel, gaskets made with FDA approved materials

**High Hygiene:**
- **Wallmount enclosures; stainless or painted carbon steel**
- **FreeStanding enclosures; stainless or painted carbon steel**
- **Blue e+ air conditioners; stainless or painted carbon steel**

**Basic Hygiene**
- NEMA 4X stainless steel slope-top wallmount enclosures
- NEMA 4X stainless steel freestanding enclosures
- NEMA 4X stainless steel Blue e air conditioners

**High Hygiene**
- Hygienic Design slope-top wallmount enclosures
- Hygienic Design freestanding enclosures
- Hygienic Design air-to-water heat exchangers

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