Rittal – The System.

Faster – better – everywhere.

Hygienic Design Enclosures

Superior Cleanability

RITTAL

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Rittal – 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.

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

Hygienic design control and monitoring, consoles, and support arms.

Hygienic design large system enclosures and accessories.

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

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.

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.

Hygienic Design Compact Enclosures and Terminal Boxes
can be machine mounted with the HD system accessories.

TS8 Enclosure System
Enclosures and climate control solutions for outside the washdown or hygienic zone. Available in Stainless Steel or Carbon Steel.

| ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES |

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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 raw materials and food products
- 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 the following products:
– NV 16201 terminal boxes HD
– NV 13091 compact enclosures HD
– NV 17040 air/water heat exchangers HD

Rittal Hygienic Design   Rittal Hygienic Design
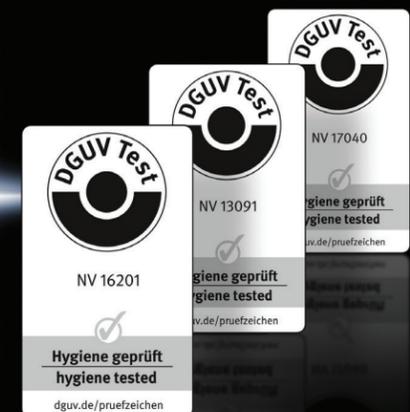
Cleanliness assured

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.

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.

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

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

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

4 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

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

6 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

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
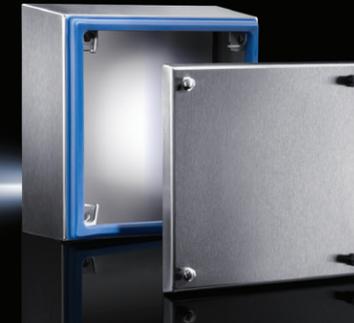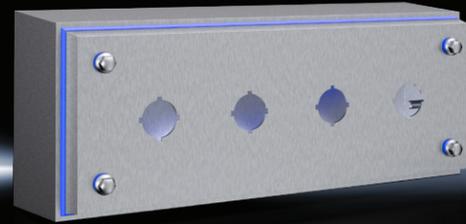- Hexagon shape for perfect cleanliness

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

Left column

Design:
– All four sides have 3° slope from back to front
– Captive fastners 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, 2.0mm
– 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 <0.8μm
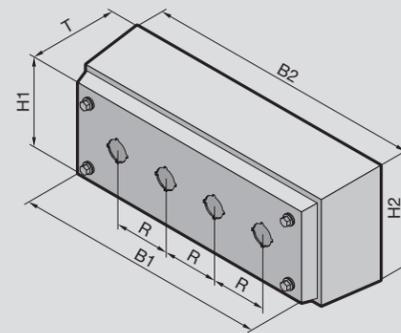– Gasket: Blue, dyed (RAL 5010)

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
– Cover
– Mounting bracket (pre-assembled)
– Gasket and screw plug (supplied loose)

Approvals:
– UL
– cUL

Push Buttons

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	PG
Height (front) (H1)		4	100	4	100	4	100	4	100	6	160	
Height (rear) (H2)		5	122	5	122	5	122	5	122	7	182	
Width (front) (B1)		4	100	6	160	9	220	11	280	9	220	
Width (rear) (B2)		5	122	7	182	10	242	12	302	10	242	
Depth (T)		4	90	4	90	4	90	4	90	4	90	
Model No.	1 pc(s).	1681.600		1682.600		1683.600		1684.600		1686.600		
Model Name		PB01225HD14		PB02225HD14		PB03225HD14		PB04225HD14		PB06225HD24		
Weight lbs. | kg		2.16	0.98	2.87	1.3	3.57	1.62	4.37	1.98	4.67	2.12	

Accessories

			PG
HD wall spacer bracket		see page	21
HD cable gland		see page	26

Right column

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
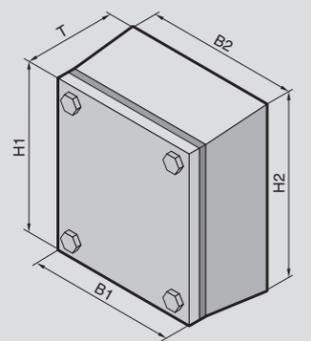– Gasket: Blue, dyed (RAL 5010)

Protection category 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
– Cover
– Mounting bracket (pre-assembled)
– Gasket and screw plug (supplied loose)

Approvals:
– UL
– cUL

Depth: 3 - 5" (80 - 120 mm), Height-Rear: 7 - 13" (172 - 327mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	PG
Height (front) (H1)		6	150	6	150	8	200	8	200	8	200	12	300	
Height (rear) (H2)		7	172	7	177	9	227	9	227	9	227	13	327	
Width (front) (B1)		6	150	6	150	8	200	12	300	16	400	16	400	
Width (rear) (B2)		7	172	7	177	9	227	13	327	17	427	17	427	
Depth (T)		3	80	5	120	5	120	5	120	5	120	5	120	
Model No.	1 pc(s).	1670.600		1671.600		1672.600		1674.600		1675.600		1676.600		
Model Name		HD060603N4		HD060605N4		HD080805N4		HD081205N4		HD081605N4		HD121605N4		
Weight lbs. | kg		4	1.7	5	2.2	7	3	9	4	11	5	13	5.9	

Accessories

								PG
HD wall spacer bracket		see page						21
Mounting plates	1 pc(s).	1560.700	1561.700	1562.700	1563.700	1564.700	1568.700	
Support rails TS 35/7.5	10 pc(s).	2314.000	2314.000	2315.000	2316.000	2317.000	2317.000	
HD cable gland		see page						26

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:
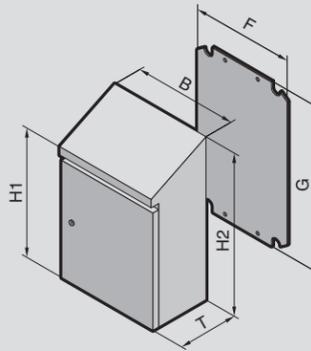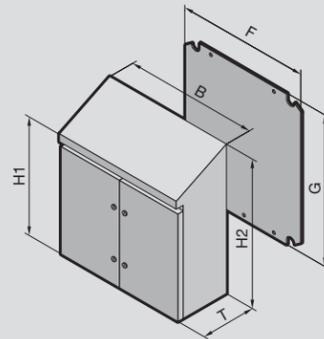– IP 69K

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

Depth: 6 - 8" (155 - 210mm), Height: 14 - 17" (350 - 430mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Height (front) (H1)		14	350	17	430	17	430	17	430
Height (rear) (H2)		17	437	22	546	22	549	22	549
Width (B)		9	220	12	310	15	390	32	810
Depth (T)		6	155	8	210	8	210	8	210
Mounting plate height		11	275	14	355	14	355	14	355
Mounting plate width		6	162	10	250	13	330	30	750
Model No.	1 pc(s).	1302.600		1304.600		1306.600		1314.600	
Model Name		HD120806N4		HD151208N4		HD151508N4		HD153208N4	
Weight lbs. | kg		14.55	6.6	24.25	11	32.41	14.7	56.22	25.5

Depth: 8" (210mm), Height: 22 - 37" (430 - 810mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Height (front) (H1)		22	550	22	550	26	650	26	650	32	810
Height (rear) (H2)		26	669	26	669	30	769	30	769	37	929
Width (B)		15	390	20	510	15	390	24	610	24	610
Depth (T)		8	210	8	210	8	210	8	210	8	210
Mounting plate height		19	475	19	475	23	575	23	575	29	730
Mounting plate width		13	330	18	450	13	330	22	550	22	550
Model No.	1 pc(s).	1305.600		1307.600		1308.600		1310.600		4000.012	
Model Name		HD201508N4		HD202008N4		HD241508N4		HD242408N4		HD302408N4	
Weight lbs. | kg		38.58	17.5	43.43	19.7	39.46	17.9	60.41	27.4	70.55	32

Depth: 12" (300 mm), Height: 17 - 32" (430 - 810mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Height (front) (H1)		17	430	26	650	26	650	32	810
Height (rear) (H2)		24	601	32	821	32	821	39	981
Width (B)		24	610	24	610	32	810	24	610
Depth (T)		12	300	12	300	12	300	12	300
Mounting plate height		14	355	23	575	23	575	29	735
Mounting plate width		22	550	22	550	30	750	22	550
Model No.	1 pc(s).	1320.600		1311.600		1315.600		1312.600	
Model Name		HD152412N4		HD242412N4		HD243212N4		HD302412N4	
Weight lbs. | kg		47.84	21.7	68.34	31	85.98	39	83.78	38

Depth: 12" (300 mm), Height: 32 - 43" (810 - 1100mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Height (front) (H1)		32	810	37	950	41	1050	43	1100
Height (rear) (H2)		39	981	44	1120	48	1221	50	1270
Width (B)		30	760	37	940	32	810	37	940
Depth (T)		12	300	12	300	12	300	12	300
Mounting plate height		29	735	34	871	38	955	40	1021
Mounting plate width		28	705	35	879	29	739	35	879
Model No.	1 pc(s).	4000.014		1330.600		1316.600		1331.600	
Model Name		HD303012N4		HD363612N4		HD403212N4		HD423612N4	
Weight lbs. | kg		74.96	34	132.28	60	132.5	60.1	148.81	67.5

Depth: 12 - 18" (300 - 450mm), Height: 49 - 62" (1250 - 1575mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Height (front) (H1)		49	1250	50	1270	62	1575	61	1550
Height (rear) (H2)		56	1421	57	1440	69	1745	71	1804
Width (B)		32	810	37	940	37	940	36	910
Depth (T)		12	300	12	300	12	300	18	450
Mounting plate height		45	1155	47	1191	59	1496	59	1505
Mounting plate width		29	739	35	879	35	879	33	840
Model No.	1 pc(s).	1317.600		1332.600		1333.600		1334.600	
Model Name		HD483212N4		HD483612N4		HD603612N4		HD603618N4	
Weight lbs. | kg		156.53	71	168.65	76.5	276.02	125.2	285.06	129.3

Accessories

			PG
HD wall spacer bracket		see page	21
HD cable gland		see page	26
HD hinge	2 pc(s).	see page	20
Rails for interior installation	4 pc(s).	see page	24
HD T-handle	1 pc(s).	see page	20
HD cam lock		see page	19
HD pressure release		see page	21

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

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
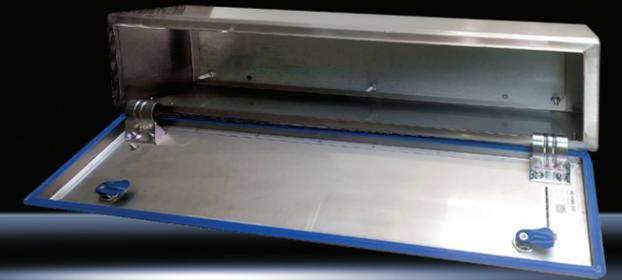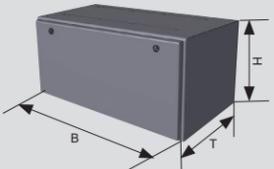
Depth: 16" (400mm), Height: 41 - 49" (1050 - 1250mm)

	Packs of	in.	mm.	in.	mm.	PG
Height (front) (H1)		41	1050	49	1250	
Height (rear) (H2)		50	1277	58	1477	
Width (B)		40	1010	40	1010	
Depth (T)		16	400	16	400	
Mounting plate height		37	945	46	1175	
Mounting plate width		37	945	37	945	
Model No.	1 pc(s).	1318.600		1319.600		
Model Name		HD404016N4		HD484016N4		
Weight lbs. | kg		1810	821.1	204	92.5	

Accessories

			PG
HD wall spacer bracket		see page	21
HD cable gland		see page	26
HD hinge	2 pc(s).	see page	20
Rails for interior installation	4 pc(s).	see page	24
HD T-handle	1 pc(s).	see page	20
HD cam lock		see page	19
HD pressure release		see page	21

Depth: 12 - 18" (300 - 450mm), Height: 49 -62" (1250 - 1575mm)

	Packs of	in.	mm.	in.	mm.	in.	mm.	in.	mm.	PG
Height (front) (H1)		8.6	219	11.4	290	8.7	220	8.7	220	
Height (rear) (H2)		9	229	11.9	302	8.7	220	8.7	220	
Width (B)		8.1	205	12	305	16.1	460	28	710	
Depth (T)		8.3	210	10.1	255	8.4	210	8.4	210	
Model No.	1 pc(s).	4000.021		4000.022		4000.031		4000.032		
Model Name		HD090808H4		HD111210H4		HD091808H4		HD092808H4		
Weight lbs. | kg		10	4.5	18	8.2	38	17.2	83	37.6	

Accessories

			PG
HD wall spacer bracket		see page	21
HD cable gland		see page	26
HD hinge	2 pc(s).	see page	20
Rails for interior installation	4 pc(s).	see page	24
HD T-handle	1 pc(s).	see page	20
HD cam lock		see page	19
HD pressure release		see page	21

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

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
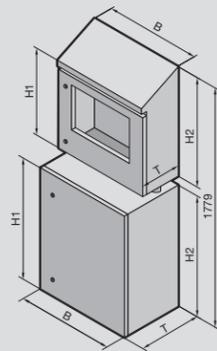 Guideline 21 CFR
  177.2600

Surface finish:
– Brushed, grain 400,
  $R_A < 0.8$ µm
– Gasket: Blue, dyed (RAL 5010)

Protection category IP to IC 60 529:
– Enclosure top: IP 66
– Enclosure bottom: IP 66

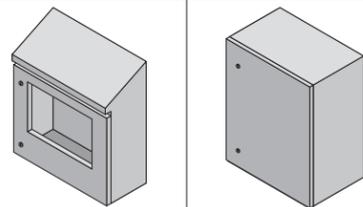**Protection category IP to DIN 40 050-9:**
– Enclosure top: IP 59K
– Enclosure bottom: IP 69K

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

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
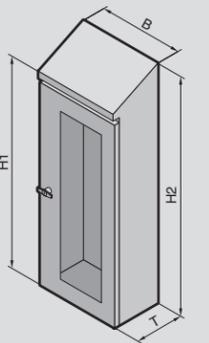 first aid kits and defibrillators

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 insert-
  ed gasket
– Interchangeable door hinge
– T-handle with 3-point lock system

HD production data cabinet, modular

	Packs of	in.	mm.	in.	mm.	PG
Height (front) (H1)		27	692	34	863	
Height (rear) (H2)		33	848	35	888	
Width (B)		32	810	32	810	
Depth (T)		10	266	20	496	
Model No.	1 pc(s).	**4000.062**		**4000.006**		
Weight lbs. | kg		73	33.2	119	54.2	

Accessories

HD keyboard support	1 pc(s).	see page		22
HD wall spacer bracket		see page		21
HD hinge	2 pc(s).	see page		20
HD cable gland		see page		26
HD connection components (for combining enclosures together)	1 pc(s).	see page		21
HD T-handle	1 pc(s).	see page		20
HD flap	1 pc(s).	see page		22
HD leveling feet		see page		19

Fire extinguisher enclosure HD

	Packs of	in.	mm.	in.	mm.	PG
Height (front) (H1)		26	650	34	863	
Height (rear) (H2)		30	769	35	888	
Width (B)		12	300	32	810	
Depth (T)		8	210	20	496	
Viewing window width		5	120	7	190	
Viewing window height		19	482	26	670	
Model No.	1 pc(s).	**4000.073**		**4000.075**		
Weight lbs. | kg		30	13.5	49	22	

Accessories

HD wall spacer bracket		see page		21
HD hinge		see page		20

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.

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

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.

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

Total cooling output L35 W10, 200 i/h (kW)		2047 BTU (0.6)		3412 BTU (1)	
Total cooling output L35 W10, 400 i/h (kW)		**2217 BTU (0.65)**		**4095 BTU (1.2)**	
Temperature control	Thermostat-controlled magnetic valve	∎		∎	
Power consumption Pel 50/60 Hz W		36/37		83/85	
Rated operating voltage V, ~, HZ		230, 1 ~, 50/60		230, 1 ~, 50/60	
		in.	mm.	in.	mm.
Height		21	526	39	982
Width		9	220	8	215
Depth		4	100	4	100
Rated current max. A		0.16 / 0.14		0.38 / 0.47	
Pre-fuse A		2		4	
Operating temperature range		+34°F…+158°F (+1°C…+70°C)		+34°F…+158°F (+1°C…+70°C)	
Setting range		+68°F…+140°F (+20°C…+60°C)		+68°F…+140°F (+20°C…+60°C)	
Water inlet temperature		+34°F…+86°F (+1°C…+30°C)		+34°F…+86°F (+1°C…+30°C)	
Water connection	G 3/8" external thread	∎		∎	
Permissible operating pressure (p.max.) bar		14-145 PSI (1-10)		14-145 PSI (1-10)	
Air throughout of fans (unimpeded air flow), Internal circuit 50/60 HZ m³/h		164 / 182 CFM (280 / 310)		400 / 432 CFM (680 / 735)	
Model No.		**3214.700**		**3215.700**	
Weight lbs. | kg		13	6	31	14

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

HD leveling feet

Design	Packs of	Without base mount		With base mount	
Thread		M12		M12	
		in.	mm.	in.	mm.
Adjustment range		4.8 — 6.9	122 — 175	4.8 — 6.9	122 — 175
Model No.	4 pc(s).	4000.240		4000.250	

HD cam lock

Options to replace current HD enclosure lock.

Applications:
– In case a different contour is required or an
  option with metal tongue, please use 9980.111
  to replace the standard lock that comes with
  your HD enclosure
– To replace the standard lock, please use
  5050.613

Material:
– Stainless steel

HD cam lock

	Packs of		
Model No.	1 pc(s).	9980.111	5050.613

HD enclosure key

For HD cam lock.

Note:
– Enclosure, case, and lock systems are supplied
  as standard with matching keys

HD enclosure key

	Packs of	
Model No.	1 pc(s).	2549.00

HD bit

for universal key 2549.500.

HD bit

	Packs of	Without key lock
Model No.	1 pc(s).	2549.510

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 T-handle

Design	Packs of	Without key lock	With key lock
Model No.	1 pc(s).	4000.065	4000.067

HD hinge

To be used in exchange in HD enclosures with
internal hinges.

Material:
– Stainless steel 1.4301 (AISI 304)

Supply includes:
– Assembly parts

HD hinge

	Packs of	
Model No.	2 pc(s).	4000.130

HD wall spacer bracket

Benefits:
- Creates space for cleaning behind the enclosure
- Shorter assembly times by eliminating the need for an all-round seal
- Improved hygiene by avoiding inaccessible dead spaces or gaps between the enclosure wall
- Rated UL Type 4X and IP69

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

HD wall spacer bracket

	Packs of	in.	mm.	in.	mm.
Height		2	50.8	1.9	50
Design specifications		no pass through		pass through	
Model No.	1 pc(s).	**9957.334**		**4000.100**	

HD connection components

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

Material:
– Console: 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 connection components

	Packs of	
Model No.	1 pc(s).	**4000.066**

HD pressure release

The integrated sealing membrane in pressure relief plugs largely prevents these pressure differences and the build-up of condensate, as well as protecting against the penetration of moisture from outside.

Supply includes:
– Lock Nut

Material:
– Sheet steel 1.4301 (AISI 304)

Technical Specifications:
– Connection thread M12 X 1.5
– Air permeability up to 60 liters / hour with a pressure difference of 70 mbar

Approvals:
– UL Type 4X
– IP 66 / IP69

HD pressure release

	Packs of	
Model No.	1 pc(s).	**4000.300**

HD keyboard support

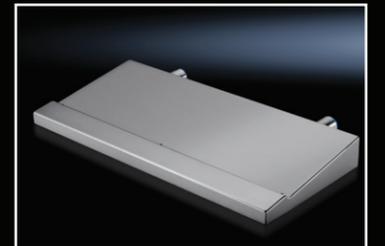To support standard keyboards, including water drain hole.

Material:
– Stainless steel 1.4301 (AISI 304)

Supply includes:
– Spacer support to the enclosure

HD keyboard support

	Packs of	in.	mm.
Width		23	573
Depth		10	250
Contact surface width		22	570
Contact surface depth		7	190
Model No.	1 pc(s).	**4000.072**	

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
– Hinges and cam lock

HD hinge

	Packs of	
Model No.	1 pc(s).	**4000.068**

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 Guideline 21 CFR 177.2600.

Material:
– Stainless steel
– Silicone

Protection category IP to IEC 60 529:
– IP 56 when fitted over fan-and-filter unit/outlet
  filter with filter mat

To fit Model No.	W x H x D in. (mm)	Protection category	Packs of	Model No.
3237...	5.9" x 9" x 1.5" (150 x 230 x 40)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R	1 pc(s).	**3237.080**
3238...	6.9" x 9.6" x 2.1" (176 x 245 x 55)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R NEMA 4 NEMA 4X	1 pc(s).	**3238.080**
3239...	9.1" x 12.9" x 2.1" (233 x 330 x 55)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R NEMA 4 NEMA 4X	1 pc(s).	**3239.080**
3240.../3241...	11.1" x 15.3" x 3.3" (282 x 390 x 85)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R NEMA 4 NEMA 4X	1 pc(s).	**3240.080**
3243.../3244...	13.7" x 18.8" x 4.3" (350 x 480 x 110)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R NEMA 4 NEMA 4X	1 pc(s).	**3243.080**
3245...	13.7" x 18.8" x 6.2" (350 x 480 x 160)	NEMA 1 NEMA 12 NEMA 3 NEMA 3R	1 pc(s).	**3245.080**

Rails for interior installation

For HD compact installation
For mounting on the existing threaded bolts.
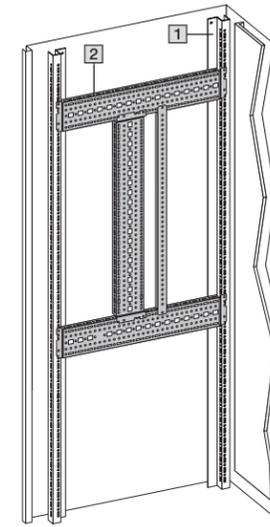With TS system punchings on three sides.

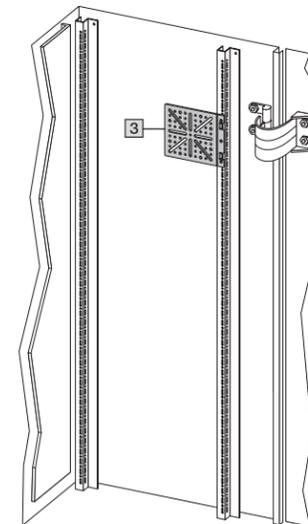**Material:**
– Sheet steel, zinc-plated

Supply includes:
– Assembly parts

Length in. (mm)	Packs on	Model No.
20" (510)	4 pc(s).	**5001.050**
27.9" (710)	4 pc(s).	**5001.051**
35.8" (910)	4 pc(s).	**5001.052**
43.7" (1110)	4 pc(s).	**5001.053**

Interior installation door

Enclosure	1	1	1
Model No.	**Model No.**		
1316.600	5001.052	5001.050	5001.050
1317.600	5001.053	5001.051 5001.050	5001.051 5001.050

Interior installation door

Enclosure	1 Rails for interior installation	2 TS punched section with mounting flange 17 x 73 mm	3 Mounting plates
Model No.	**Model No.**	**Model No.**	
1308.600 1310.600 1315.600	5001.050	–	–
1316.600	5001.052	8612.130 (only on lock side)	8612.400 8612.410
1317.600	5001.053	8612.130 (only on lock side)	8612.400 8612.410
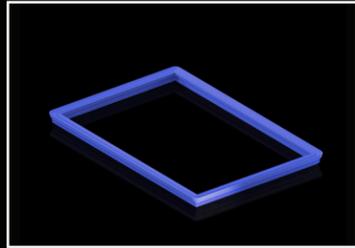
Replacement Gaskets

Spare Gasket	Fits Enclosure Model No.
5050.631	1302.600
5050.855	1304.600
5050.630	1306.600
5050.623	1314.600
5050.856	1305.600
5050.628	1307.600
5050.629	1308.600
5050.626	1310.600
5050.627	1320.600
5050.857	1311.600
5050.622	1315.600
5050.858	1312.600
5050.625	1316.600
5050.624	1317.600
5050.688	1318.600
5050.669	1319.600

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 to clean, making it cost effective, 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 DIN 40 050-9:
– IP 69K
Supply Includes (per pack):
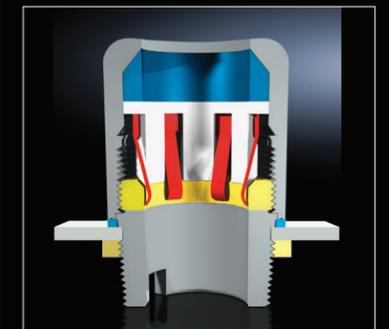– 5 cable glands
– 5 lock nuts

Metric Version

Size	Packs of	M12 X 1.5		M16 X 1.5		M20 X 1.5		M25 X 1.5	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.
Cable diameter		0.12 — 0.26	3 — 6.5	0.20 — 0.39	5 — 10	0.24 — 0.47	6 — 12	0.47 — 0.67	12 — 17
Model No.	5 pc(s).	2410.001		2410.011		2410.021		2410.031	

Metric EMC Version

Size	Packs of	M16 X 1.5		M20 X 1.5		M25 X 1.5	
		in.	mm.	in.	mm.	in.	mm.
Cable diameter		0.20 — 0.39	5 — 10	0.24 — 0.47	6 — 12	0.47 — 0.67	12 — 17
Model No.	5 pc(s).	2410.111		2410.121		2410.131	

MetricNPT Version

| Size	Packs of	NPT 1/4"		NPT 3/8"		NPT 1/2"		NPT 3/4"	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.
Cable diameter		0.20 — 0.26	5 — 6.5	0.24 — 0.39	6 — 10	0.35 — 0.53	9 — 13.5	0.55 — 0.71	14 — 18
Model No.	1 pc(s).	9957.640		9957.641		9957.642		9957.643	

[1] Gasket
[2] Cap nut
[3] Gripper jaws
[4] Shield spring (EMC version only)
[5] Clamping ring
[6] Enclosure gasket
[7] Base with locator for assembly tool

Why use hygiene-compatible cable glands

Critical points with conventional solutions

[1] Cable entry in front of gasket
[2] No minimum radii on the hexagon
[3] External threads
[4] Gap caused by O-ring on the enclosure surface
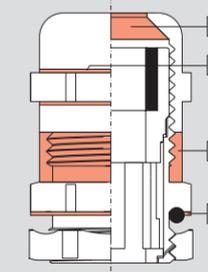
Hygiene-compatible design features

[1] Gasket directly at the cable entry
[2] Compliance with minimum radii on the hexagon
[3] No external threads
[4] Flush termination between the cap nut and the enclosure
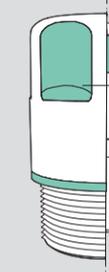
Assembly tool

For HD cable gland tool, for attaching 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
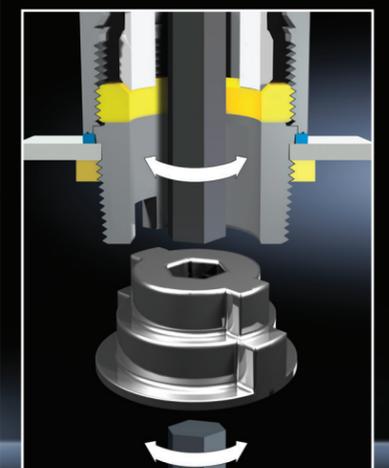
Supply includes (per pack):
– One (1) pc(s). Adapter for sizes M12 – M25

Assembly tool

	Packs of	
Model No.	1 pc(s).	2410.290

Rittal – The System.

Faster – better – everywhere.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

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