

Rittal – The System.

Faster – better – everywhere.

► Technical System Catalogue Terminal Boxes KL



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FRIEDHELM LOH GROUP



Terminal boxes KL



The small enclosure – with global approvals and available off the shelf in many standard sizes. The practical system accessories transform the KL terminal box into a smart solution for every standard application.

- 1** Optimum corrosion protection due to triple-treated housing surfaces
- 2** Permanently high protection category thanks to seamlessly foamed-in PU seal
- 3** Perfect protection from multi-folded enclosure protection channel preventing the ingress of dirt and water when the door is opened
- 4** Effortless wall-mounting thanks to rear panel with holes, prepared for wall mounting bracket or direct wall mounting
- 5** Maximum flexibility in cable routing (only for housings with gland plate), as the sheet steel gland plates for self-population can be exchanged for various pre-punched plates
- 6** Flexible interior configuration thanks to integral perforated system strips with 12.5 mm pitch pattern
- 7** Safe earthing to any side via earthing bracket in the cover and shaped earthing lugs in all four corners of the housing

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Internationally recognised approvals and certifications

Rittal products boast a wealth of internationally recognised approvals and certifications and comply with the most exacting and globally recognised quality standards.

- All components are subjected to the most stringent testing in accordance with international standards and regulations
- The consistently high product quality is ensured by a comprehensive quality management system
- Regular production inspections by external test institutes guarantee compliance with global standards

All current approvals and certifications can be found on the Rittal website.



CAD data

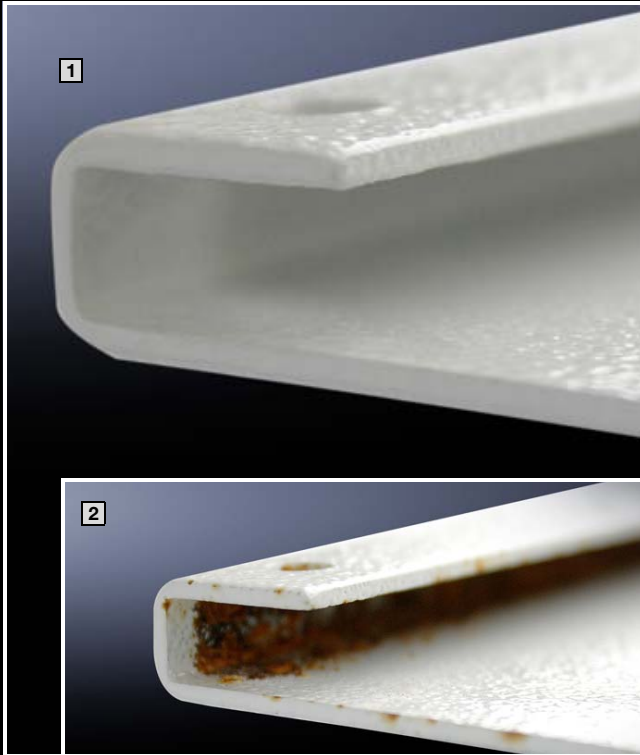
Using the RiCAD 3D online CAD component library, Rittal offers engineering, climate control, IT and power solutions for the widest range of enclosures and applications from a single source.

With professional data for every CAD system, the efficiency of your system design is increased and assembly times are reduced.

- CAD data is also available as an app for reference on the move or from the Rittal website
- Data can be requested via e-mail
- Choose from over 70 CAD formats
- Direct link to the relevant page in the latest Rittal Catalogue for an "all-in-one" solution
- Optimum planning confidence through accurate and validated drawings
- By dispensing with the need for lengthy remodelling, time-savings are achieved



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Optimum surface protection

Triple surface treatment provides optimum protection against corrosion.

Maximum quality is achieved in three stages:

1st phase: Nanoceramic primer

2nd phase: Electrophoretic dipcoat-priming

3rd phase: Textured powder-coating

1 Plate with triple surface treatment (Rittal Standard) after a 180-hour salt spray mist test

2 Metal powder-coated only following a 180-hour salt spray mist test



PU foam seal

- Seamlessly foamed-in
- Temperature resistant from -20°C to $+80^{\circ}\text{C}$
- May be over-painted and briefly stove-enamelled at up to 180°C



Earthing

- Simple earthing and safe PE conductor connection to any side
- via earthing bracket in cover
- via earthing lugs in all four corners of the housing
- The earthing kit, which has a cross-section of 4 mm^2 , is designed specifically for terminal boxes. It reduces the amount of installation work, as all the carefully prepared parts required to earth the cover are already included
- Earth straps in various cross-sections and lengths available as accessories

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Housing protection channel

- Specifically designed to remove water, so that moisture does not collect against the seal
- Housing return edge with continuous protection channel prevents the ingress of dust and dirt when the door is opened
- Multi-folded protection channel also ensures a high level of stability with the housing fully opened
- Additional protection for the high-quality PU foam seal



Gland plate

- Large gland plates for straightforward handling and plenty of space for cable entry
- May be exchanged for gland plates with metal or plastic knockouts for simple, fast cable routing
- Optionally available with or without gland plates in the case of enclosures with a depth of 120 mm



Wall mounting

- Rear panel holes with square knockouts facilitate the twist-proof attachment of wall brackets
- Any unused rear panel holes can be blanked off with sealing plugs
- Enclosures can also be mounted directly on walls from inside through the rear panel holes



Cover

- The cover is secured using quick-release fasteners as standard
- The fasteners are engaged securely by turning them $\frac{3}{4}$ of a rotation
 - providing optimum compression of the cover seal
 - preventing damage to the seal as the result of overtightening screws
- The quick-release fasteners are securely guided in sockets, which makes even overhead installation very simple
- Cover hinges for user-friendly servicing when components are installed in the enclosure and cover as accessories



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Interior configuration

- Side panels with 25 mm system punchings integrated into the enclosure offer the highest levels of flexibility when configuring the interior
- Punched profile strips for optional configuring with mounting plate or support rail
- Having a mounting clearance of 14 mm between the installed components and the rear panel allows terminals, for example, to be snapped on easily and permits cables to be routed underneath support rails
- Compatible earthing concepts for all components



Design variants

KL terminal boxes are also available in the following variants:

- Stainless steel
- For applications in potentially explosive zones



Accessories

Wall mounting brackets

- These are available with varying wall clearances, enabling cables to be laid behind the terminal boxes if required
- If the installation is to be flush with the wall, this can be achieved using special wall mounting brackets



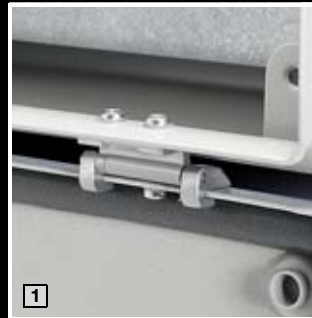
Cover holder/cover hinge

1 Hinges:

- Each hinge is securely fitted by means of a hole drilled retrospectively in the cover edge fold and in the enclosure edging
- This is ideal for terminal boxes that are opened frequently, especially if components are installed in the cover

2 Holder:

- No retrospective drilling necessary; the holder is very easy to fit and keeps the cover open
- This means that there is no loading on the earth straps, which can thus be fitted without any concerns



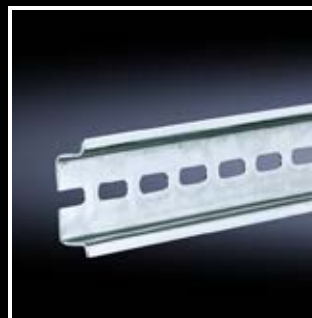
Mounting plate

- Steel sheet mounting plates are available for simple configuring or preassembly, including outside the enclosure
- As well as providing the necessary corrosion protection, the zinc-plated surface also provides EMC protection by ensuring that assemblies are contacted over a large area



Support rails

- Customer-specific configuration possible, in particular for terminal and bus applications
- Support rail profiles that are cut to match the dimensions of the enclosure help save time
- The all-round zinc-plated support rails provide optimum corrosion protection
- The mounting clip for support rails also enables assemblies that are not designed for "snap assembly" to be adapted so they can fit onto support rails



Accessories



Cable entry

- Simple cable entry through gland plates
- Gland plates with knockouts in sheet steel and plastic
- Connector gland for fitting preassembled connectors with a high protection category
- Metric cable glands made from brass and plastic

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