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Rittal – The System.

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Ground straps

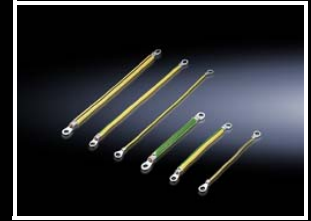
To configure a reliable grounding connection with perfect contact

- With ring terminals in M6 and M8 to match the grounding screws
- Length-optimized and ready to install

Housing	Connection option		
	Door/Cover	Housing	Mounting Plate
KL	M6	M6	M8
EB	M6	M6	–
AE	M6	M6 ¹⁾ /M8	M8
KE/KEL	M8	M8	M8
CM/TP	M6	M8	M8
TS/SE	M8	M8	M8
PC	M8	M8	–

¹⁾ M6 with AE 1032.XXX/AE 1035.XXX

Connection	Cross-section mm ²	Length inches (mm)	Packs of	Model No.
M8 – M8	4	7 (170)	5 pc(s).	2564.000
M8 – M8	16	7 (170)	5 pc(s).	2565.000
M8 – M8	25	7 (170)	5 pc(s).	2566.000
M6 – M6	10	8 (200)	5 pc(s).	2565.100
M8 – M8	4	12 (300)	5 pc(s).	2567.000
M6 – M8	10	12 (300)	5 pc(s).	2565.110
M8 – M8	10	12 (300)	5 pc(s).	2565.120
M8 – M8	16	12 (300)	5 pc(s).	2568.000
M8 – M8	25	12 (300)	5 pc(s).	2569.000



Grounding braid

Tin-plated copper, in various lengths and cross-sections with press-fit contact rings. Grounding braids counteract the proximity effect at high frequencies, while offering flexible connection options.

For	Cross-section mm ²	Length inches (mm)	Packs of	Model No.
M6	10	8 (200)	10 pc(s).	2412.210
M8	16	8 (200)	10 pc(s).	2412.216
M8	25	8 (200)	10 pc(s).	2412.225
M6	10	12 (300)	10 pc(s).	2412.310
M8	16	12 (300)	10 pc(s).	2412.316
M8	25	12 (300)	10 pc(s).	2412.325



Assembly components

for system punchings

To fasten ground straps and grounding braids to

- Horizontal TS enclosure sections
- PS rail systems
- Horizontal SE enclosure sections (in the depth only, top)

Size	Packs of	Model No.
M6	10 set(s)	2570.000
M8	10 set(s)	2559.000



Also required:

- For mounting on the horizontal TS, SE enclosure section: Captive nut, see page 538



Assembly components

for base plates

To fasten ground straps and grounding braids to

- Base plates

Self-tapping screws allow for rapid assembly

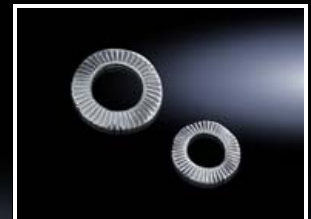
Size	Packs of	Model No.
M8	10 set(s)	2570.200



Contact washers

The serrated contact washers facilitate a secure protective grounding conductor connection. No need to manually remove paint at the point where the connection is made.

Size	Packs of	Model No.
M5	100 pc(s).	2343.000
M6	100 pc(s).	2334.000
M8	100 pc(s).	2335.000



Interior Fittings

Grounding



Grounding plate

- For installation in
- Comfort Panel
 - TS
 - SE
 - PC

A grounding cable can be screwed onto the threaded bolt and connected with up to eight components via a 6.3 mm spade terminal using grounding bands.

Packs of	Model No.
1 pc(s).	2570.500

Supply includes:

- Assembly components



Central grounding point

For connecting

- Grounding bands
- Grounding braids

To the vertical and horizontal enclosure section. The terminal lug is joined to and makes contact with the enclosure frame by means of two sheet metal screws. The ground connection is made through the M8 x 20 mm threaded bolt.

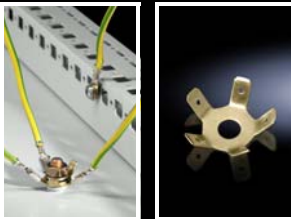
- Material:**
- Carbon steel

- Surface finish:**
- Zinc-plated

Packs of	Model No.
1 pc(s).	7829.200

Supply includes:

- 1 connection bracket
- 2 assembly screws for mounting to the enclosure section
- 2 serrated washers
- 1 nut M8
- 1 contact lock washer M8
- 1 washer



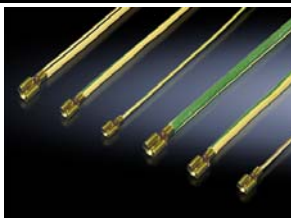
Equipotential bonding star for 8 mm grounding bolt

The grounding connector is used for simple equipotential bonding on an 8 mm grounding stud, or in conjunction with the central grounding point 7829.200. Up to five spade terminals (6.3 mm) can be contacted on one grounding point.

Packs of	Model No.
10 pc(s).	7548.210

Supply includes:

- 10 grounding connectors
- Assembly components



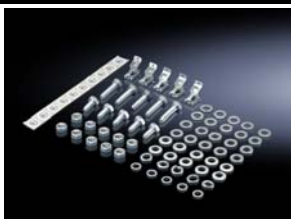
Complete grounding kit for upgrading existing DK-TS applications

To DIN EN 60 950/VDE 0805, Ø 4 mm². For system-compatible grounding of all enclosure parts on the enclosure frame. Ground conductors are pre-assembled ready for connection with connectors and cut to the correct length.

Packs of	Model No.
1 set(s)	7829.150

Supply includes:

- 8 ground straps
- Central grounding point and assembly components



Grounding kit KE

To produce the required external equipotential bonding for spray-finished housings in the following series:

- KL
- AE
- TS

For application areas in device group II, category 3, as per EC directive 94/9 EC Annex VIII, Internal Control of Production.

Packs of	Model No.
5 pc(s).	9214.000

Grounding kit

for KL

Includes all the screws, nuts, contact washers and grounding strap needed to ground the cover; length 250 mm, 4 mm² cross-section.

Packs of	Model No.
5 pc(s).	2570.100



PE busbar

699 mm-long PE busbar with 42 pre-assembled screws, including terminal clamps up to 6 mm² (fine-wire conductors), 10 mm² (single-wire or multi-wire conductors) and main terminal clamp up to 35 mm².

Packs of	Model No.
1 pc(s).	2364.000



Accessories:

- Rail mounting bracket, see page 537



Ground rail, horizontal

for TS

Supply includes:

- Ground rail made from E-Cu 57 to DIN EN 12 163, DIN EN 13 601, 15 x 5 mm
- 20 connection points with M5 screws
- 2 ground connections 25 mm²
- 2 isolators
- Assembly components

Length, inches (mm)	Packs of	Model No.
18 (450)	1 pc(s).	7113.000



Grounding kit, pre-assembled

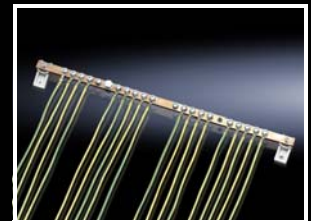
for TS, TS IT

For star grounding. With pre-assembled ground conductors to integrate an equipotential bonding strip in network enclosures.

Supply includes:

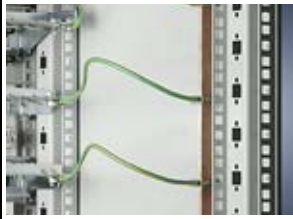
- Ground rail made from E-Cu 57 to DIN EN 12 163, DIN EN 13 601
- 16 grounding leads 6 mm²
- 2 isolators
- Assembly components

For TS enclosures up to H x W x D inches (mm)	Packs of	Model No.
79 x 32 x 32 (2000 x 800 x 800)	1 set(s)	7829.100
87 x 32 x 47 (2200 x 800 x 1200)	1 set(s)	7829.110



Interior Fittings

Grounding



Ground rail, vertical

for TS

Easy to mount on 25 mm DIN hole pattern on distributor or on 19" (482.6 mm) punched rails. The supplied ground conductors facilitate star grounding of cable clamp straps on patch panels. The ground terminals are fully adjustable. Rail current carrying capacity approx. 200 A.

Supply includes:

- Ground rail made from E-Cu 57 to DIN EN 12 163, DIN EN 13 601, 15 x 5 mm
- 16 conductor connection clamps 2.5 – 16 mm²
- 15 grounding leads 6 mm², L = 500 mm
- Assembly components

For enclosure height inches (mm)	Length inches (mm)	Packs of	Model No.
32 (800)	21 (545)	1 set(s)	7541.000
39 (1000)	29 (745)	1 set(s)	7542.000
47 (1200)	37 (945)	1 set(s)	7543.000
63 (1600)	53 (1345)	1 set(s)	7545.000
71 (1800)	61 (1545)	1 set(s)	7546.000
79 (2000)	69 (1745)	1 set(s)	7547.000
87 (2200)	77 (1945)	1 set(s)	7548.000

Extension kit

for ground rail, vertical

For system-compatible expansion of the star grounding on vertical grounding strips.

Supply includes:

- Grounding leads 6 mm², L = 500 mm
- Pre-assembled, with cable lug and wire end ferrule
- Ground terminals 2.5 – 16 mm²
- Assembly components

Packs of	Model No.
10 pc(s).	7549.000

ESD connection point

There is a risk of dangerously high potential differences when carrying out maintenance or conversion work on the enclosure. To protect sensitive electronic components, grounding can be provided through a standardized connection point (push-button). The connection point is connected to the enclosure frame by two screws and is directly conductive.

Packs of	Model No.
1 pc(s).	7752.950

Material:

- Carbon steel

Surface finish:

- Zinc-plated

Supply includes:

- Assembly components

Busbars E-Cu

with integral holes

Suitable for

- Direct installation in enclosures
- Busbar supports
 - 9340.000/.010, see page 198
- PE/PEN combinations in conjunction with PE/PEN combination angles, see page 559, and E-Cu baying bracket, see page 560

Technical details:

Available on the Internet

Dimensions 30 x 5 mm (hole pattern Ø 11 mm)

For enclosure width inches (mm)	Length inches (mm)	Packs of	Model No.	Page
16 (400)	14 (365)	2 pc(s).	9661.345	
24 (600)	22 (565)	2 pc(s).	9661.365	
32 (800)	30 (765)	2 pc(s).	9661.385	
39 (1000)	38 (965)	2 pc(s).	9661.305	
47 (1200)	46 (1165)	2 pc(s).	9661.325	

Accessories

Baying bracket E-Cu	95	4 pc(s).	9661.355	560
PE/PEN combination angle	–	4 pc(s).	9661.235	559

Dimensions 30 x 10 mm (hole pattern Ø 11 mm)

For enclosure width inches (mm)	Length inches (mm)	Packs of	Model No.	Page
16 (400)	14 (365)	2 pc(s).	9661.340	
24 (600)	22 (565)	2 pc(s).	9661.360	
32 (800)	30 (765)	2 pc(s).	9661.380	
39 (1000)	38 (965)	2 pc(s).	9661.300	
47 (1200)	46 (1165)	2 pc(s).	9661.320	

Accessories

Baying bracket E-Cu	95	4 pc(s).	9661.350	560
PE/PEN combination angle	–	4 pc(s).	9661.230	559

PE/PEN combination angle, E-Cu

for PE/PEN combinations

The PE/PEN combination, comprising busbars, combination angles and baying brackets, supports type-tested configurations as per IEC 61 439-1. The pre-assembled combination angles, baying brackets and the busbars individually cut to the enclosure width make for extremely time and cost-efficient assembly.

Material:

- E-Cu

Supply includes:

- Assembly components

Tested short-circuit resistance

- PE/PEN combination 30 x 5 mm: I_{cw} 18 kA, 1 sec.
- PE/PEN combination 30 x 10 mm: I_{cw} 30 kA, 1 sec.
- PE/PEN combination 40/80 x 10 mm: I_{cw} 60 kA, 1 sec.

For busbars mm	Application		Dimension mm	Packs of	Model No.
	Form 2-4	Others			
30 x 5	■	■	30 x 5	4 pc(s).	9661.235
30 x 10	■	■	30 x 10	4 pc(s).	9661.230



Interior Fittings

Grounding



Baying bracket E-Cu

For busbars mm	Length inches (mm)	Packs of	Model No.
30 x 5	4 (95)	4 pc(s).	9661.355
30 x 10	4 (95)	4 pc(s).	9661.350