

Network Rail Approved Terminal Blocks from WAGO Limited





Contents

Spring Connection The Universal Connection	4
Network Rail Appoved Terminal Blocks and Accessories	5 – 16
Quality and Reliability Innovation - Quality - Safety	17 – 20
Other WAGO Solutions Trains, Signals and Infrastructure	21 – 26
Contact Information	27

SPRING PRESSURE CONNECTION TECHNOLOGY FOR MAXIMUM SAFETY AND UPTIME

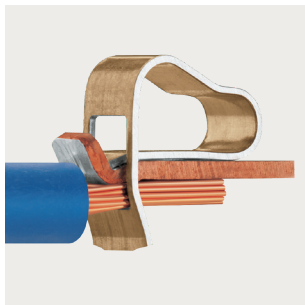
Safe, reliable electrical connections for power and signal transmission are taken for granted today – and with good reason. However, this did not happen overnight. During the 1950s, we departed from mainstream screw technology when we created our innovative approach: spring connections.

WAGO was the first company to apply spring pressure technology to connect electrical conductors, ushering in a decisive technological advance. WAGO continued development of this technology with the same measure of rigor and success.

Today the spring clamp has a myriad of variants. Why? To satisfy user demands for “smaller yet,” “even easier to assemble” and “more cost effective” to the greatest degree possible. And best of all: Meet all of these needs at the same time! The four most essential principles from which this multitude of versions originates are briefly described below.

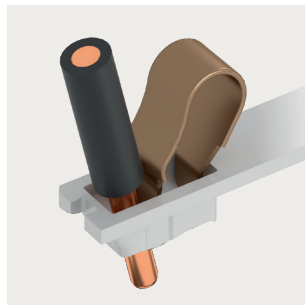
Proven in billions of applications worldwide!

CAGE CLAMP®



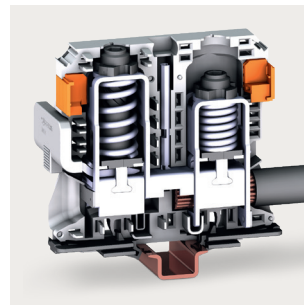
from 0.08-35mm²

Push-In CAGE CLAMP®



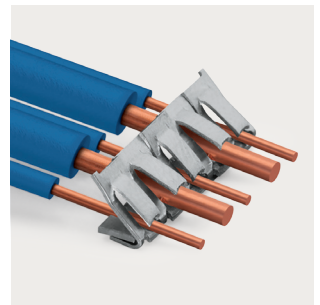
from 0.14-25mm²

POWER CAGE CLAMP®



from 10-185mm²

PUSH WIRE®



from 0.5-6mm²



Network Rail Approved 280 Series

WAGO Part No. 280-675

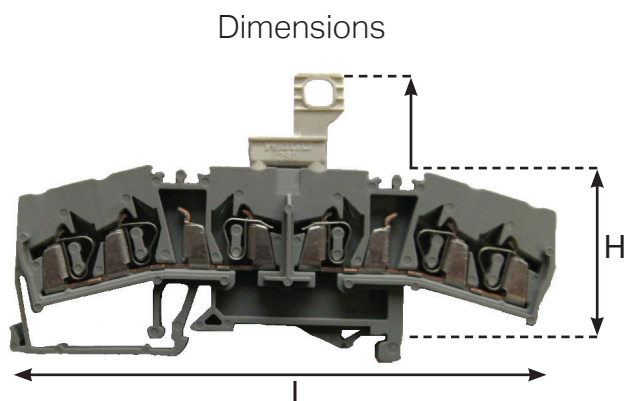
**TS35 DIN rail-mounted terminal block
with disconnect link facility.**

800V/8kV/3

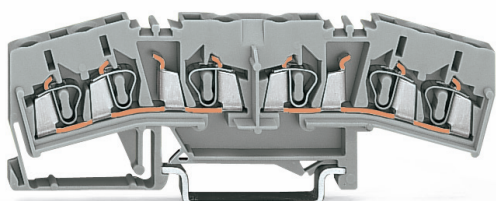
24A

0.08 - 2.5mm²

Insulation stripping length 8 - 9mm



Length	93mm
Height	28mm
Height with jumper (with tab)	44mm
Width	5mm



PADS No. 086/042121

WAGO Part No. 280-675

DIN Rail mounted terminal block, 0.08 - 2.5mm²
with disconnect link facility, grey.



PADS No. 086/042124

WAGO Part No. 280-325, grey

PADS No. 086/042125

WAGO Part No. 280-333, orange

End and intermediate plate, 5mm thick.



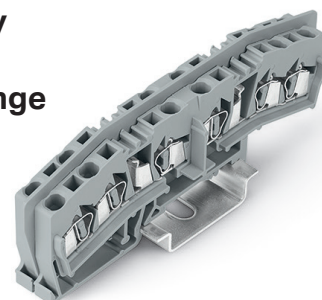
PADS No. 086/043050

WAGO Part No. 280-394, grey

PADS No. 086/043051

WAGO Part No. 280-395, orange

Separator plate, 1mm thick.



Network Rail Approved 280 Series



PADS No. 086/042122
WAGO Part No. 280-495

Disconnect jumper with tab,
white.



PADS No. 086/042123
WAGO Part No. 280-498

Insulation stop for disconnect
jumper point, red.



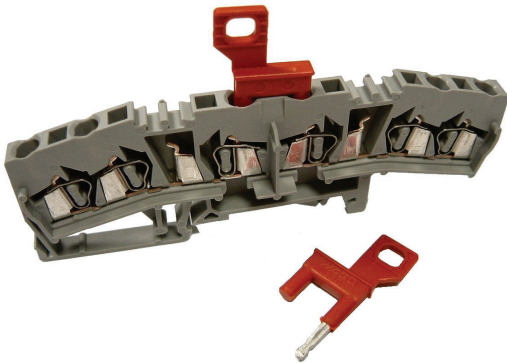
PADS No. 086/042134
WAGO Part No. 280-492

Disconnect jumper without
tab, grey.



PADS No. 086/042127
WAGO Part No. 231-126/011-000

Test probe, grey

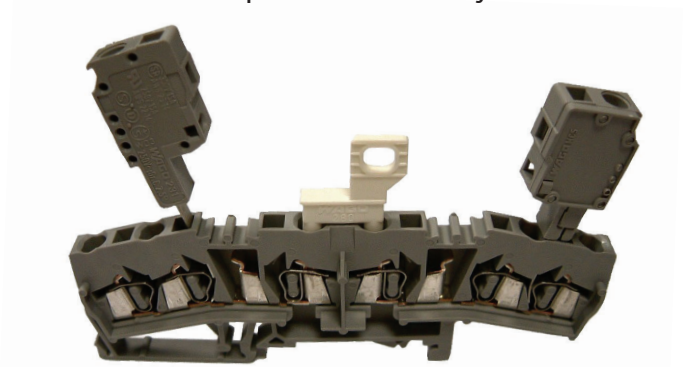
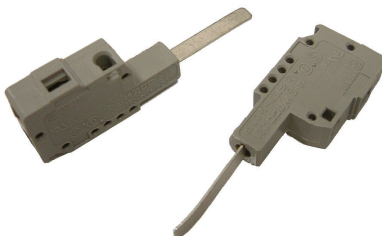


Red insulation stop (part No. 280-498) is available as an equivalent to the red dome nut and can be fitted into the jumper location once the disconnect link has been removed. Installation and removal of this part can be seen on the Operating Information page in Part 2.

The 280-498 is based on the white disconnect link. However this jumper only has one leg which is used for holding the stop in place. Its purpose is solely to blank off the centre jumper locations.



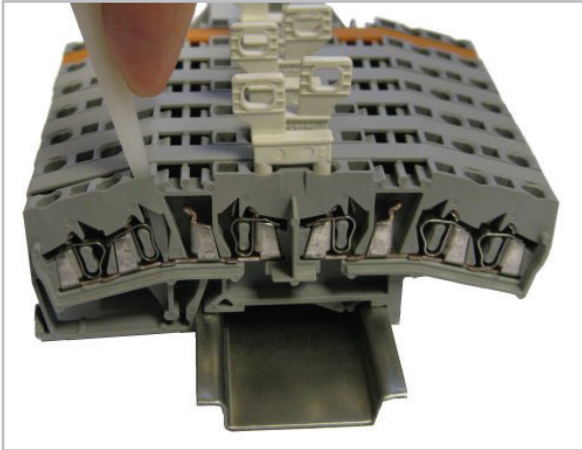
The 231-126/011-000 is a test probe that can be inserted into the operating slot. It is pushed down the back of the clamp making contact with the busbar and clamp simultaneously.



Operating instructions

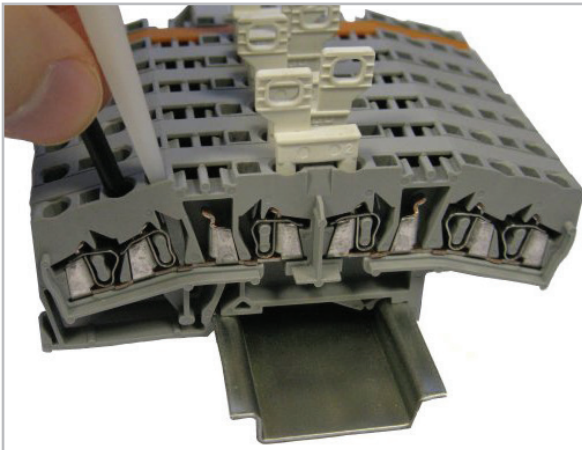
for the 280-675 terminal block & accessories

Part 1: Inserting wires into a CAGE CLAMP® Connection system



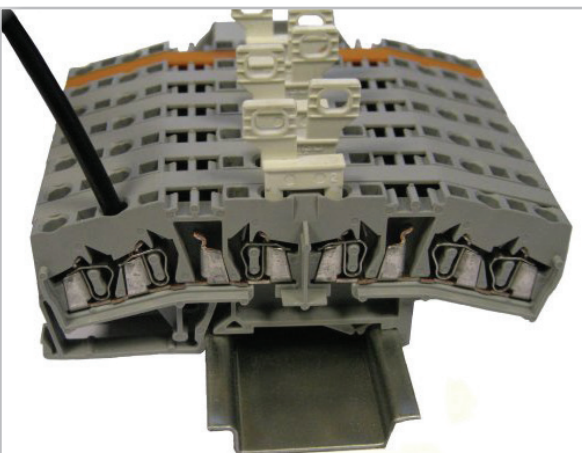
Step 1:

Strip the cable insulation 8 - 9mm using the stripping tool (206-124). Introduce the operating tool, initially at a slight angle into the square operating slot and push down until it will go no further. You cannot damage the spring as positive "stops" are built into the design of both the spring and terminal housing.



Step 2:

The operating tool blade will then remain in place, automatically holding the spring open. Introduce the prepared cable via the rounded cable entry hole.



Step 3:

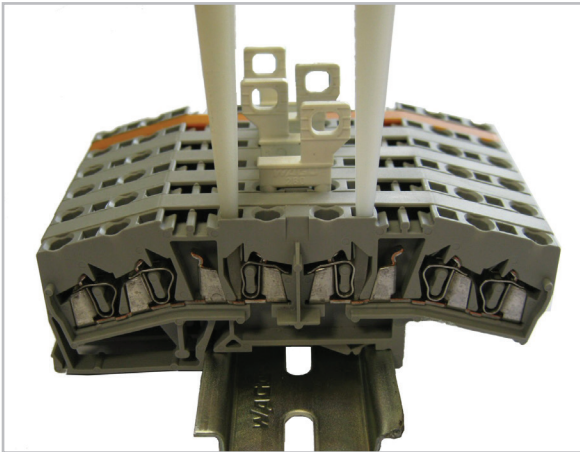
The operating tool can then be withdrawn, which then releases the clamping spring on to the cable to provide a secure connection with exactly the right level of tension. To remove the wire repeat step 1, remove or replace the cable and then release the operating tool.

Operating tool part number 210-130 shown.

Operating instructions

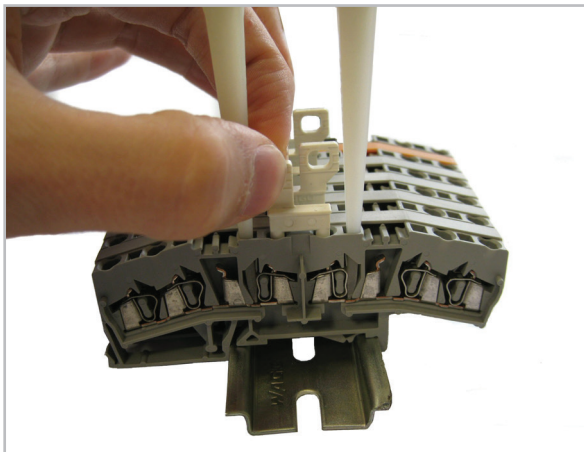
for the 280-675 terminal block & accessories

Part 2: Insertion of the disconnect jumper / link and insulation stop



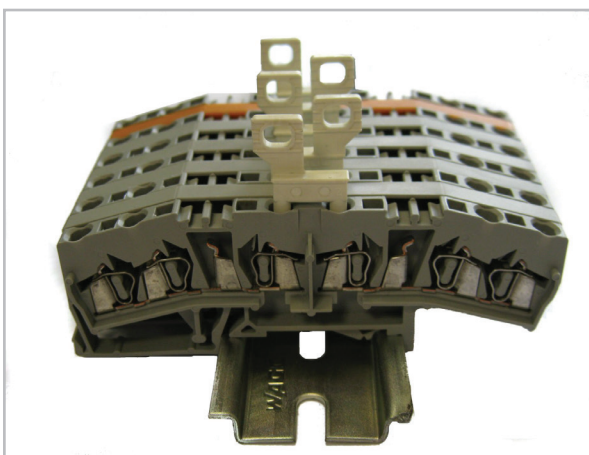
Step 1:

Open the two central clamping springs by inserting 2 x 210-130 (3.5 x 0.5mm blade) operating tools into the operating slots (see picture).



Step 2:

Insert the required jumper fully into the open clamping springs. The contact legs are notched so once in place you should feel a click.



Step 3:

Remove both operating tools to close the clamps, leaving the jumper help in position. To remove repeat step one to take out the jumper or replace with a different version and the step 3.

Operating tool part number 210-130 shown.

Network Rail Approved 280 Series

WAGO Part No. 280-833

TS35 DIN rail-mounted terminal block

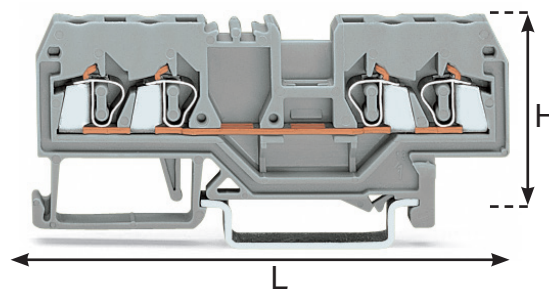
800V/8kV/3

24A

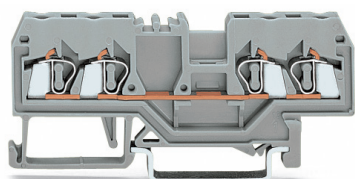
0.08 - 2.5mm²

Insulation stripping length 8 - 9mm

Dimensions



Length	75mm
Height	28mm
Width	5mm



PADS No. 086/042129

WAGO Part No. 280-833

DIN Rail mounted 4-conductor terminal block,
0.08 - 2.5mm², grey.



PADS No. 086/042132

WAGO Part No. 280-835/056-000, orange

4-conductor end and intermediate plate, 5mm thick.



PADS No. 086/043061

WAGO Part No. 280-482, 2-way

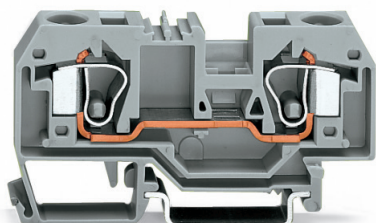
PADS No. 086/043062

WAGO Part No. 280-483, 3-way

Comb-style jumper bar, for use in conductor
entry hole, insulated, 24A.

Network Rail Approved

284 Series



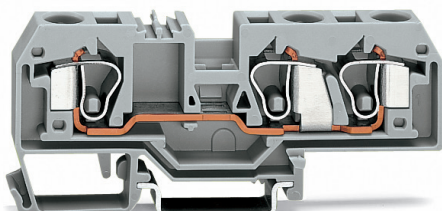
PADS No. 0088/201000
WAGO Part No. 284-901, grey

DIN Rail mounted 2-conductor carrier terminal block, 0.2 - 10mm², 10mm wide.



PADS No. 0088/201002
WAGO Part No. 284-325, grey
PADS No. 0088/201001
WAGO Part No. 284-328, orange

Intermediate end plate for the 284-901, 2.5mm thick.



PADS No. 0088/201003
WAGO Part No. 284-681, grey

DIN Rail mounted 3-conductor carrier terminal block, 0.2 - 10mm², 10mm wide.



PADS No. 0088/201004
WAGO Part No. 284-308, grey
PADS No. 0088/201005
WAGO Part No. 284-339, orange

Intermediate end plate for the 284-681, 2.5mm thick.

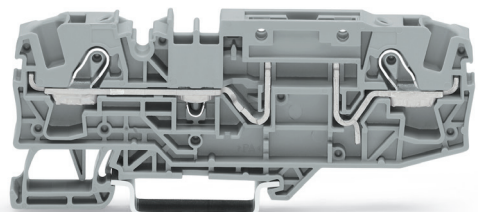


PADS No. 0088/201006
WAGO Part No. 284-400

Finger guard, touch proof cover (yellow).

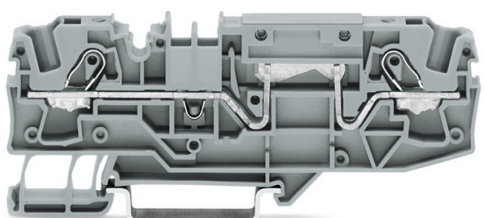
Network Rail Approved

2006 Series



PADS No. 0088/201007
WAGO Part No. 2006-1661, grey

DIN Rail mounted 2-conductor carrier terminal block,
0.5 - 6 (10)mm², 7.5mm wide.



PADS No. 0088/201011
WAGO Part No. 2006-1601, grey

DIN Rail mounted 2-conductor through terminal block,
0.5 - 6 (10)mm², 7.5mm wide.



PADS No. 0088/201008
WAGO Part No. 2006-1695, grey
PADS No. 0088/201009
WAGO Part No. 2006-1696, orange

Intermediate end plate for the 2006-1661 &
2006-1601, 2.9mm thick



PADS No. 0088/201054
WAGO Part No. 2006-1691, grey
PADS No. 0088/201055
WAGO Part No. 2006-1692, orange

Intermediate end plate for the 2006-1661 &
2006-1601, 1mm thick



PADS No. 0088/201013
WAGO Part No. 2006-401/000-050

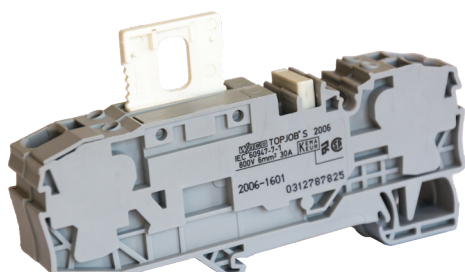
Disconnect link for 2006-1661,
white.



PADS No. 0088/201014
WAGO Part No. 2006-451

Insulation stop for 2006-1661, red.

Network Rail Approved 2006 Series



PADS No. 0088/201048
WAGO Part No. 60356200

2006 Series 2 to 1 conductor **disconnect** terminal block assembly, 2.5 - 10mm² (Grey)



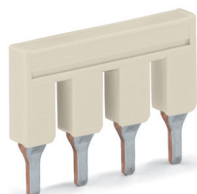
PADS No. 0088/201049
WAGO Part No. 2006-402

2-way push-in type jumper



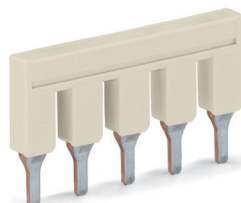
PADS No. 0088/201050
WAGO Part No. 2006-403

3-way push-in type jumper



PADS No. 0088/201051
WAGO Part No. 2006-404

4-way push-in type jumper



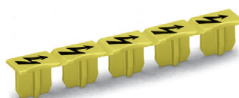
PADS No. 0088/201052
WAGO Part No. 2006-405

5-way push-in type jumper



PADS No. 0088/201053
WAGO Part No. 2006-191

Lockout cap (grey)



PADS No. 0088/201010
WAGO Part No. 2006-115

Protective warning marker,
for 5 terminals

Network Rail Approved Accessories

Operating tools



PADS No. 0088/201015
WAGO Part No. 210-721

Partially insulated, suitable for 2006 - 2016 Series



PADS No. 086/042169
WAGO Part No. 209-130

Fully insulated, suitable for 280 Series



PADS No. 086/042133
WAGO Part No. 210-658

Short angled, 3.5 x 0.5mm blade



PADS No. 086/043063
WAGO Part No. 280-432

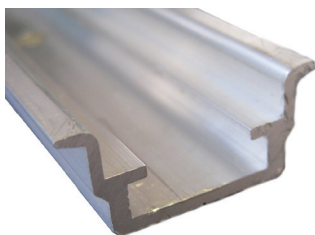
Fully insulated comb, 2-way to use with comb-style jumpers



PADS No. 086/043064
WAGO Part No. 280-433

Fully insulated comb, 3-way to use with comb-style jumpers

DIN Rail and end stops



WAGO Part No. 210-146

Aluminium DIN rail TS 35/15, 2m



PADS No. 088/201056
WAGO Part No. 249-116
PADS No. 086/042126
WAGO Part No. 249-117

End stop for TS 35 DIN rail 6mm (249-116) & 10mm wide (249-117), grey

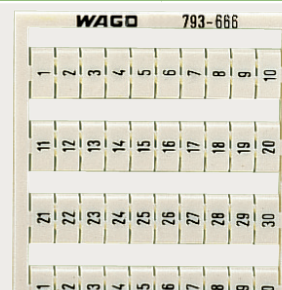
Network Rail Approved Accessories

Horizontal marking on white cards



PADS No.	WAGO Part No.	Marking
0088/201016	793-502	1-10 (x10)
0088/201017	793-503	11-20 (x10)
0088/201018	793-504	21-30 (x10)
0088/201019	793-505	31-40 (x10)
0088/201020	793-506	41-50 (x10)
0088/201021	793-569	51-60 (x10)
0088/201022	793-570	61-70 (x10)
0088/201023	793-571	71-80 (x10)
0088/201024	793-572	81-90 (x10)
0088/201025	793-573	91-100 (x10)
0088/201026	793-566	1-50 (x2)
0088/201027	793-507	51-100 (x2)

Vertical marking on white cards



PADS No.	WAGO Part No.	Marking
0088/201028	793-602	1-10 (x10)
0088/201029	793-603	11-20 (x10)
0088/201030	793-604	21-30 (x10)
0088/201031	793-605	31-40 (x10)
0088/201032	793-606	41-50 (x10)
0088/201033	794-601	51-60 (x10)
0088/201034	794-602	61-70 (x10)
0088/201035	794-603	71-80 (x10)
0088/201036	794-604	81-90 (x10)
0088/201037	794-605	91-100 (x10)
0088/201038	793-666	1-50 (x2)
0088/201039	793-607	51-100 (x2)
086/043053	51292686	101-200 (x1)
086/043054	793-610	201-300 (x1)
086/043055	793-611	301-400 (x1)

PADS No. 086/043067 WAGO Part No. 209-113

Marker card for self marking,
100 markers per card

PADS No. 086/043065 WAGO Part No. 209-112

Group Marker Carrier

PADS No. 086/043066 WAGO Part No. 209-114

Protective cover transparent

Vertical decade marking on orange cards



PADS No.	WAGO Part No.	Marking
086/043056	51292681	10-50 (x2)
086/043057	51292682	60-100 (x2)
086/043058	51292683	110-200 (x1)
086/043059	51292684	210-300 (x1)
086/043060	51292685	310-400 (x1)

Other options are available, please contact us on 01788 568 008

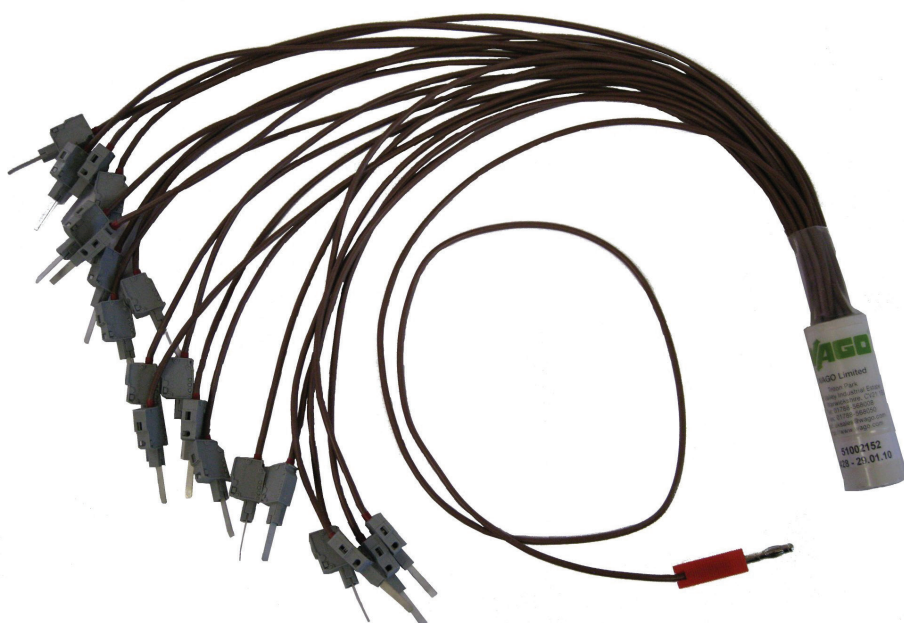
Network Rail Approved Accessories

Bunch strap tester, available in a 20 or 24-way combination

The WAGO bunch strap tester is specifically designed to be used with the WAGO CAGE CLAMP® terminals and can be used to Megger test up to 20 or 24 terminals at a time.

The tester is constructed from silicon insulated wire, each of the arms has a replaceable connector attached that can be placed into the square operating hole of the terminal, thus allowing testing without disturbing the cable.

The Megger connection is via a 4mm stackable banana plug. The unit is supplied complete as shown above with either 20 or 24 terminal leads, each unit has unique serial number and date of manufacture.



PADS No. 086/042135
WAGO Part No. 51002152, 20-way

PADS No. 086/042136
WAGO Part No. 51002165, 24-way

Other number of ways available
upon request.



231-126/011-000 Test Probe



51002153 Test Plug



Serial number and date of manufacture

Manufacturer:
WAGO Ltd

Issue 6
Valid From : 18-11-2013

DIN Rail Mounted Terminal Blocks

Product Description

Terminal blocks for use as a replacement for 2BA terminal blocks. The terminals have inbuilt positive stops to prevent damage and do not have a limit to their number of operations. A range of accessories are also available.

Product Image



Scope of Acceptance

Full Acceptance:

Accepted for use as a replacement of the 2BA terminal blocks for terminating railway signalling cable conductors up to 2.5mm² cross sectional area. Use of the DIN Rail Mounted Terminal Blocks in signal heads is prohibited.

Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.
Authorised by:

Richard Olutola
Engineer (Asset Management and Railway Systems)

Edward C Rollings MSc, CEng, MIET, FIRSE
Professional Head – Signalling and Telecommunications

Manufacturer:
WAGO Ltd

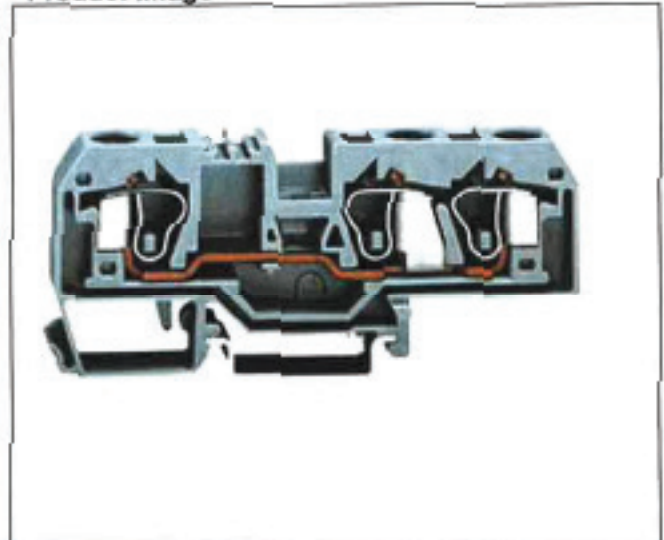
Issue : 2
Valid From : 21/11/2017

Touch Proof Terminal Blocks

Product Description

A range of touch proof terminals that can accommodate conductors up to 10mm². The 2006 series terminal has a disconnect facility.

Product Image



Scope of Acceptance

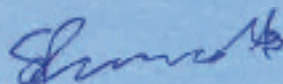
Full Acceptance:

Accepted for use for terminating railway signalling cable conductors from 2.5mm² up to 10mm² cross sectional area.

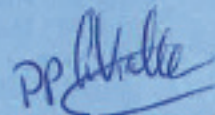
Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Reviewed by:

Authorised by:

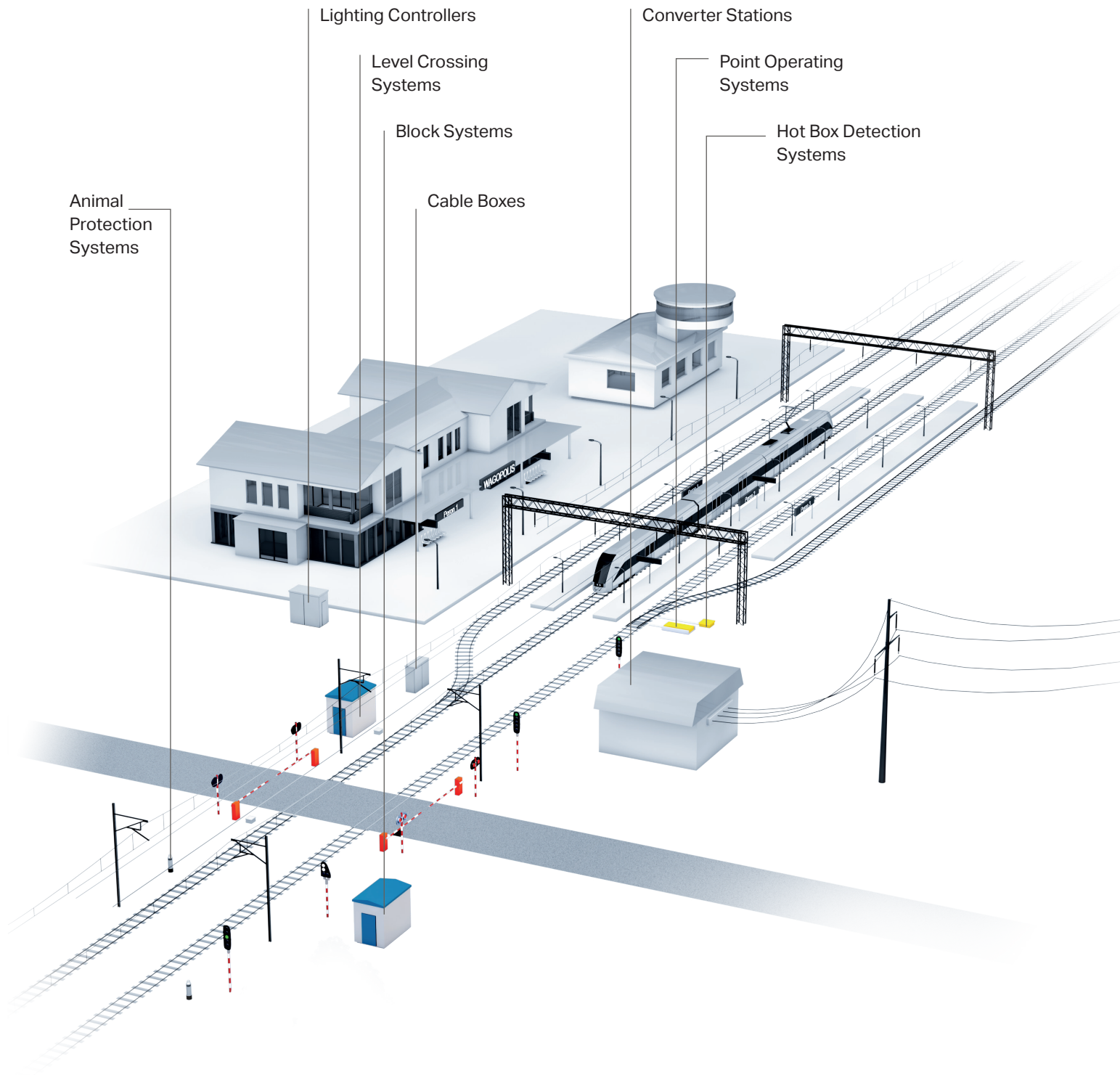


Steve Rennolds
Engineer (Asset Management and Railway Systems)



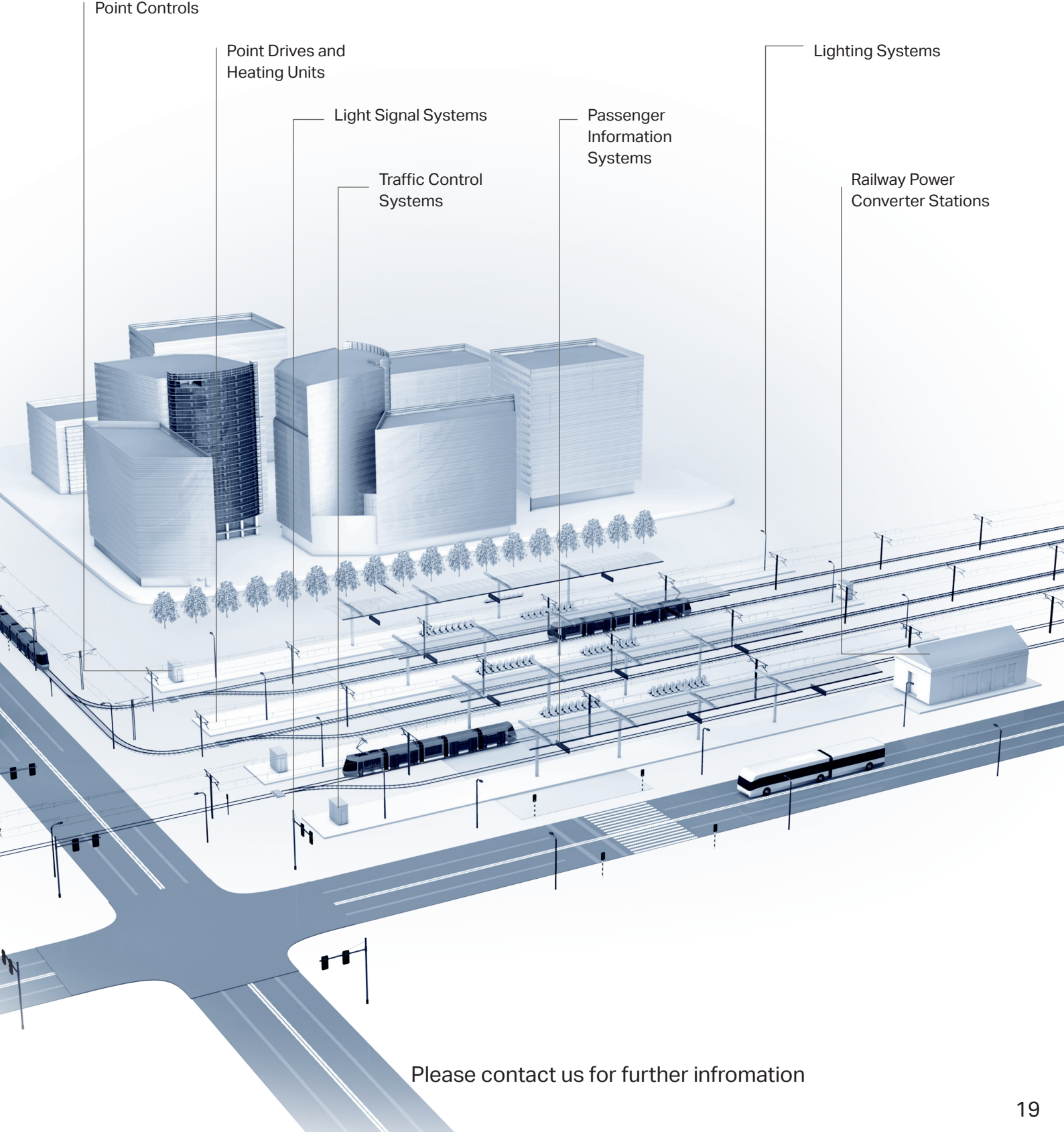
Jerry Morling BEng MSc CEng MIET MIRSE
Professional Head Signalling

SIGNAL TECHNOLOGY APPLICATION AREAS



Please contact us for further information

INFRASTRUCTURE APPLICATION AREAS



Point Controls

Point Drives and Heating Units

Light Signal Systems

Traffic Control Systems

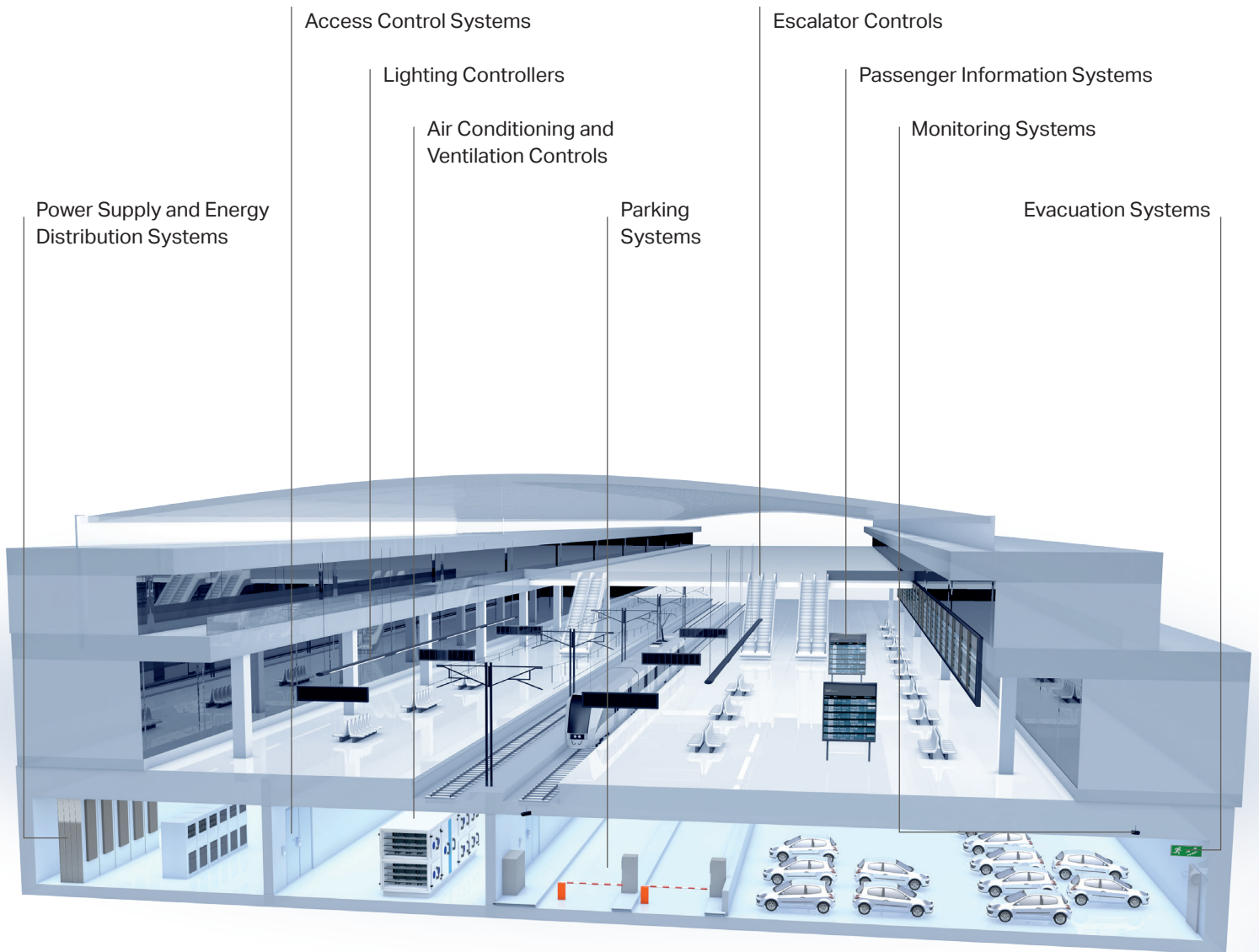
Passenger Information Systems

Lighting Systems

Railway Power Converter Stations

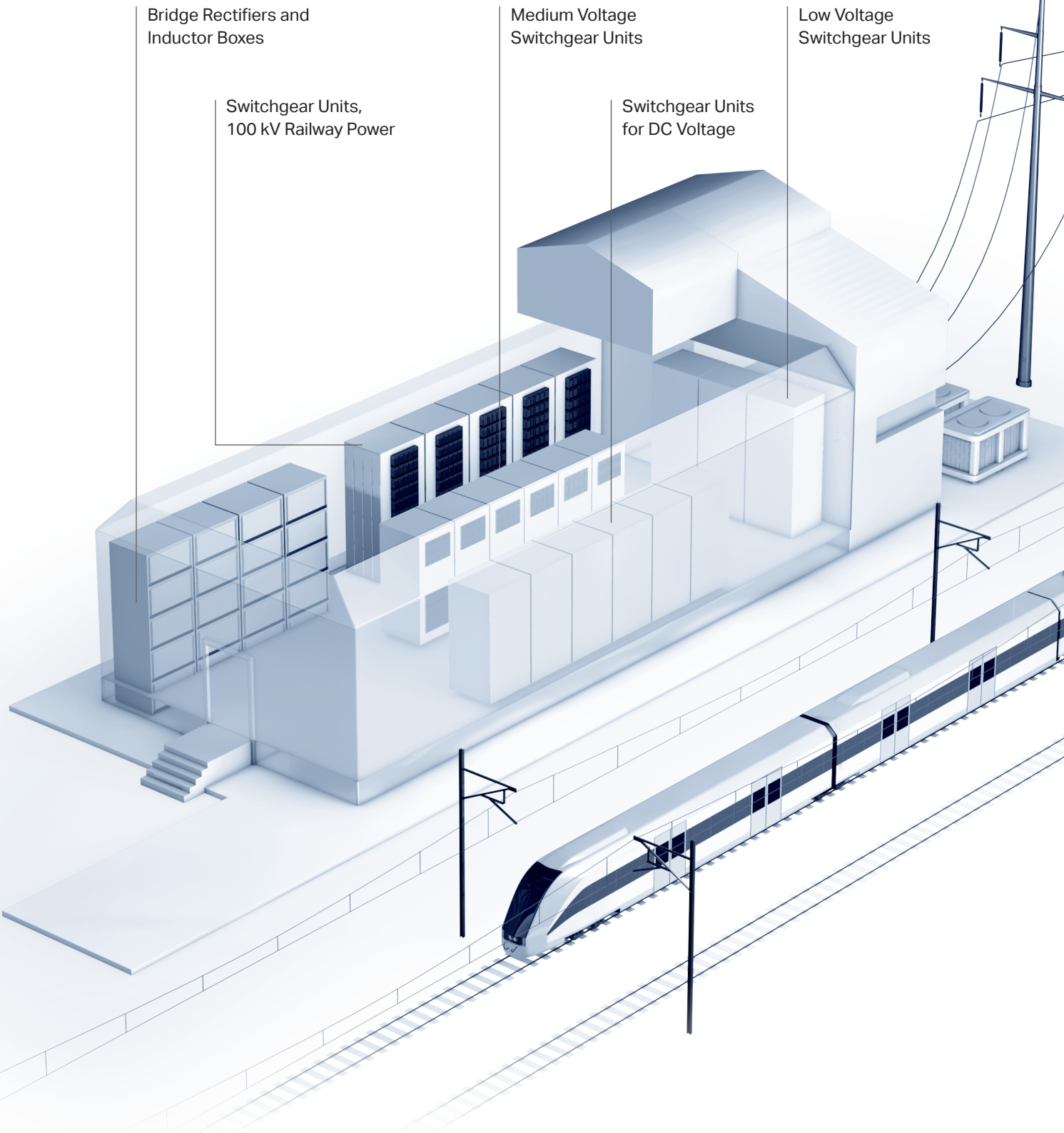
Please contact us for further information

RAILWAY STATION APPLICATIONS



Please contact us for further information

POWER SUPPLY APPLICATIONS



Bridge Rectifiers and Inductor Boxes

Switchgear Units, 100 kV Railway Power

Medium Voltage Switchgear Units

Switchgear Units for DC Voltage

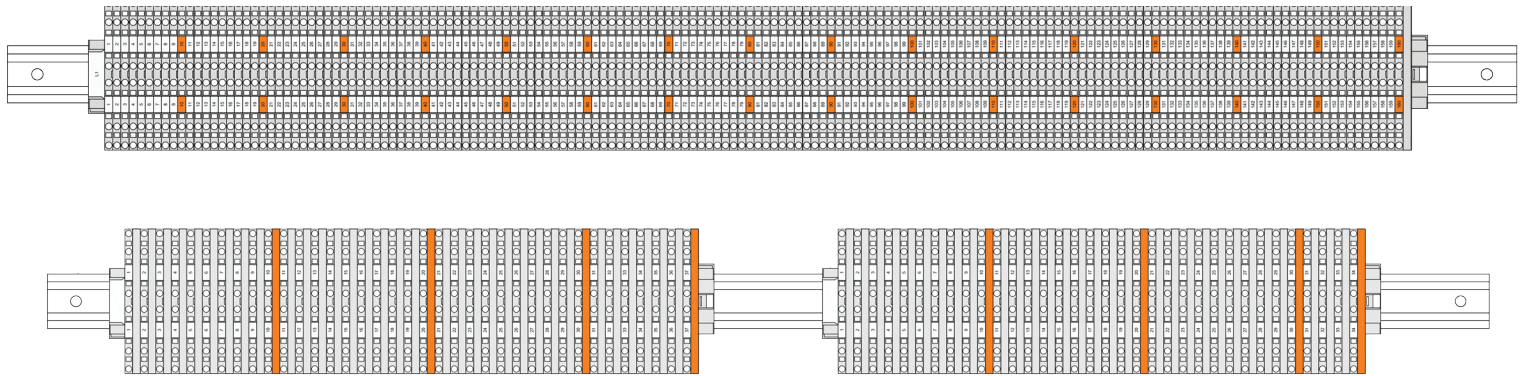
Low Voltage Switchgear Units

Please contact us for further information

WAGO Limited Services

Custom rail assemblies are available, contact us for a quote.

- With or without a wiring harness
- Fitted within a suitable enclosure (free-issued or sourced by WAGO Limited)
- Or a kit of parts for the end user to assemble



Contacts

Technical Enquires

Tel: 01788 568 008
uksales@wago.com

Sales Enquires

Tel: 01788 568 008
uksales@wago.com



WAGO Limited
Triton Park, Swift Valley Industrial
Estate, Rugby, CV21 1SG
Tel: 01788 568 008
uksales@wago.com
www.wago.com

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.
"Copyright – WAGO Kontakttechnik GmbH & Co. KG – all rights reserved. The content and structure of the WAGO websites, catalogs, videos, and other WAGO media are subject to copyright. Distribution or modification to the contents of these pages and videos is prohibited. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO Kontakttechnik GmbH & Co. KG by third parties."