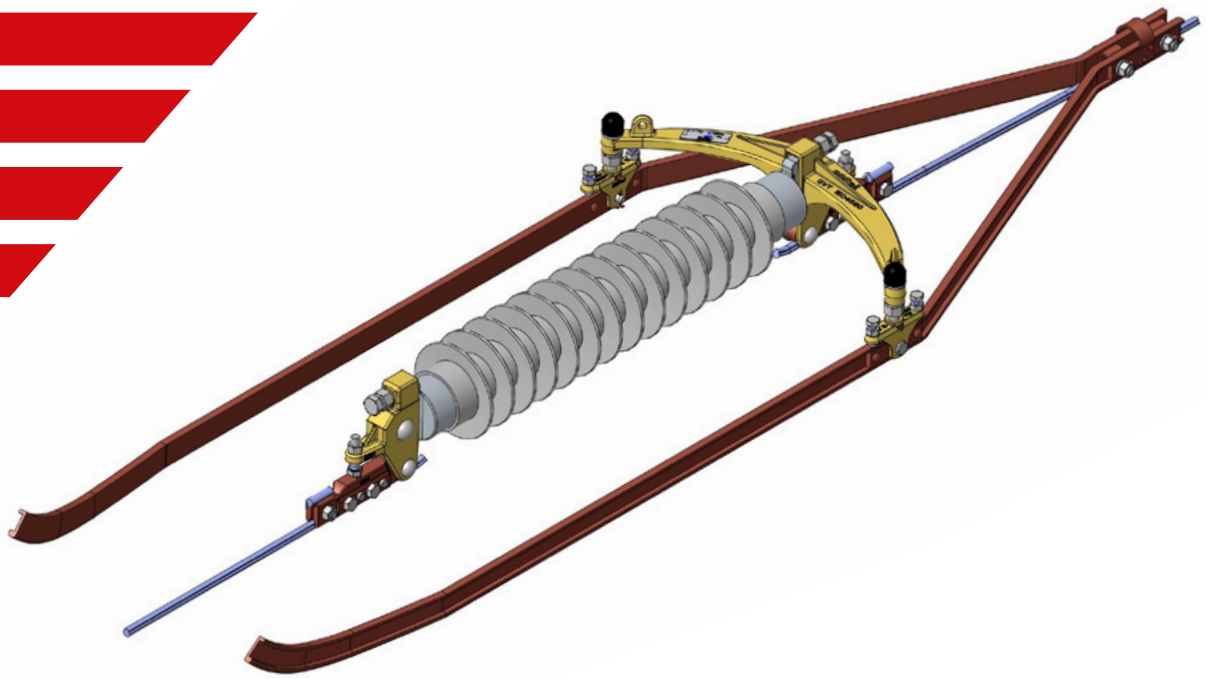
COMPANY MAIN TOPIC [PRODUCT]

TracFeed® STR
SECTION INSULATOR

English



Made in Germany

TracFeed® STR SECTION INSULATOR

Section insulator arrangement in Denver/USA

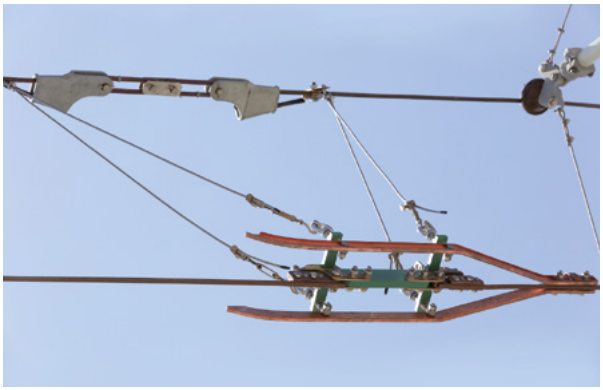
The TracFeed® section insulator families developed by Rail Power Systems offer a wide range of application options thanks to their standardised design. They can therefore cover almost every overhead contact line application.

Section insulators enable the segregation of contact line feed sections in electrical railway systems. In general, section insulators are used in stations and for points connections.

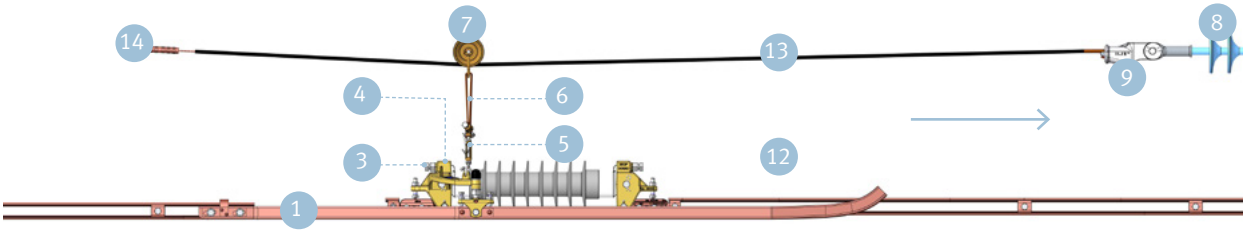
Section insulators are also installed during structural alteration works to contact line installations. Existing feeding groups can be separated by installing the insulators in individual sections. For assembly work and for states of construction, the separated sections can then be switched off individually or for longer periods.

TracFeed® STR section insulators can be installed directly in the contact line in a short space of time. The suspension makes it easy to regulate the installation position.

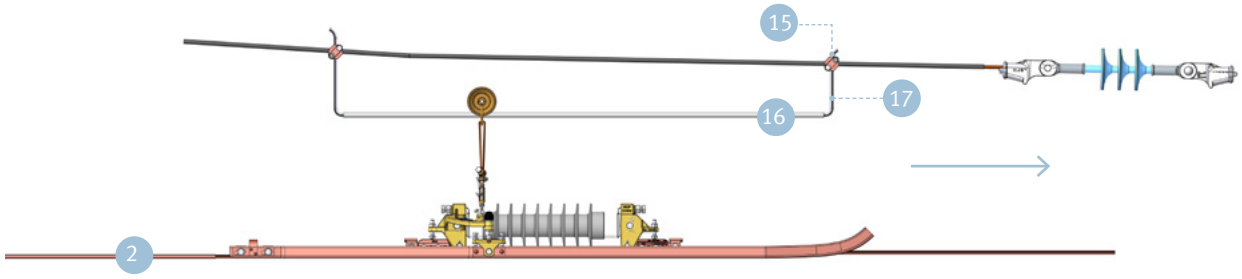
Not least because of the solid construction method and the materials used, TracFeed® STR section insulators from Rail Power Systems have a very long life expectancy with low maintenance requirements.



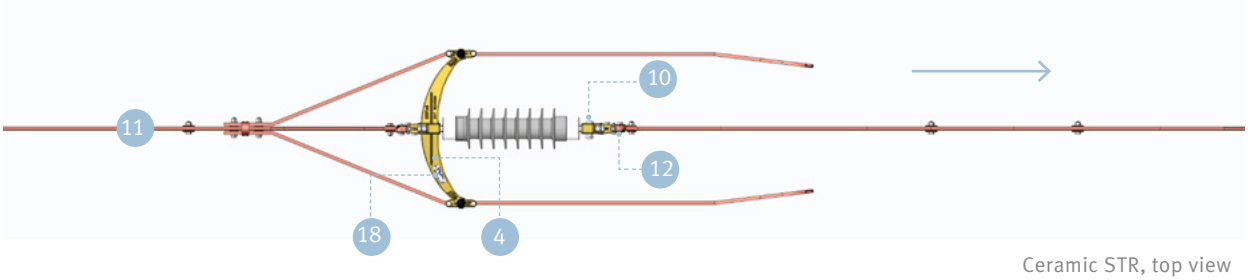
DESIGN AND COMPONENT OVERVIEW



Ceramic STR, side view



Composite STR, suspension with pulley, side view



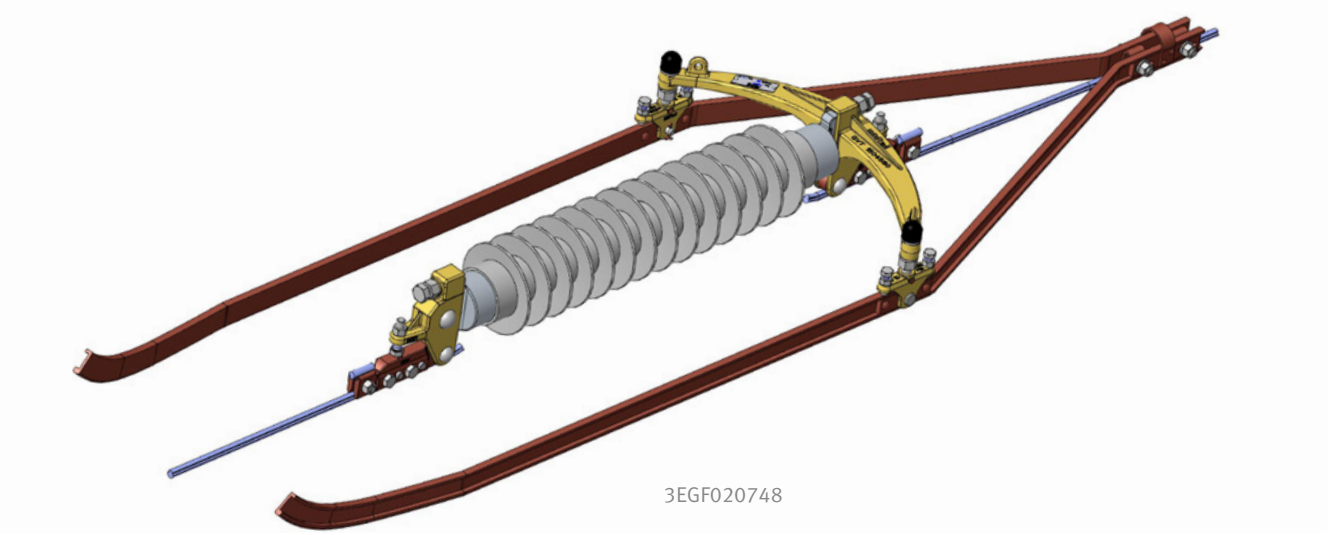
Ceramic STR, top view

General view of section insulator

1. Bolt
2. Contact wire reinforcement (integrated)
3. Adjustment bolts on swivel assembly with clevis
4. Swivel assembly with clevis with arms
5. Turnbuckle with wire clamp
6. Suspension wire (copper binding wire)
7. Wire pulley with shackle
8. Catenary wire insulator (composite or ceramic)
9. Anchor clamp
10. Parallel groove clamp
11. Contact wire reinforcement, approx. 2 m
12. Contact wire end clips
13. Shrink hose or incised, insulated catenary wire
14. Catenary wire compression splice
15. Cross clamp
16. Steel tube
17. Contact wire
18. Plate

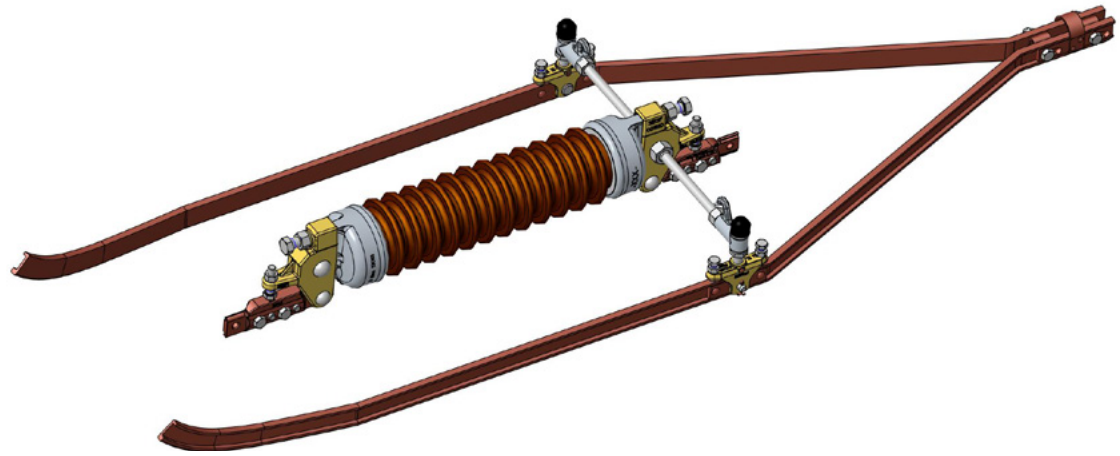
Main direction of travel →

SECTION INSULATOR 25 KV



Order number		3EGF017345	3EGF020748
Rated voltage	kV AC	25	25
Insulators		Composite	Composite
Air gap	mm	170	190
Minimum creepage distance	mm	1210	1450
Arcing horns		Yes	No
Impulse withstand voltage measurement	kV	150	325
Power frequency withstand voltage, wet	kV	70	160
Contact wire cross-section	mm²	80–150	80–150
Screens		13	14
Distance insulator eye-eye	mm		790
Total length +/ - 10	mm	2005	2012
Weight	kg	35	37
Max. operating force	kN	30	30
Minimum collapse load with 80 mm additional lever	kN	88	88
Max. travel speed	km/h	160	160
Number of pantograph passes without maintenance	Mio.	2	2

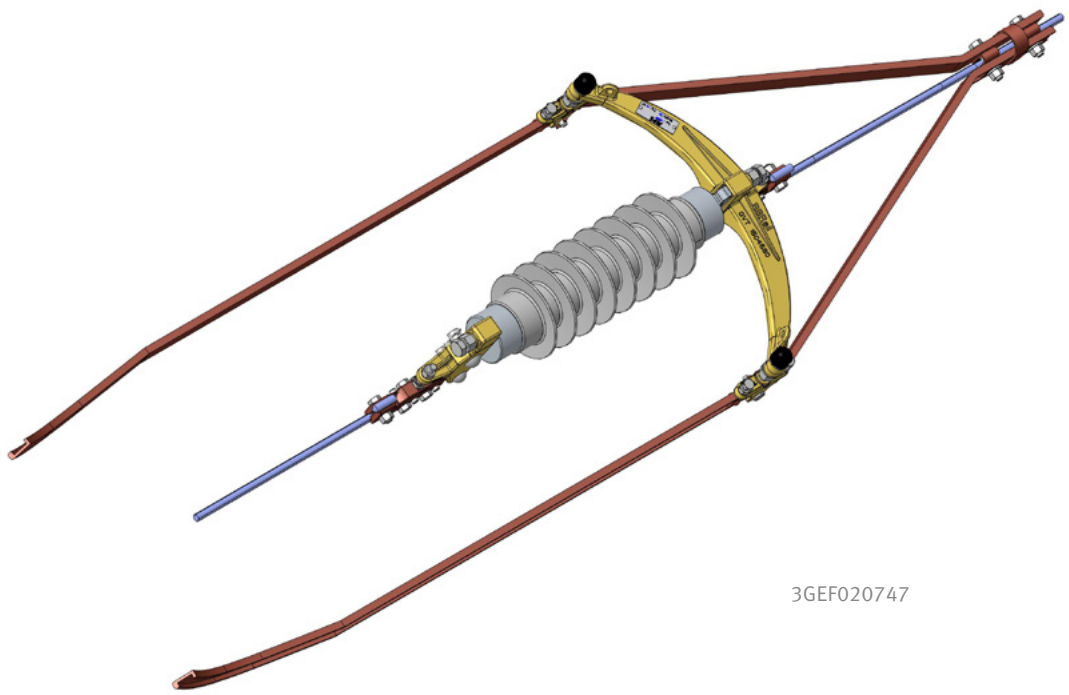
SECTION INSULATOR 25 KV (ROD CONSTRUCTION)



3EGF007541

Order number		3EGF007541	3EGF007542
Rated voltage	kV AC	25	25
Insulators		Ceramic	Ceramic
Minimum creepage distance	mm	725	1210
Air gap	mm	190	305
Impulse withstand voltage measurement	kV	160	320
Power frequency withstand voltage, wet	kV	80	160
Contact wire cross-section	mm²	80 – 150	80 – 150
Screens		12	13
Distance insulator eye-eye	mm	597	790
Total length +/ - 10	mm	1 810	2 000
Weight	kg	31	38.5
Max. operating force	kN	30	30
Minimum collapse load with 80 mm additional lever	kN	88	88
Max. travel speed	km/h	160	160
Number of pantograph passes without maintenance	million	2	2
Reference insert		United Kingdom: Network Rail	Finland: VR Track

SECTION INSULATOR 15 KV

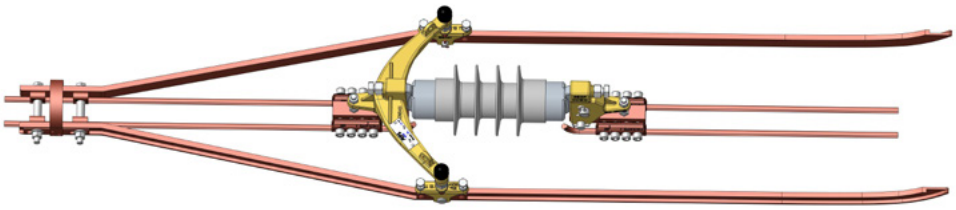


3GEF020747

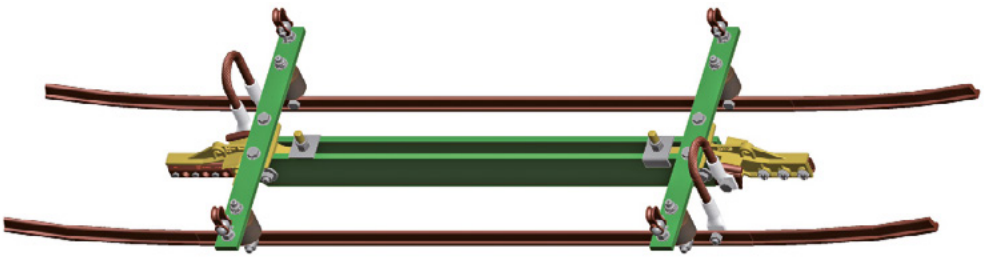
Order number		3EGF010628	3EGF007890	3EGF020747	3EGF001831	3EGF001832
Rated voltage	kV AC	15	15	15	15	15
Insulators		Composite	Ceramic	Composite	Ceramic	
Minimum creepage distance	mm	615	540	615	420	-
Air gap	mm	115	105	120	105	-
Impulse withstand voltage measurement	kV	100	93	106	93	-
Power frequency withstand voltage, wet	kV	50	47	53	47	-
Contact wire cross-section	mm²	80 – 150	80 – 150	80 – 150	80 – 150	80 – 150
Number of contact wires		2	1	1	1	1
Number of screens		6	9	6	7	9
Distance insulator eye-eye	mm	535	500	535	436	500
Total length +/ - 10	mm	1 840				
Weight	kg	30	16.5 + 12.2	26.5	26.4	28.0
Max. operating force	kN	30	30	30	30	30
Minimum collapse load with 80 mm additional lever	kN	88	88	88	88	88
Max. travel speed	km/h	160	160	160	160	160
Reference insert		Germany/ DB AG	Germany/ DB AG	Germany/ DB AG	Germany/ DB AG	Germany/ DB AG

SECTION INSULATOR 3 KV

Order number		3EGF021386	3EGF021387	3EGF010639	3EGF015682
Rated voltage	kV DC	3	3	3	3
Insulators		Composite	Composite	Composite	Composite
Minimum creepage distance	mm	444	444	500	500
Impulse withstand voltage measurement	kV	85	85	85	85
Power frequency withstand voltage, wet	kV	25	25	25	25
Contact wire cross-section	mm²	2x (80 – 150)	1x (80 – 150)	1x (80 – 150)	1x (80 – 150)
Screens		4	4		-
Distance insulator eye-eye	mm	380	380	-	-
Total length +/ - 10	mm	1 840	1 595	1 500	1 500
Weight	kg	27	22	13.5	12.8
Max. operating force	kN	30	30	15	15
Minimum collapse load with 80 mm additional lever	kN	88	88	45	45
Max. travel speed	km/h	160	160	100	100
Reference insert				Ireland/ Irish Rail	



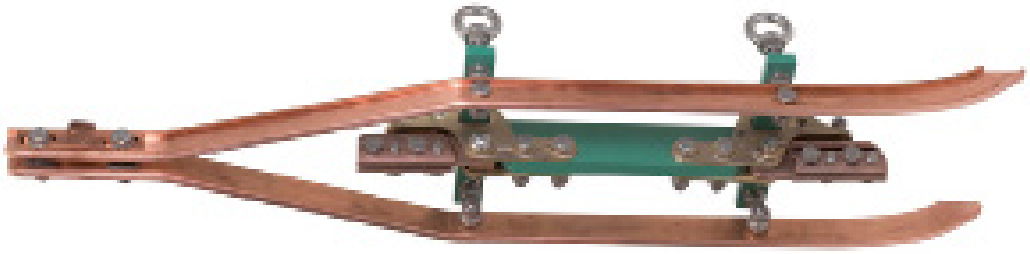
3EGF021386



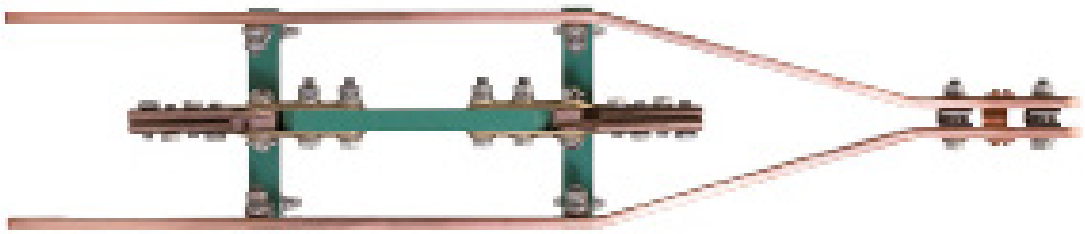
3EGF015682

SECTION INSULATOR 1.5 KV TO 3 KV

Order number		3EGF011680
Rated voltage	kV DC	3 000
Insulators		Composite
Minimum creepage distance	mm	60
Contact wire cross-section	mm²	80 – 120
Total length +/- 10	mm	1 040
Weight	kg	13
Max. operating force	kN	15
Minimum collapse load with 80 mm additional	kN	45
Max. travel speed	km/h	100
Reference insert		Turkey: Eskisehir, Istanbul Germany: Karlsruhe, Saarbrücken, Dortmund



3EGF011680



3EGF011680

SUSPENSION AND CONTACT WIRE REINFORCEMENT FOR TRACFEED® STR FAMILY 3 KV TO 25 KV

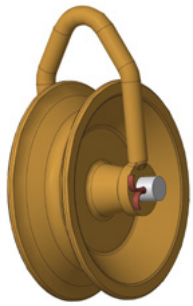
Contact wire reinforcement

Accessories:

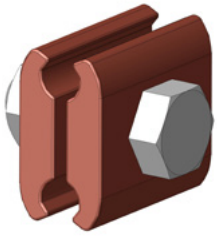
- Contact wire reinforcement
- Suspension on the catenary wire – fixed and moving for catenary wires from 35 mm² to 95 mm²
- Suspension on the linear guide – for catenary wires from 35 mm² to 253 mm²

ACCESSORIES

Part	Order number	Description	Material
1	3EGF001828	Wire pulley	Copper alloy
2	3EGF002724	Wire 4.0 CU DIN 46431	Copper
3	3EGF001819	Turnbuckle M8	Copper alloy
4	3EGF001834	Shrink hose	
5	3EGF002798	Parallel groove clamp	
6	As needed	Contact wire	
7	On request	Wedge-type dead end clamp/cone-type dead-end clamp	

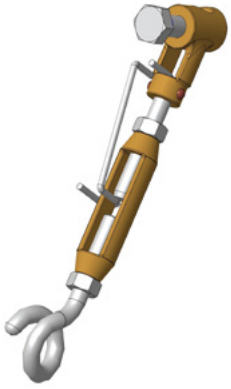


Wire pulley - 3EGF001828



Parallel groove clamp - 3EGF002798

Wedge-type dead end clamp/
cone-type dead-end clamp



Turnbuckle - 3EGF001819

Tube - 3EGF001839

Wire - 3EGF002724

WITH PRECISION: ALWAYS ON THE MOVE – WE'VE GOT THE RIGHT CONTACT WIRE TO KEEP OUR CUSTOMERS MOVING

Rail Power Systems has been developing and producing TracFeed® contact line products in close collaboration with customers and partners for decades.

TracFeed® products are approved for use in numerous countries by system operators in intercity and local transport and have proved themselves over many years of use under wide-ranging conditions. You are also assured of some impressive advantages with our entire product portfolio.

The contact line components are suitable for standard solutions and for tailored, completely customer-specific operating concepts for local and intercity transport.

Whether you are purchasing clamps for ropes and wires, aluminium components for cantilevers, tensioning wheel assemblies or section insulators from Rail Power Systems: all our contact line elements offer you different advantages.

Your advantages:

- Long service life
- High reliability
- Low life-cycle costs
- Excellent quality
- Can be used under various climatic and operating conditions

Get in touch with us if you have complex technical questions about our products. We will also be happy to provide you with in-depth information and, on request, present our complete product range featuring all product lines for TracFeed® contact line components, such as TracFeed® ALU 1000, 2000, 3000, TracFeed® OSS overhead conductor rails and TracFeed® STS conductor rail systems.

Measurable increase in performance

DNV

MANAGEMENT
SYSTEM ZERTIFIKAT

Zertifikat-Nr.:
10000406655-MSC-RvA-DEU

Datum der Erstzertifizierung:
09. Januar 2004

Gültig:
17. Dezember 2021 – 31. Oktober 2024
Ablaufdatum des letzten Zertifizierungszyklus:
31. Oktober 2021
Datum der letzten Rezertifizierung:
16. Oktober 2021

Hiermit wird bescheinigt, dass das Unternehmen
Rail Power Systems GmbH
Garmischer Straße 35, 81373 München, Deutschland
sowie die im Anhang aufgeführten Standorte

ein Umwelt-Managementsystem in Übereinstimmung mit dem folgenden Standard eingeführt hat und anwendet:
ISO Muster:2015

Dieses Zertifikat ist gültig für die folgenden Produkt- oder Dienstleistungsbereiche:
Vertrieb, Beratung, Fertigung von Komponenten, Entwicklung, Planung und Montage von Fahrleitungs- und Bahnenergieversorgungssystemen / Netzleittechnik / 50-Hz Anlagen /Signaltechnik inklusive Wartung und Service (Instandhaltung) und Gesamtprojekte

Ort und Datum:
Berendrecht, 17. Dezember 2021

Zertifizierungsstelle:
DNV - Business Assurance
Zwolseweg 1, 2994 LB Berendrecht,
Netherlands

MGMT. SYS.
RvA C 024

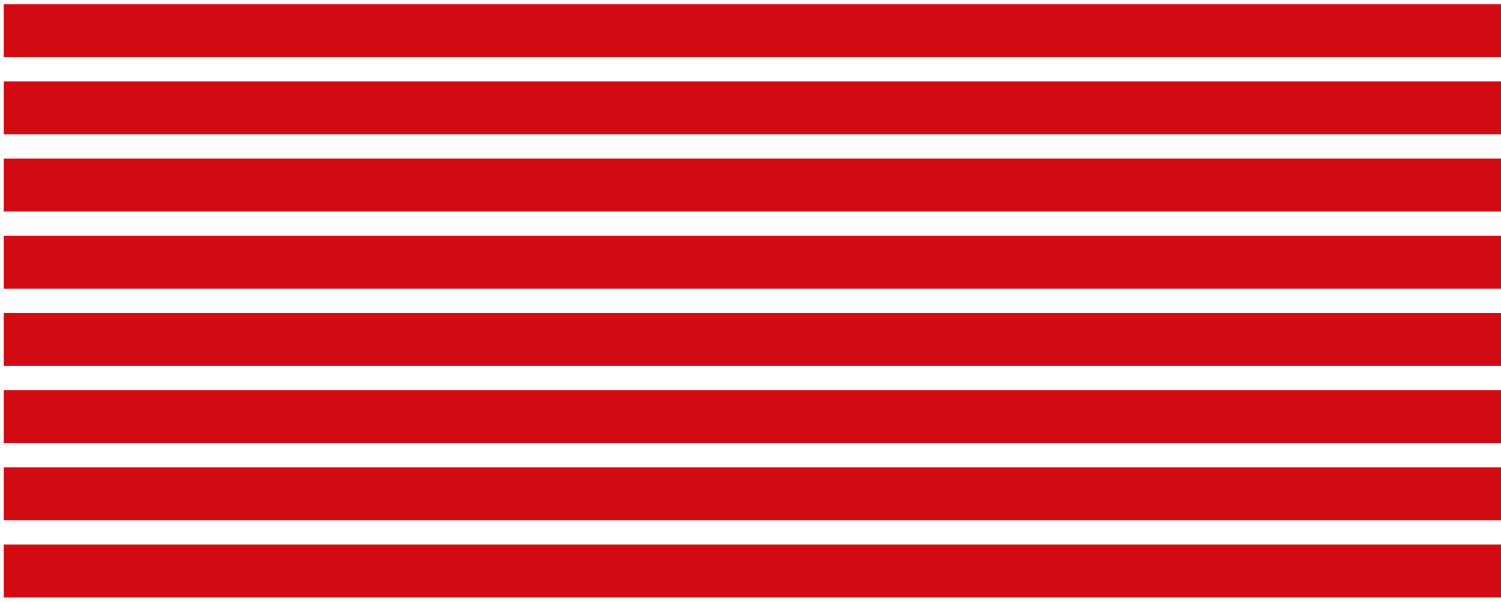
IAF

Erik Kosk
Vertreter des Managements

Bei Verstoß gegen die im Zertifizierungsvertrag genannten Bedingungen kann das Zertifikat seine Gültigkeit verlieren.
AKKREDITIERTE STELLE: DNV Business Assurance B.V., Zwolseweg 1, 2994 LB, Berendrecht, Netherlands – TEL: +31(0)102922689. www.dnv.com/assurance

Quality: ISO 9001
Environment: ISO 14001
Energy: ISO 50001
Health: ISO 45001

Further brochures, data sheets, project reports, certificates, etc. are available here:
www.rail-ps.com/service/downloads



The specifications set out in this document apply to conventional applications. They do not represent performance limits. This means that divergent specifications may be attained in specific applications. The contractually agreed specifications alone shall apply. We reserve the right to effect technical modifications. TracFeed® is a registered trademark of Rail Power Systems GmbH.

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