

# Conductor rails 4 and 5-poles **UNILIFT-UCR**



40A, 63A, 80A,  
100A, 125A, 160A, 200A

UCR-04 2023



## CONDUCTOR RAIL UNILIFT-UCR

**40A, 63A, 80A, 100A, 125A, 160A, 200A**

- innovative
- safe
- high quality
- 4 and 5-pole versions

The UNILIFT-UCR conductor rail meets the applicable standards and regulations, is safe and reliable. It has many advantages:

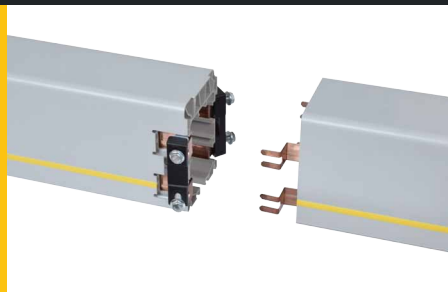
- it is made in a wide range of sizes, from 40A to 200A, in a 4- and 5-pole version,
- has a light and rigid structure,
- easy and quick to install thanks to:

- pre-assembled sections ready for connecting the power lines,
- accessories like covering flanges, that do not require the use of tools,
- connections of copper stripes are precise and quick to install thanks to the method of simultaneous pushing of their ends in two perpendicular planes

- the product is safe:

- IP23
- enclosure - profile made of self-extinguishing PVC,
- accessories and permanent fastening of connection cover elements.

The conductor rail line can be lengthened and shortened easily.



Ends of copper stripes are pushed together without the need to disassemble the pressure pieces.

The tapes are joined by using screw clamps set at an angle of 45 ° to the side surfaces of the conductor rail enclosure.



Such setting of clamps is a guarantee of high quality of joint system without gaps and faultlines.

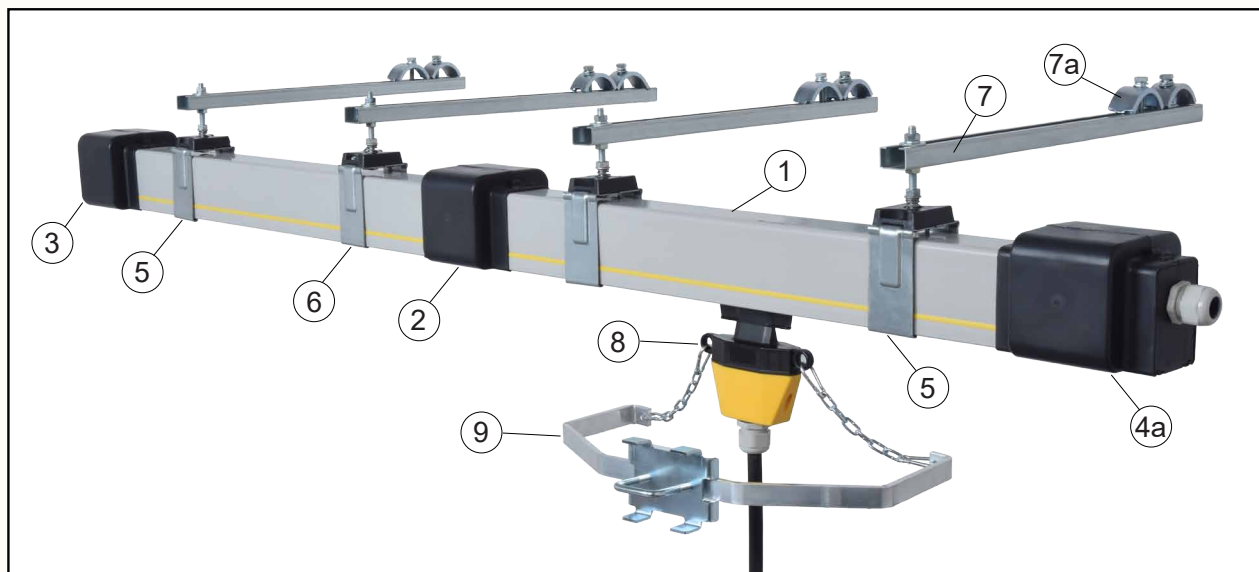


Finally, the connection point of the sections should be protected with a cover.

## Conductor rail UNILIFT-ULA

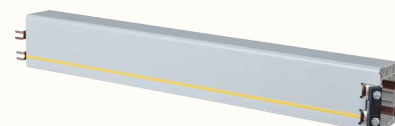
contains a number of innovative technical solutions concerning, inter alia, such important elements as: system for connecting copper tapes, current collectors, slings, profile of busbars and other accessories.

## ELEMENTS OF THE UNILIFT-UCR CONDUCTOR RAIL

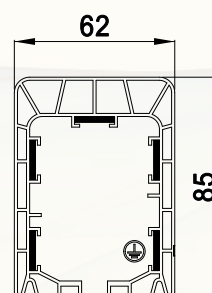


### 1 CONDUCTOR RAIL SECTIONS

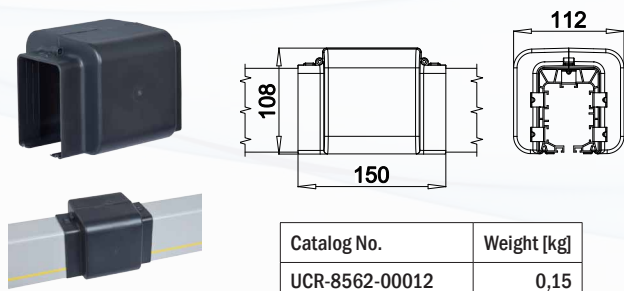
Designations								
Nominal current $I_n$ [A]		40	63	80	100	125	160	200
Wire cross-section $s$ [mm <sup>2</sup> ]		8	10	16	25	35	48	70
Impedance $Z$ [ $\Omega$ /km] ( $T_0 = 35^\circ\text{C}$ , $f = 50\text{ Hz}$ )		2,31	1,86	1,26	0,80	0,57	0,51	0,43
Number of poles		4	4	4	4	4	4	4
Weight [kg/m]		1,54	1,60	1,83	2,20	2,58	2,79	3,53
Length 4 [m]	UCR-8562	-04044	-06344	-08044	-10044	-12544	-16044	-20044
Length 3 [m]	UCR-8562	-04043	-06343	-08043	-10043	-12543	-16043	-20043
Length 2 [m]	UCR-8562	-04042	-06342	-08042	-10042	-12542	-16042	-20042
Length 1 [m]	UCR-8562	-04041	-06341	-08041	-10041	-12541	-16041	-20041
Other length [m] - on request	UCR-8562	-04040	-06340	-08040	-10040	-12540	-16040	-20040
Expansion element	UCR-8562	-80404	-80634	-80804	-81004	-81254	-81604	-82004
Number of poles		5	5	5	5	5	5	5
Weight [kg/m]		1,60	1,70	2,00	2,41	2,91	2,79	4,15
Length 4 [m]	UCR-8562	-04054	-06354	-08054	-10054	-12554	-16054	-20054
Length 3 [m]	UCR-8562	-04053	-06353	-08053	-10053	-12553	-16053	-20053
Length 2 [m]	UCR-8562	-04052	-06352	-08052	-10052	-12552	-16052	-20052
Length 1 [m]	UCR-8562	-04051	-06351	-08051	-10051	-12551	-16051	-20051
Other length [m] - on request	UCR-8562	-04050	-06350	-08050	-10050	-12550	-16050	-20050
Expansion element	UCR-8562	-80635	-80635	-80805	-81005	-81255	-81605	-82005



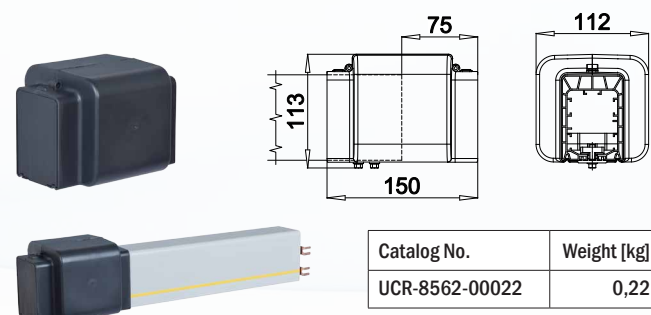
Enclosure: self-extinguishing PVC  
Standard lengths: 4m, 3m, 2m, 1m  
Non-standard sections: up to 4m  
Maximum work-to-phase voltage: 750V



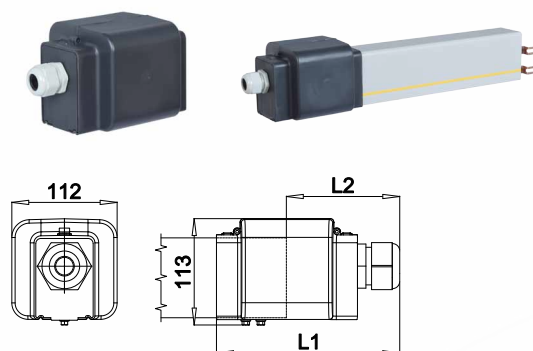
### 2 COVERING FLANGE



### 3 END CAP

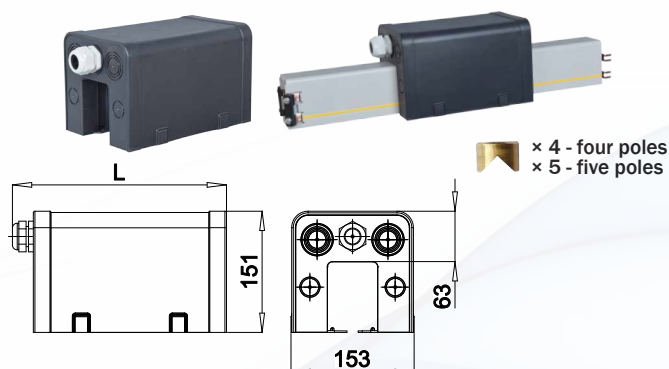


**4a** **END FEED**



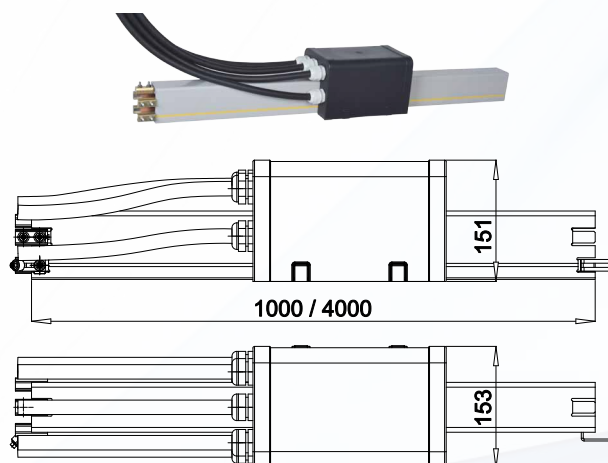
Catalog No. - 4 poles	Cable gland	Dimension		Weight [kg]	Catalog No. - 5 poles	Weight [kg]
		L1	L2			
UCR-8562-31025	M25	186	111	0,25	UCR-8562-31525	0,33
UCR-8562-31032	M32	190	115	0,25	UCR-8562-31532	0,33
UCR-8562-31040	M40	200	125	0,30	UCR-8562-31540	0,38

**4b) LINE FEED 40A, 63A, 80A, 100A**



Cable gland	L [mm]	Catalog No. - 4 poles	Weight [kg]	Catalog No. - 5 poles	Weight [kg]
M25	276	UCR-8562-32425	1,00	UCR-8562-32525	1,10
M32	280	UCR-8562-32432	1,00	UCR-8562-32532	1,10
M40	290	UCR-8562-32440	1,10	UCR-8562-32540	1,20

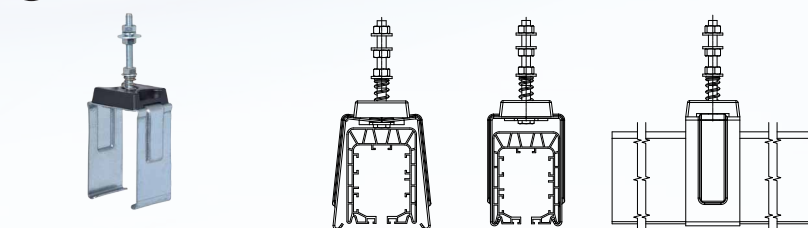
**4c LINE FEED 125A, 160A, 200A**



Line feeds like 125A, 160A and 200A have 2[m] lenght cables

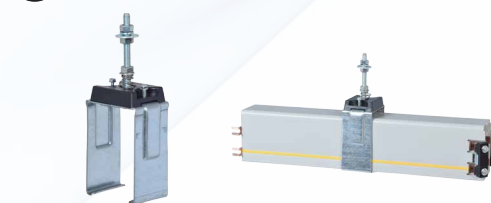
Nominal current	Section length	Catalog No. - 4 poles	Weight [kg]	Catalog No. - 5 poles	Weight [kg]
125A	1m	UCR-8562-31425	6,00	UCR-8562-31525	7,30
	4m	UCR-8562-34425	14,00	UCR-8562-34525	15,00
160A	1m	UCR-8562-31460	7,00	UCR-8562-31560	8,50
	4m	UCR-8562-34460	16,00	UCR-8562-34560	17,00
200A	1m	UCR-8562-31420	9,00	UCR-8562-31520	10,50
	4m	UCR-8562-34420	20,00	UCR-8562-34520	21,50

## 5 SLIDING HANGER



Catalog No.	Weight [kg]
UCR-8562-00040	0,28

## 6 FIXING HANGER



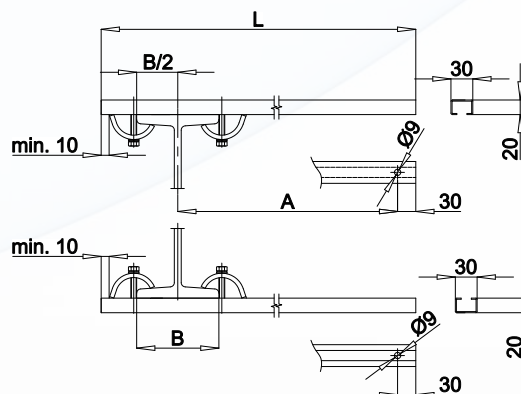
Catalog No.	Weight [kg]
UCR-8562-00041	0,29

## 7 SUPPORT ARM

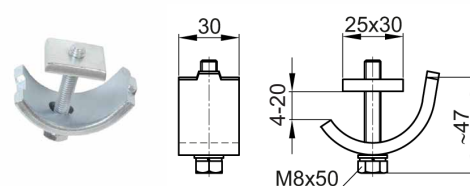


**Material: Sendzimir galvanized steel**

Catalog No.	L [mm]	Weight [kg]
UCR - 8562-00380	380	0,37
UCR - 8562-00500	500	0,49
UCR - 8562-00600	600	0,58



## 7a GIRDER CLIP



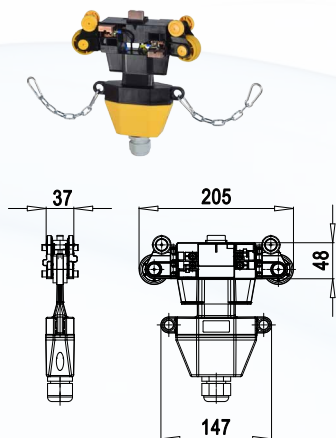
**Material:** galvanized steel

Catalog No.	Type	Weight [kg]
UCR-8562-00100	LK-C11-40	0,14

For conductor rails UNILIFT-UCR 160A and 200A we recommend using support arms with different dimensions. Technical information can be found in the catalog "Cable trolleys and accessories for C1-rail tracks", p. 10-11.

## 8 NOMINAL CURRENT

### 8.1 Single nominal current

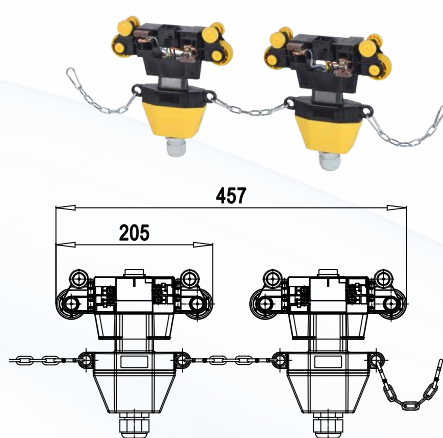


Nominal current 40A

Number of poles	Catalog No.	Weight [kg]
	<b>without cable*</b>	
4	UCR-8562- 10404	0,42
5	UCR-8562- 10405	0,48

\* Possible to equip the collector with a connection cable.

### 8.2 Double nominal current

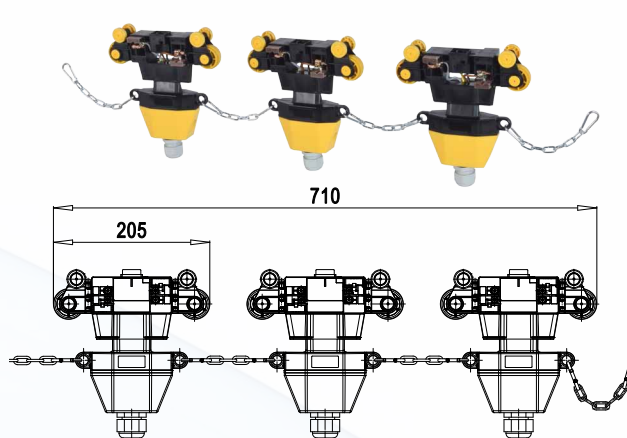


Nominal current 80A

Number of poles	Catalog No.	Weight [kg]
	<b>without cable*</b>	
4	UCR-8562- 10804	0,95
5	UCR-8562- 10805	1,10

\* Possible to equip the collector with a connection cable.

### 8.3 Triple nominal current



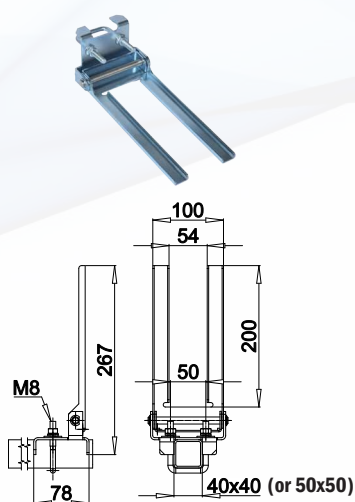
Nominal current 120A

Number of poles	Catalog No.	Weight [kg]
	<b>without cable*</b>	
4	UCR-8562- 11124	1,50
5	UCR-8562- 11125	1,70

\* Possible to equip the collector with a connection cable.

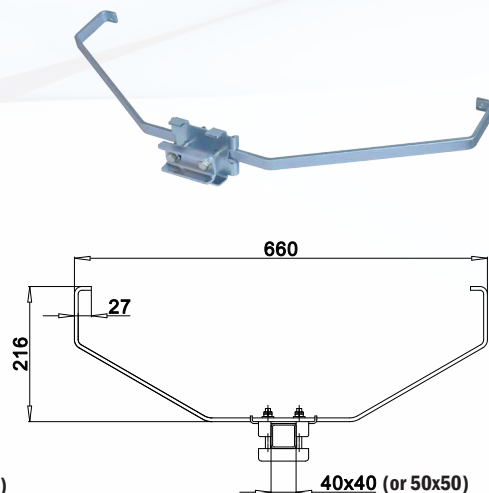
## 9 TOWING ARMS

### 9.1-1 Swinging towing arm



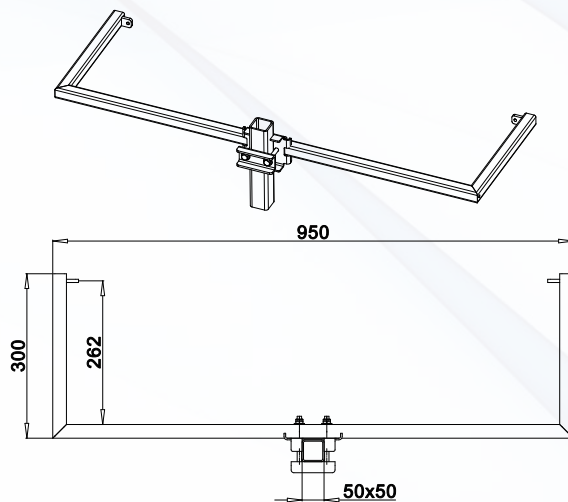
Towing arm type	Catalog No.	Weight [kg]
single (cradle)	UCR-8562-00030	0,67

### 9.2 Double towing arm



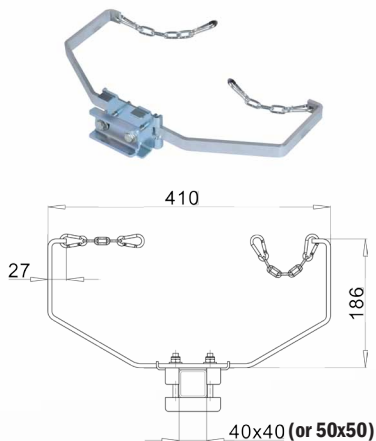
Towing arm type	Catalog No.	Weight [kg]
double	UCR-8562-00032	1,22

### 9.3 Triple towing arm



Towing arm type	Catalog No.	Weight [kg]
triple	UCR-8562-00033	2,46

### 9.1-2 Single towing arm

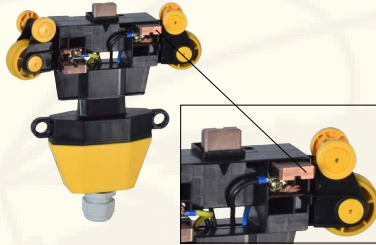


Towing arm type	Catalog No.	Weight [kg]
single	UCR-8562-00031	1,07



## Universal current collector - for straight and curved driving

The current collector is equipped with interchangeable driving units, separate for driving straight ahead and driving in a curve. The rest of the elements, including the body, are the same for both driving variants.



## Electric brushes

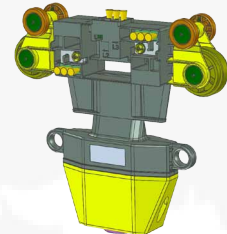
Electric brushes are easy to replace. The current collector has a chamber with a cable covered connector. The user can connect a cable (electric wire) of individual length. The road wheels are made of a material with high frictional resistance and have durable bearings that are also resistant to operation in a chemically aggressive environment.



Fot.1. Current collector - UNILIFT-UCR conductor rail line.

## Cleaning trolleys

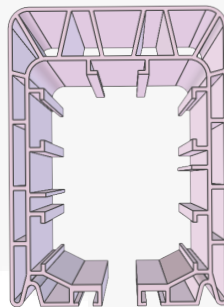
Cleaning trolleys are equipped with special brushes to collect debris that can make it difficult to transfer energy to current collectors in polluted atmospheres.



## Original conductor rail housing profile

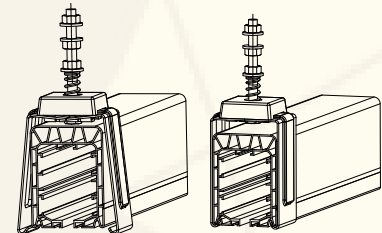
The track is based on a PVC profile, which has a multi-chamber structure, giving the sections very good stiffness, and at the same time being light. The profile has a slot in the lower part that allows the current collector to move. Thanks to the appropriate structure, the slot is durable and meets the safety requirements while maintaining a constant size along the entire length of the power line.

The curved sections of the track are made to order.



## Fast and safe installation of UNILIFT-UCR conductor rail sections

Sections of the busbars are mounted to slings, which have tiltable catches (hangers), which enable quick and reliable suspending of the sections without the use of tools.



Fot.2. Conductor rail line UNILIFT-UCR - view 1.



Fot.3. Conductor rail line UNILIFT-UCR - view 2.

## Accessories - safe insulating covers

The UNILIFT-UCR busbars have been equipped with innovative covers of the connection points of sections, having universal elements that are also elements of the end cover and the end supply cover.

The design of the cover ensures its easy and quick assembly and (if necessary) disassembly.

The cover has also elements that allow safe connection of components in the event of damage to the catches.

The UNILIFT-UCR busbar has a covering flange (for line feed), consisting of three elements ensuring perfect conditions for power supply assembly and safety.

**UNILIFT®**

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