

UNCHAINED ENERGY

MOBILIS
MOVIT



ELECTRIFICATION OF TRAVELLING MACHINES

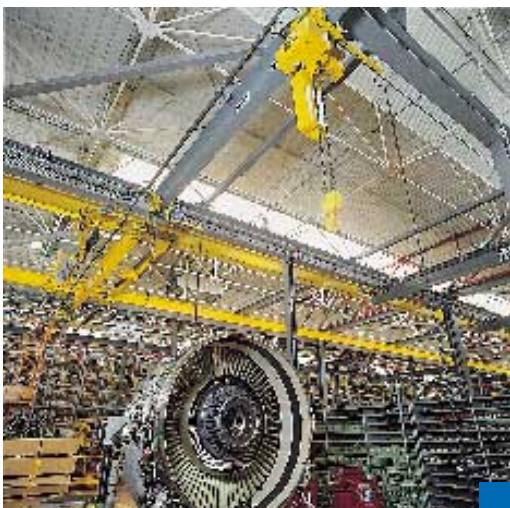


As a leading specialist in electrical power supply, FELS is broadening its MOBILIS range with a highly innovative line of single-conductor rails boasting an unrivalled aesthetic quality.

FROM INTEGRATION TO MAINTENANCE - A WHOLE LINE OF INNOVATIONS

MOBILIS MOVIT benefits from over 30 years' experience in electrical power rails and has in-depth knowledge of expectations on the world market - for all integrators, fitters and users. Designed in the same spirit as the multi-pole conductor rail MOBILIS ELITE, MOBILIS MOVIT focuses on three key features :

- simplicity, in terms of transport, assembly, maintenance and dismantling ;
- safety, by taking into account installation and service conditions as well as respecting standards and regulations ;
- reliability, for optimum customer satisfaction.



INSTALLATION AND ASSEMBLY - HIGHLIGHTS

As with the entire MOBILIS range, everything has been designed to facilitate the mounting process :

- suspensions pre-assembled in multiple pole units ;
- the profile easily slots into the suspensions by a simple clipping process ;
- many parts, such as covering flanges, feed boxes etc. are mounted without tools, screws or nuts ;
- all accessories are factory mounted.

MOBILIS MOVIT® : ELECTRIFICATION LINE WITH SINGLE POLE CONDUCTOR RAILS 315A - 450A - 630A

HIGHER PERFORMANCE

Designed in aluminium with a stainless steel track for the contact surfaces, it offers you high conductivity, light weight, competitive production costs and flexibility of shape.

With a clearance between rails of 50 mm, the aesthetic, compact design takes up minimum space and minimises voltage drops due to its low line impedance.

HIGHLY PRACTICAL

Numerous features make MOBILIS MOVIT easy to integrate, install and use:

- simply sliding and clipping into the suspensions
- compact connection requiring minimum preparation
- high-speed collector travel (up to 600 m/min.)
- long-distance lines without expansion joints
- suitable for inside or outside installation
- no tools required to mount insulation accessories
- rail profile providing easy installation of a de-icing system etc.

GREATER SAFETY

Security and working safety are the key-words for the entire range in total respect of the regulations and standards in force. The installed rail offers a protection index of IP 23, the PVC insulating envelope is fluted, thereby increasing insulation clearance, the collector brush has innovative reinforced insulation, the shape of the contact track enhances the quality and reliability of current collection, the quality of the materials and the care taken at every stage guarantee a long life.



DESIGN: ENHANCED EFFICIENCY

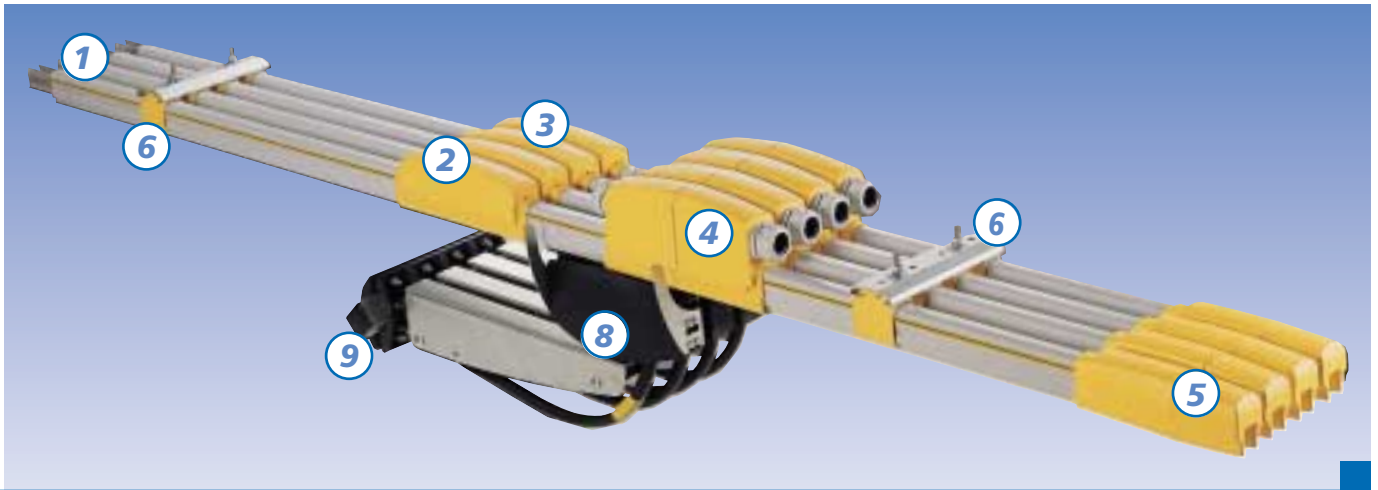
Just like the entire MOBILIS range, this rail has benefited from all the power of industrial design by combining performance, ergonomics, aesthetics and economic reality.

A VAST ARRAY OF APPLICATIONS

With this particularly powerful single-conductor rail, whole new fields of demanding applications can now benefit from the innovations and top performance of the MOBILIS range:

- *handling of heavy loads ;*
- *port industries ;*
- *high-capacity overhead cranes ;*
- *gantries ;*
- *human transport (peoplemover, monorails in amusement parks etc.).*





GENERAL FEATURES

Conformance to standards CEI60439-2 and EN60204-32 - Protection index IP23 according to CEI60529. Maximum operating voltage: 750 VAC - Minimum and maximum ambient temperatures: -30°C to +55°C. Resistance to short circuits: please consult us beyond I_{cw} 8.5 kA 0.2s and I_{pk} 17kA. All plastic accessories are self-extinguishing.

1 RAILS

Aluminium conductor with stainless steel track.
Self-extinguishing insulation in rigid PVC.
Duty cycle at 35°C: 100% for 315 and 450A, 75% for 630A.

Intensity	Weight per metre per rail	Impedance in 3-phase 50 Hz 35°C	Impedance in				Special length
			4 metres	3 metres	2 metres	1 metre	
315 A - phase	0.81 kg	2.27×10^{-4} Ohm/m	MC1314	MC1313	MC1312	MC1311	MC1310
315 A - earth			MC1324	MC1323	MC1322	MC1321	MC1320
450 A - phase	1.03 kg	1.72×10^{-4} Ohm/m	MC1414	MC1413	MC1412	MC1411	MC1410
450 A - earth			MC1424	MC1423	MC1422	MC1421	MC1420
630 A - phase	1.26 kg	1.49×10^{-4} Ohm/m	MC1614	MC1613	MC1612	MC1611	MC1610
630 A - earth			MC1624	MC1623	MC1622	MC1621	MC1620



2 CONNEXION

Reference: MC1000
For the feed box and each junction between the rails, standard for all intensities.
Weight: 0.3 kg



3 FLANGE

Reference: MC2200
Insulates the connections, no-tools assembly.
Thermoplastic.
Weight: 0.17 kg,
Length: 250 mm.



4 FEED BOX

Reference: MC2300
For line link-up to a connection, with terminal lugs Ø10, 2 cable glands.
M32 (cable Ø 15 to 25 mm).
Thermoplastic.
Weight: 0.36 kg,
length: 290 mm.



5 TRANSFER ELEMENT-END CAP

Reference: MC2400
To insulate the ends and create transfer points, no-tools assembly.
Thermoplastic.
Weight: 0.14 kg,
length: 190 mm.



6 SLIDING SUSPENSION

Supports rails and allows for rail expansion.

Clearance 50 mm, self-aligning. To be installed every 2 metres. Thermoplastic and anodised aluminium.



Number of poles	Weight	Reference
4	0.3 kg	MC2504
5	0.38 kg	MC2505

8 COLLECTOR

Collector current capacity:
single = 200A,
double = 400A.
Duty cycle: 50% at 35°C.
Maximum travel speed:
600 m/min.

Lateral clearance +/-100 mm,
vertical clearance +/-50 mm.
Delivered with 50 mm² flexible cable,
length 2 metres.



Type	Phase	Terre	Poids
Simple	MC4112	MC4122	3,85 kg
Double	MC4212	MC4222	7,50 kg

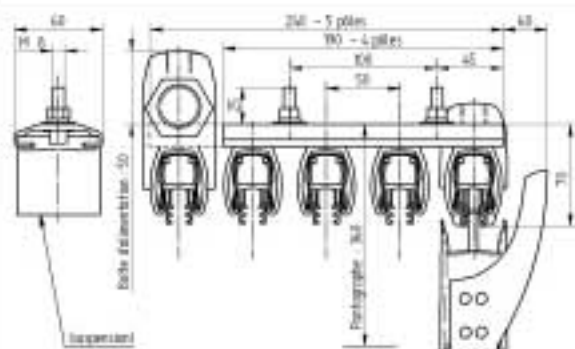
11 EXPANSION JOINT

Compensates expansion on lines over 200 metres in length. Assembled like the rail elements, nominal length 4 m to be adapted according to the assembly temperature.



Intensity	Weight	Reference
315 A - phase	6.2 kg	MC5314
315 A - earth		MC5324
450 A - phase	7.0 kg	MC5414
450 A - earth		MC5424
630 A - phase	7.9 kg	MC5614
630 A - earth		MC5624

13 DIMENSIONS



7 FIXING CLAMP

Reference : MC2600

2 clamps placed on either side of a sliding suspension to immobilise a pole. Anodised aluminium. Weight: 0.07 kg, length 40 mm.



9 COLLECTOR BRACKET

Reference : MC4900

For single and double collectors up to 5 poles. Galvanised steel. Weight: 2 kg, length: 500 mm.



10

Reference : MC2550

To mount sliding suspensions on the support structure. Clamping capacity: thickness 15 to 30 mm, width 300 mm. Galvanised steel. Weight: 1.1 kg.



12 MISCELLANEOUS

- **Supply connection lugs**
50 mm² terminal 10 reference MC8050
70 mm² terminal 10 reference MC8070
95 mm² terminal 10 reference MC8095
- **Contact grease for 200 connections** reference MC1010
- **Brush to prepare the rail ends** reference MC8010
- **Suspension unclipping kit** reference MC8025
- **Replacement brush for collector** reference MC8040
- **Single cleaning collector** reference MC4190

