



**SUSPENDED MINING
LOCOMOTIVE
DLZ110F-II**

KL - DLZ110F-II - EN

Version

Valid from

0

2.5.2010

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Description:

Suspended mining locomotive type DLZ110F-II is tractive means determined for transport trip set on monorail hanging railway profile I 155 in horizontal plane in cant to 30 degree.

Locomotive may be used in surroundings with danger of methane and carbon dust explosion to degree SNM 2 according to § 232 decree CBÚ č. 22/1989 Sb. in wording to later regulations. According to the decree of the government č. NV 23/2003 (direction of European parliament and Council EU 94/9/ES) machinery is arranged in group "I" and category M2. Locomotive matches the requirements NV 176/2008 (direction of European parliament and Council EU 2006/42/ES).

Basic parts of the locomotive are two cabins, motor part with two driving units and from one to five additional driving units. Motor part consists of diesel motor and hydraulic drive. The motor is four-stroke, four cylinders. The motor is adjusted for application in mining conditions by protection suction and exhaust tract with machinery which inhibits primer detonation of methane explosion and it's transport to unprotected atmosphere. Exhaust gases are cooled by water in special exhaust case, so that their outlet temperature doesn't exceed 70 degree. Starting up the motor is made by hydraulic starter. Locomotive operating mode, speed, covered motohours, pressure and temperature values of diesel hydraulic set are monitored by electronic control and security system. At exceeding determinate values will go to the switching off the motor and the locomotive will be stopped or braked to a stop. Driving unit forms final tract element, which provides the transport of torsion moment on driving pulley with polyurethane rubbing section and monorail on which the locomotive moves. Driving unit consists of two low speed hydraulic motor and lightening steady brake with a function of emergency brake. At exceeding set speed braking system automatic starts and stops the locomotive.



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Technical parameters:

Motor type	Z1404-turbo (adapted for mining conditions)
Motor kind	compression ignition with direct injection fuel
Max. power output	81 kW – 5 %
Rated speed	2300 min ⁻¹
Number of cylinders	4
Fuel consumption (max. power output)	255 g/kWh
Consumption	diesel oil
Cooling	compulsory watery
Content NO _x in exhaust gases	max. 350 ppm (0,035%)
Capacity of cooling set	30 liters
Capacity of fuel tank	60 liters
Max. pressure in hydraulic circuit	34 MPa
Average of driving pulleys	355 mm
Rated voltage	28 V
Service temperature/humidity	0-40 °C / 90%
Max. inclination of hanging railway	30°

Main sizes weights

Driving units (drives)	3	4	5	6	7
Length (mm)					
- total	7.650	8.650	9.650	10.650	11.650
- motor part	2.700				
- cabin	1.780				
Height (mm)					
- total	1.425				
- line	1.235				
Full width (mm)	850 ⁺⁴⁰				
Expeditionary weight (kg)	4.400	4.800	5.200	5.600	6.000

Tractive parameters

Locomotive DLZ110F-II is made with two sizes of hydraulic pumps and numbers of drives from 3 to 7.

- DLZ110F-II-125(130)-3 (locomotive with pumps 125 (130) cm³ and 3 drives)
Maximum drawing force 60 kN
Maximum speed 7,2 km/hour
- DLZ110F-II-125(130)-4 (locomotive with pumps 125 (130) cm³ a 4 drives with a possibility of switching off one drive)
Maximum drawing force 80 kN
Maximum speed 7,2 km/hour (with switched-off drive)
Maximum speed 5,4 km/hour (without switched-off drive)



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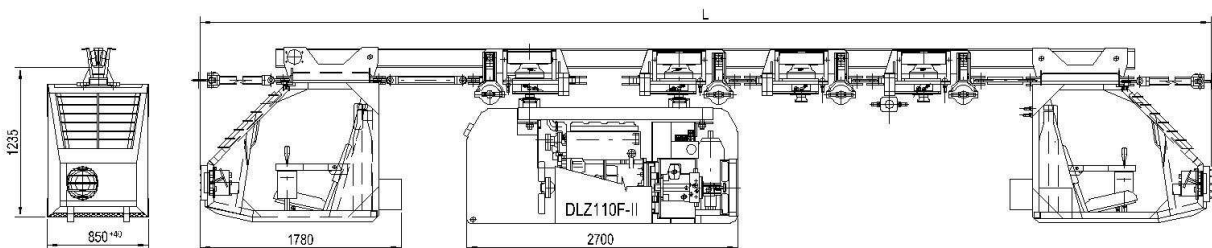
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- DLZ110F-II-125(130)-5 (locomotive with pump 125 (130) cm³ and 5 drives with a possibility of switching off one drive)
Maximum drawing force 100 kN
Maximum speed 5,4 km/hour (with switched-off drive)
Maximum speed 4,3 km/hour (without switched-off drive)
- DLZ110F-II-180-4 (locomotive with pump 80 cm³ and 4 drives, one drive switches off)
Maximum drawing force 80 kN
Maximum speed 7,2 km/hour (without switched-off drive)
- DLZ110F-II-180-5 (locomotive with pump 180 cm³ and 5 drives, one drive switches off)
Maximum drawing force 100 kN
Maximum speed 7,2 km/hour (with switched-off drive)
Maximum speed 5,9 km/hour (without switched-off drive)
- DLZ110F-II-180-6 (locomotive with pump 180 cm³ and 6 drives, two drives switched-off)
Maximum drawing force 120 kN
Maximum speed 7,2 km/hour (with switched-off 2 drives)
Maximum speed 4,9 km/hour (without switched-off drive)
- DLZ110F-180-7 (locomotive with a pump 180 cm³ and 7 drives; max. 3 drives is disconnected)
Maximum traction force 140 kN
Maximum speed 7,2 km/hour (with three disconnected drives)
Maximum speed 4,2 km/hour (without a disconnected drive)

Certificate ATEX : KDB 05 ATEX 184

(motor ZETOR 1404-turbo including suction and exhaust tract)

Dimensional drawing:



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Ordering:

In the order please state the type of the machinery you ask for, supply number, number of units, number of asked sets accompanying documentation (Direction for use, Catalogue of spare parts, etc. – usually we enclose 2 sets of this documentation) and specific requirements (for example different paint, etc.)

Ordering key:

SUPPLY NUMBER	HYDROGENERATOR VOLUME	DRIVES NUMBER	TYPE DESIGNATION
603-00-00000-9-57	125 cm ³	3	DLZ110F-II-125-3
603-00-00000-9-58	130 cm ³	3	DLZ110F-II-130-3
604-00-00000-9-60	125 cm ³	4	DLZ110F-II-125-4
604-00-00000-9-61	130 cm ³	4	DLZ110F-II-130-4
604-00-00000-9-62	180 cm ³	4	DLZ110F-II-180-4
605-00-00000-9-62	180 cm ³	5	DLZ110F-II-180-5
605-00-00000-9-60	125 cm ³	5	DLZ110F-II-125-5
605-00-00000-9-61	130 cm ³	5	DLZ110F-II-130-5
607-00-00000-9-54	180 cm ³	6	DLZ110F-II-180-6
607-00-00000-9-74	180 cm ³	7	DLZ110F-II-180-7

Example of ordering:

An order of one locomotive DLZ110F-II with 5 drives and a pump 180 cm³ with a delivery 3 sets of accompanying document.

MACHINE TYPE	SUPPLY NUMBER	ITEMS NUMBER	ACCOMPANYING DOCUMENTATION	SPECIFIC REQUIREMENTS
DLZ110F-II-180-5	605-00-00000-9-62	1	3 SETS	

Delivery date: 14-16 weeks from confirmation the definite order

Customs classification: 8602 90 00



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