

### In Passenger Service















#### 16273 Diesel Locomotive Road Number 217 001-7

Prototype: German Railroad, Inc. (DB AG) diesel road engine, road number 217 001-7, in the paint scheme around 2004. Diesel hydraulic locomotive with electric train heating.

**Use**: Passenger and freight trains.

Model: The locomotive has a built-in digital decoder and sound generator for operation with DCC, Selectrix, and Selectrix 2. It also has a motor with a flywheel. 4 axles powered. Traction tires. The locomotive has warm white LED headlights and marker lights that change over with the direction of travel and that can be controlled in digital operation. The locomotive has cab lighting that can be controlled in digital operation. The locomotive has a close coupler mechanism. It also has separately applied grab irons. Length over the buffers 102 mm / 4".

- Grab irons separately applied.
- Warm white LEDs for lighting.
- Cab lighting.
- Digital sound with many functions.

One-time series.

### Diesel hydraulic locomotive with electric train heating



Digital Functions	DCC	SX2	SX
Headlight(s)	•	•	•
Engineer's cab lighting	•	•	•
Diesel locomotive op. sounds	•	•	
High Pitch Horn	•	•	
Direct control	•	•	
Sound of squealing brakes off	•	•	
Rear Headlights off	•	•	
Low Pitch Horn	•	•	
Front Headlights off	•	•	
Diesel Heating Engine	•	•	
Compressor	•	•	
Conductor's Whistle	•	•	
Station Announcements	•	•	
Sanding	•	•	
Station Announcements	•	•	

#### Class 120 Flectric Locomotive

With the delivery in 1979/80 of five class 120 pre-production series locomotives, three-phase asynchronous motors were used for the first time in the world on a standard gauge locomotive. These motors can be controlled smoothly without steps. For a long time unsolvable difficulties faced the advantages of three-phase motors. The three-phase motor could not be made flexible and thereby usable for practical operations until the advent of electronic switching

and control technology. Externally the prototypes impressed you with their length of 19.200 mm / 63 feet that made them almost as long as the classes 103, 150, and 151. They differed from the latter in having only two-axle trucks of a completely new design. A BBC hollow shaft universal joint drive served to transmit power. The mainframe and lightweight construction locomotive body formed a self-supporting design.

Between 1987 and 1989 the regular production locomotives road numbers 120 101-160 were built by AEG.

BBC, Siemens, Krauss-Maffei, Krupp, and Henschel with numerous improvements such as time-division shuttle trains and multiple unit control, reinforced line brakes, auxiliary electro-pneumatic brakes as well as automatic running and brake controls with anti-wheel slip. The lack of airtight windows and doors for use on new high-speed routes as well as difficulties with the electronics required several corrections and improvements and thus delayed putting the locomotives into service. The pre-production locomotives have been history since 2011 and even

the regular production locomotives did not escape unscathed. At the start of 2005 road numbers 120 153 and 160 were transferred as road numbers 120 501 and 502 to DB System Technology as experimental and test locomotives. Five units (120 116, 129, 107, 128, and 121) were equipped in 2007 along with three other units in 2010 (120 131, 139, and 117) with a commuter service package (train destination display, train dispatching system, server, etc.), designated as road numbers 120 201-208, and transferred to DB Reaio.



#### 16024 Class 120 Electric Locomotive

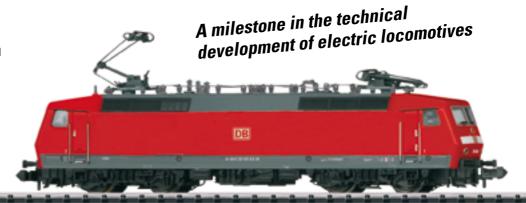
Prototype: German Railroad, Inc. (DB AG) class 120 fast general-purpose locomotive. Current paint scheme. B-B wheel arrangement. Built starting in 1987.

**Use**: Passenger and freight trains.

Model: The locomotive has a digital interface connector. It also has a 5-pole motor with a flywheel, 4 axles powered. LEDs are used for the headlights and marker lights and they change with the direction of travel. The locomotive

has a close coupler mechanism. It also has new roof equipment with individual insulators and wire. New rail clearance devices are cast onto the coupler drawbar. Length over the buffers 120 mm / 4-3/4".

One-time series.





### "Le Capitole"

Class CC 6500 Electric Locomotive and "TFF CAPITOLE" Car Set

The SNCF purchased the class CC 6500 between 1969 and 1975 as a universal locomotive for its DC network in three production groups (CC 6501-38, 6539-59, and 6560-74) that differed from each other markedly in the version for the side ventilation bands. Four other units were done in a dual-system version as road numbers BB 21001 and 21002 (1969) as well as BB 21003 and 21004 (1974) that were converted back however in 1995/96 to DC locomotives CC 6575-6578. All of the locomotives have the typical SNCF look for the year in question that had been

designed by the designer Paul Arzens as artistic advisor to the SNCF. When designing the end parts of the locomotives, he had in mind the silhouette of a racing sprinter with the body leaning forward and the leas bent. This was how the so-called "nez cassé" (= broken nose) was born – a zigzag type of shape at the end of the locomotive as seen from the sides.

In accordance with the SNCF usage, the CC 6500 units were designed as "monomoteur" locomotives. Each of the two three-axle trucks had only a single self-cooled DC traction motor, the type TTB 665 A1 that powered all of the wheel sets by means of gearboxes and cardan shaft drives. The locomotive body

rested on four rubber spring elements consisting of layers of rubber with steel layers between them. The gearbox had two settings: "V" for "Vitesse" or speed (maximum speed = 220 km/h / 138 mph) and "M" for "Marchandies" or freight for freight trains (maximum speed = 100 km/h / 63 mph) with clearly increased pulling power.

At the beginning of their prestigious career, the CC 6500 units pulled France's most important trains such as the TEE trains "Capitole", "Le Mistral", or "l'Aquitaine". The "Capitole" was upgraded on September 27, 1970 to a domestic TEE train with new 1st class cars of the type Grand Confort (compartment cars.

open seating cars, dining cars, bar cars, and half baggage cars with a generator). The locomotives and cars were resplendent in metallic gray paint scheme with a red window band as well as orange accompanying stripes, and the CC 6500 locomotives had an engraved panel at both ends with the lettering "Capitole". These locomotives could also be found at the head of heavy freight trains due to their high pulling power. With the introduction of the TGV service and the placing into service of newer locomotives the CC 6500 units gradually transferred to regional service, and on July 5, 2007, the last units were withdrawn from service.



Traction tires.







#### 16611 Class CC6500 Electric Locomotive

**Prototype**: French State Railways (SNCF) class CC6500. C-C wheel arrangement, built starting in 1970. **Use**: Fast passenger trains such as the "CAPITOLE". Model: The locomotive has a tooling change with an engraved train sign on the end of the locomotive. The train name is "CAPITOLE". The locomotive has a built-in digital decoder and a motor with a flywheel. 4 axles powered.

Length over the buffers 125 mm / 4-15/16".

• Train sign "CAPITOLE".

One-time series.

Car sets to go with this locomotive are available under item numbers 15691 and 15692.

Digital Functions	DCC	SX2	SX
Headlight(s)	•	•	•
Direct control	•	•	



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A locomotive with a prestigious career and the train sign "CAPITOLE" visible from a distance





15692 15691 16611

# "CAPITOLE" Express Train Passenger Cars





#### 15691 "TEE CAPITOLE" Car Set

Prototype: French State Railways (SNCF) Grand-Comfort cars. 2 open seating cars, 1st class.

Use: TEE trains in France.

**Model**: The cars have close coupler mechanisms. Total length over the buffers 318 mm / 12-1/2".

66616 LED Lighting kit.

One-time series.





One of the fastest trains in Europe with regularly scheduled speeds of 200 km/h / 125 mph



#### 15692 "TEE CAPITOLE" Car Set

Prototype: French State Railways (SNCF) Grand-Comfort cars. 1 open seating car with a baggage compartment, 1st class, and 1 dining car.

Use: TEE trains in France.

**Model**: The cars have close coupler mechanisms. Total length over the buffers 318 mm / 12-1/2".

66616 LED Lighting kit.

One-time series.





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### Striking Looks

"Diving Goggles" - Classes 750, 753, and 754 for the ČD, ČDC, ŽSCS, and ŽSSK

"Diving Goggles" or "Cobra" is the synonyms for the most striking diesel locomotive of former Czechoslovakia. The locomotives have nicknames thanks to the unique look with the anti-glare cabs. The Czechoslovakian locomotive builder ČKD developed the class T478.3 at the end of the Sixties in order to relieve the lack of diesel road engines for passenger service on the Czechoslovakian State Railways (ČSD). The predecessor model, the class T478.1, formed the basis. The new diesel electric unit was designed to be about 72 metric tons and had to be able to pull passenger trains at maximum speed of up to

100 km/h / 62.5 mph. Many proven components from the class T478.1 were adopted, the complete running gear, the design for the main frame and the engine room, the hydrostatic drive for the cooling vents, and the type PG 500 steam generator. By contrast, the locomotive body with its two end cabs were given a modern look developed by industrial designers. The type "K 12 V 230 DR" diesel motor was also newly developed by CKD.

Four hundred eight production locomotives were built between 1969 and 1977 as the class T478.3 (with steam heating). Starting in 1988, they were incorporated as the class 753 into the motive power roster of the ČSD according to the new numbering scheme. After the construction of two prototypes

with higher performance in 1975 another 84 units of the comprehensive class T478.4 with electric heating were delivered in 1979/1980. The ČSD took them into the new numbering scheme as the class 754. Between 1991 and 1995, 163 units of the class 753 were converted to electric heating in the new class 750 with the same assignment numbers. After the division of Czechoslovakia on January 1, 1993, around 75% of the "Diving Goggles" came to the new Czech State Railroad (ČD), while the remaining 25% was taken over by the newly established Slovakian State Railroad (ŽSR).

In 2001, the ČD sold 57 locomotives of the class 753 to Inekon Holding in Prague. The "Diving Goggles" were updated there and were sold mostly to an

Italian private railroad operator starting in 2003. Nine units were equipped with a used slow running ČKD six-cylinder motor, 31 locomotives were given a new Caterpillar type "3512 B DITA" motor as well as new electrical equipment from Siemens. The latter were then designated as the class 753.7. The Italian Ferrovie Nord Milano (FNM) took 18 units of this group into their motive power roster as the class DE 520. Since then other locomotives were converted in a similar manner for the Czech private railroads AWT and Unipetrol Doprava as well as the freight service group ČDC of the Czech State Railroad.





















Prototype: Czech Railroad (České drahy ČD) class 750 general-purpose locomotive. Its striking looks have earned it the nickname "Diving Goggles" or "Cobra" (Brejlovec). Built starting in 1970.

Model: The frame and body are constructed of die-cast metal. The locomotive has a built-in digital decoder and a sound generator for operation with DCC, Selectrix, and Selectrix 2. The motor has a flywheel. 4 axles powered. Traction tires. The locomotive has warm white LED headlights and marker lights that change over with the direction of travel and that can be controlled in digital operation. The locomotive has cab lighting that can be controlled in digital operation.

Length over the buffers 104 mm / 4-1/8".

- Warm white LEDs for headlights.
- Cab lighting.
- Digital sound with many functions.
- Closed end skirting that can be replaced.

One-time series.

•			
Headlight(s)	•	•	•
Engineer's cab lighting	•	•	•
Diesel locomotive op. sounds	•	•	
Horn	•	•	
Direct control	•	•	
Sound of squealing brakes off	•	•	
Rear Headlights off	•	•	
Horn	•	•	
Front Headlights off	•	•	
Station Announcements	•	•	
Conductor's Whistle	•	•	
Letting off Steam	•	•	
Blower motors	•	•	
Sanding	•	•	
Safety Valve	•	•	

DCC

**Digital Functions** 





# **Express Train Passenger Cars**



### 15696 Type Y Express Train Passenger Car

**Prototype**: 1 Type Y express train passenger car, 2nd class, painted and lettered for the Czech Railroad (České drahy ČD). Built starting in 1968.

**Model**: The car has close couplers with guide mechanisms. Total length over the buffers 153 mm / 6".

#### 66616 LED lighting kit.

One-time series.



### 15695 Type Y Express Train Passenger Car Set

Prototype: 1 Type Y-B/70 express train passenger car, 2nd class with a baggage compartment, and 1 express train passenger car, 1st class, painted and lettered for the Czech Railroad (České drahy ČD). Built starting in 1968.

Model: The cars have close couplers with guide mechanisms.

Total length over the buffers 306 mm / 12-1/16".

This car set can be lengthened as desired with the 15696 add-on car.









15696 | 15695 | 16735 |

7

### "Diving Goggles"















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#### 16736 Class 750 Diesel Locomotive

Prototype: Železnice Slovenskej republiky (ŽSSK) class 750 general-purpose locomotive. Its striking looks have earned it the nickname "Diving Goggles" or "Cobra" (Brejlovec). Built starting in 1970, updated starting in 1991. Diesel electric drive.

Model: The frame and body are constructed of die-cast metal. The locomotive has a built-in digital decoder for operation with DCC, Selectrix, and Selectrix 2. The motor has a flywheel. 4 axles powered. Traction tires. The locomotive has warm white LED headlights and marker lights that change over with the direction of travel and that can be controlled in digital operation. The locomotive has cab lighting that can be controlled in digital operation. Length over the buffers 104 mm / 4-1/8".



- Warm white LEDs for headlights.
- Cab lighting.
- Closed end skirting that can be replaced.

Digital Functions	DCC	SX2	SX
Headlight(s)	•	•	•
Direct control	•	•	
Rear Headlights off	•	•	
Front Headlights off	•	•	





### 15697 Type Y Express Train Passenger Car

**Prototype**: 1 Type Y express train passenger car, 2nd class, painted and lettered for the Slovakian Railroad (Železničná spoločnosť Slovensko ZSSK). Built starting in

**Model**: The car has close couplers with guide mechanisms.

Total length over the buffers 153 mm / 6".

A prototypical train consists of at least 3 passenger One-time series. cars.

66616 LED lighting kit.

# Makes a prototypical train for the Slovakian Railroad





### The Legendary 01 519



















#### 22907 Class 01.5 Steam Express Locomotive with a Tender

**Prototype**: Class 01.5 steam express locomotive with a coal tender. GDR German State Railroad (DR/GDR) "Reko" version as it currently looks as a museum locomotive for the Zollernbahn Railroad Enthusiasts (EFZ), Rottweil, Germany. Includes spoked wheels, type 2'2'T34 standard design coal tender, special design Witte smoke deflectors for the class 01.5, continuous dome streamlining, and inductive magnets on both sides. Road number 01 519. The locomotive looks as it currently does in 2016.

**Model**: The locomotive has a digital decoder and extensive sound functions. It also has controlled high-efficiency propulsion with a flywheel, mounted in the boiler. 3 axles powered. Traction tires. The locomotive and tender are constructed mostly of metal. The 7226 smoke unit can be installed in the locomotive. The triple headlights change over with the direction of travel. They and the smoke unit that can be installed in the locomotive will work in conventional operation and can be controlled digitally. The cab lights can also be controlled digitally. Maintenance-free warm white LEDs are used for the lighting. There is a close coupling with a guide mechanism between the locomotive and tender. There is a close coupler with an NEM pocket and a guide mechanism on the tender. The minimum radius for operation is 360 mm / 14-3/16". Protective sleeves for the piston rods and brake hoses are included as detail parts.

•	Version as a museum locomotive for the Zollern-
	bahn Railroad Enthusiasts (EFZ), Rottweil,
	Germany.

- Continuous dome streamlining, partially open bar frame, and many separately applied details.
- Digital decoder and extensive operation and sound functions included.

A small brochure on the history of road number 01 519 and its restoration is also included.

The steam express locomotive with road number 01 519 is being done in a one-time series for its 80th birthday in cooperation with the Zollernbahn Railroad Enthusiasts (EFZ), Rottweil, Germany.

This model can be found in an AC version in the Märklin H0 assortment under item number 39207.

Digital Functions	DCC	mfx
Headlight(s)	•	•
Smoke generator contact	•	•
Steam locomotive op. sounds	•	•
Locomotive whistle	•	•
Direct control	•	•
Sound of squealing brakes off	•	•
Engineer's cab lighting	•	•
Whistle for switching maneuver	•	•
Operating sounds	•	•
Letting off Steam	•	•
Sound of coal being shoveled	•	•
Grate Shaken	•	•
Air Pump	•	•
Water Pump	•	•
Dialog	•	•



Pleasure about the support: Florian Sieber, Managing Director of Märklin, and Karl-Heinz Gräßle, Product Manager for H0, hand over the check as a contribution for the restoration of road number 01 519.



### Mystique of the Borsig Works



**22959 Prussian Class G 12 Steam Freight Locomotive Prototype**: Royal Prussian Railroad Administration (KPEV)
Prussian class G 12 (later the class 58.10-21) steam freight
locomotive. Gas lighting and Prussian type pr. 3T 20 tender
included. The locomotive looks as it did shortly after being
delivered in 1917.

**Model**: The locomotive has an mfx/DC digital decoder. It also has controlled high-efficiency propulsion with a flywheel, mounted in the boiler. 5 axles powered. Traction tires. The locomotive and tender are constructed mostly of metal. The locomotive has dual headlights that change over with the direction of travel. They will work in conventional operation. Maintenance-free warm white LEDs are used for the lighting. A 7226 smoke unit can be installed in the locomotive. There is a permanent close coupling with a guide mechanism between the locomotive and tender. A close coupler with an NEM pocket and a guide mechanism

is on the front of the locomotive. There is an NEM coupler pocket with a guide mechanism and a TELEX coupler on the rear of the tender. The locomotive has many separately applied details such as piping and sand pipes. Piston rod protection sleeves and brake hoses are included. Length over the buffers 21.2 cm / 8-3/8".

Prototypical tooling changes for the Prussian version.

Partially open bar frame.



One-time series.



Partially open bar frame

Digital Functions	DCC	mfx
Headlight(s)	•	•
Smoke generator contact	•	•
Steam locomotive op. sounds	•	•
Locomotive whistle	•	•
Direct control	•	•
Sound of squealing brakes off	•	•
Engineer's cab lighting	•	•
Whistle for switching maneuver	•	•
Telex coupler on the rear	•	•
Letting off Steam	•	•
Sound of coal being shoveled	•	•
Grate Shaken	•	•
Air Pump	•	•
Water Pump	•	•
Injectors	•	•

Includes prototypical tooling changes for the Prussian version



### **USA**

















22816 Light Mikado Steam Locomotive with a Tender A non-working knuckle coupler is mounted on the pilot Prototype: Baltimore and Ohio Railroad (B&O) class Q-3 freight locomotive. USRA type light Mikado. Road number 4526.

Model: The locomotive has a digital decoder and extensive sound functions. It also has controlled high-efficiency propulsion. 4 axles powered. Traction tires. A 72270 smoke generator can be installed in the locomotive. The headlight and the smoke generator contact will work in conventional operation and can be controlled digitally. Maintenance-free LEDs are used for the lighting. The locomotive has steam locomotive sounds synchronized with the speed, a whistle sound, bell sound, or acceleration and braking delay that can be controlled digitally.

of the locomotive. There is a close coupling between the locomotive and tender. The locomotive has separately applied metal grab irons. It also has many separately applied details. A figure of a locomotive engineer and a fireman are included with the locomotive. The locomotive is authentically weathered.

Minimum radius for operation is 360 mm / 14-3/16". Length over the couplers 29 cm / 11-7/16".

- Extensive sound functions.
- Improved locomotive/tender spacing.
- Authentic weathering.

One-time series.

The car set to go with this locomotive can be found in the Märklin H0 assortment under item number 45662.

Digital Functions	DCC	mfx
Headlight(s)	•	•
Smoke generator contact	•	•
Steam locomotive op. sounds	•	•
Locomotive whistle	•	•
Direct control	•	•
Sound of squealing brakes off	•	•
Warning Sound	•	•
Bell	•	•
Air Pump	•	•
Injectors	•	•
Auxiliary Blower	•	•
Sound of Couplers Engaging	•	•
Rail Joints	•	•
Operating Sounds 2	•	•



Authentic weathering

Improved locomotive/tender spacing Locomotive engineer and fireman included



### Belgium















#### 22575 Class 18 Electric Locomotive

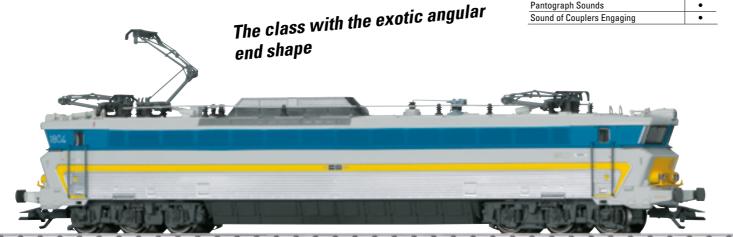
Prototype: Belgian State Railways (SNCB/NMBS) class 18 express locomotive. Four-system locomotive for all of France, the Benelux, and Germany. The locomotive looks as it did around 1980. Road number 1804. Model: The locomotive has a digital decoder and extensive sound functions. It also has a compact design maintenance-free motor with a flywheel, centrally mounted. 4 axles powered by means of cardan shafts.

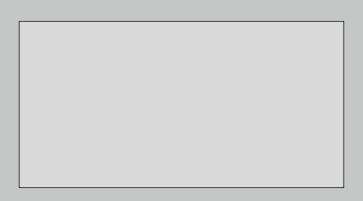
Traction tires. Warm white LEDs are used for the lighting.

They will work in conventional operation and can be controlled digitally. The locomotive has separated applied metal grab irons. It also has separately applied steps. The locomotive has detailed roof equipment and different pantographs. The cabs have interior details and there is a figure of an engineer in the front cab. Detail parts that can be mounted on the buffer beam are included. Length over the buffers 25.3 cm / 9-7/8".

One-time series.

Digital Functions	DCC
Headlight(s)	•
Electric locomotive op. sounds	•
Warning Sound	•
Direct control	•
Sound of squealing brakes off	•
Rear Headlights off	•
Bell	•
Front Headlights off	•
Stat. Announce. – Fren.	•
Horn blast 1	•
Rail Joints	•
Blower motors	•
Conductor's Whistle	•
Pantograph Sounds	•
Sound of Couplers Engaging	•





### Age Information and Warnings.



WARNING! Not suitable for children under 3 years. Sharp edges and points required for operation. Danger of choking due to detachable small parts that may be swallowed.



# RIX

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