

Master Controller

Kiepe KSS

General

Kiepe KSS master controllers produce and send the drive and brake signals necessary for the operation of rail vehicles to the vehicle control. A reference signal generator provides the reference value for the continuous regulation of the tractive and braking forces to the drive control unit¹⁾.

For less demanding requirements, up to 7 drive/brake steps can be formed via a combination of 3 step switches. With their robust design, the master controllers are especially suited for the rough operation with rail vehicles with regard to reliability, durability as well as shock and vibration resistance.

The modular design facilitates the adjustability to different requirements.

¹⁾ Not included with delivery

Basic Model

An operating lever which is upright in the zero position can be displaced by about 40° to the front (drive) and back (brake). The emergency brake position comes after this brake operation range (displacement of approx. 40–45°). The transitions between these drive/zero position/brake/emergency brake ranges are distinctly noticeable through notches (operating force in compliance with DIN 5566-1).

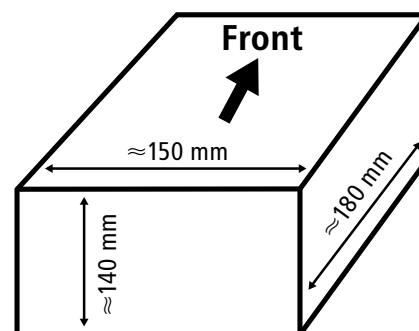
The operating lever has a knob which can be optionally designed as a ball, cone or T-grip.

A camshaft is driven by the lever through a gear ratio. The camshaft is

equipped with 6 switching elements (snap switch/change-over contact/positive opening). This way for example a notching sequence of the camshaft can be realized with 1 drive signal, 1 brake signal, 1 emergency brake signal and 3 signals for up to 7 drive and 7 braking steps. Only one switch switches from step to step. Simultaneous switching of 2 switches cannot be guaranteed

The control switch is designed for DC 24...110V and –25°C...+70°C. It weights approximately 5 kg. The connection is established at the faston plugs of the switching element.

This control switch model comes as one complete assembled device and, together with the IP00 protection standard, is made for mounting underneath the dashboard. Necessary mounting space below the dash covering:



Options

The above-mentioned basic model can be supplemented by the following features – not all of them are possible simultaneously:

Operation Mode Switch with 2–4 positions, for example for preselecting the driving direction.

For avoiding accidental switching into reverse, the operation mode switch can be supplemented with a **Reverse Block**. Switching into reverse is only possible by pushing a button.

Safety Lock for locking the control switch in the zero position.

For facilitating the **Connection**, a model with plug socket or cable with multiway plug can be delivered.

The switch can also be equipped with a **Cover Plate** (inscription possible) for mounting into a dashboard from the top. This way a protection standard of IP30 is achieved.

The master controller can be protected underneath with **Housing**.

A **Dead Man's Switch** (1–2 switching elements) can be integrated into the operating lever.

The T-grip can be equipped with a built-in **Push-button** (e.g. for a warning signal).

The position for the **Emergency Brake** can also be realized at the end of the drive range (meaning towards the front).

The lever's **Operating Range** can also be delivered with 1 x 90° (up to 14 steps) instead of 2 x 40/45°.

The **Notching Sequence** of the camshaft can be expanded to up to 8 switching elements.

A **Reference Signal Generator** can be connected for providing reference values to the traction drive control device. It can optionally issue analogue (2–10 V, 4–20 mA) or digital signals as well as customer specific characteristics or bus connections are possible on demand.