Level crossing technology.
Safe. Reliable. Capable.
PB inductive ATC control unit

Applications
The PB inductive ATC control unit is used for actuation of Type P145, P145LED and SP200LED colour-light signal lamps on crossing-protection signals (ÜS) and repeater signals (ÜSW).

Variants
Two variants of this module, PB-WI and PB-WIG (transformer, ATC, yellow lamps) are available. Up to two ATC track magnets (1000 Hz) can be connected to the PB-WI in addition to the signal lamp; the PB-WIG also permits connection of two active marker lights to crossing-protection signals for train speeds of above 120 km/h.

Features:
- Compact design
- Replaces “Einheit” ATC and old PB-ATC
- Connection of P145, P145LED and SP200LED colour-light signal lamps
- Connection of up to two ATC track magnets
- Connection of two active marker lights possible
- Activation of colour-light signal lamp with continuous or flashing display
Function

Upon signal enable, the level-crossing control system transmits a pulsed signal to the crossing-protection signal or repeater signal.

The PB inductive ATC system uses the first flash pulse of this signal to perform flash monitoring in order to protect against intercore short-circuit. If this test is successful, the second flash pulse is used to activate the colour-light signal lamp in the crossing-protection signal/repeater signal and the ATC track magnet(s) is/are short-circuited.

The type of colour-light signal lamp connected (P145, P145LED and/or SP200LED) can be configured on the PB inductive ATC control unit using jumpers.

Active marker lights actuated by the PB inductive ATC crossing-protection signals are monitored. In the case of marker lights with an incandescent illuminant, failure of a main filament in one of the two marker lights causes changeover to the secondary filaments and deactivation of the crossing-protection signal (signal indication BÜ0). In the case of marker lights with LEDs, the crossing-protection signal is immediately deactivated in case of an LED failure. Redundant installation is not necessary, due to the significantly greater service-lives of LEDs.