

DC soft starter

EDPS 110 / 800S - H914.52.20

The EDPS soft starter can be used to replace conventional starter contactors in diesel locomotives. The basic principle of the soft starter EDPS is the combination of a power contactor with power semiconductors to achieve wear-free switching of direct currents at high battery voltages. The power semiconductor can also limit the current in the starting phase using a PWM controller.

Technology:

- The EDPS soft starter consists of a contactor with semiconductor start support for limiting starting currents in DC drives
- The module is designed for operating voltages of 110V and motor currents up to 800A.
- A robust mechanism provides operational durability and interchangeability with conventional contactors.

Advantages

- Limiting the current increases the battery life
- The battery voltage drop during the starting process is significantly reduced
- A battery of smaller dimensions can be used
- No sparking at the contactor due to "cold switching"
- The soft start protects the starter and the starter pinion
- A monitoring function counts the number of starts and failed starts that have electrical causes.





Special features:

- Temperature monitoring of the power semiconductors
- Voltage monitoring of the battery voltage to protect the contactor
- 2 different PWM programs can be accessed
- The auxiliary contacts are equipped with spark suppression circuits so that despite the high voltage, currents of up to 5A can be switched at 110V without burning the relay contacts.

Technical data:

		Min	Type	Max	Condition
Operating voltage:	Ub	60VDC	110VDC	135VDC	
Supply current "Coil"	Is		350mA		Ub = 110VDC
Supply current "Coil" in standby mode	Iss		35mA		Ub = 110VDC
Load current:	Ik		800A		Max 20s
Maximum power loss	Ptot			approx. 2kW	At Ik 800A
Maximum current	I _{max}		1600A		< 1ms
Maximum PWM frequency	F _{pwm}			2kHz	

Item number: H914.52.20

Product information