



i ELM9410 | Power supply terminal for E-bus, with diagnostics

The ELM9410 power supply terminal is used to increase the E-bus current. The exchange of data between EtherCAT Couplers and the connected EtherCAT Terminals takes place over the E-bus. Each EtherCAT Terminal requires a certain amount of current from the E-bus (see technical data: "Current consumption E-bus"). This current is fed into the E-bus by the power supply unit of the respective EtherCAT Coupler. In configurations with a large number of EtherCAT Terminals, the ELM9410 can be used to increase the current supply to the E-bus by 2 A. The ELM9410 is designed in particular to meet the needs of high-precision analog measurement technology, e.g. with ELM3xxx terminals: to reduce interference in the connected measurement technology, both the E-bus supply U_s and the 24 V power contact supply U_p are electrically isolated and filtered in the terminal. The power contact supply can carry a maximum load of 2 A. The extensive voltage and temperature monitoring provides assistance with commissioning and operation; results are displayed by LED and in the process image. As a result, the ELM9410 can be used in special measuring situations instead of the conventional EL9410 supply. Mixed operation with EK1100/EL9410 is possible, however, not ensuring electrical isolation in this configuration.

Technical data	ELM9410
Technology	power supply terminal
Short-circuit proof	yes
Input voltage	24 V DC
Input current	typ. 70 mA + (E-bus/4)
Power supply	24 V DC (-15 %/+20 %)
Output voltage	5 V for E-bus supply
Output current	2 A
Current consumption E-bus	–
Current consumption from U_s	50 mA + (Σ E-bus current/4)
Current consumption from U_p	50 mA + load
Current supply E-bus	2000 mA
Insulation voltage input/output	500 V (E-bus/US/UP)
Power contacts	max. 24 V DC/max. 2 A
Diagnostics in the process image	yes
Special features	electrically isolated output voltages, reverse polarity protection, diagnostics of supply and output voltages
Weight	approx. 450 g
Operating/storage temperature	0...+60 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Electrical isolation	500 V (E-bus/field potential)
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE



Product announcement

estimated market release 3rd quarter 2018