

Step plate motor control unit

Automatic dc motor control with current sense



Applications:

- DC motor control
- Control unit for electrically driven step plates in vehicles

Features:

- Compact enclosure
- Power supply 10-15 Vdc
- Programmable with TConnect® software
- DC current sense
- Input for switches and sensors : 3
- Output for relays, lamps etc. : 2
- USB for parameter settings and monitoring

General description:

The step plate motor control unit is designed for controlling a 12Vdc electric motor, driving a step plate in a commercial vehicle.

The motor will be switched on when the door above the step plate is opened or closed.

Limit switches are not needed: The control unit senses the current through the motor.

When the current goes higher than the programmed threshold, the motor stops.

The firmware and settings defining the operation, can be programmed with TConnect®.

TConnect® is a free communication software package for Techno Electronics devices, and can be downloaded from our website.

Optional:

- Custom design services
- Company logo on the enclosure
- Cable tree and/or connector set
- Programming service

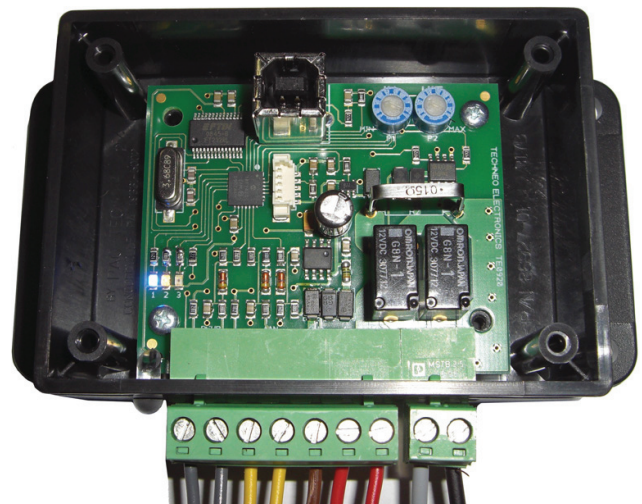
Ordering information:

Description

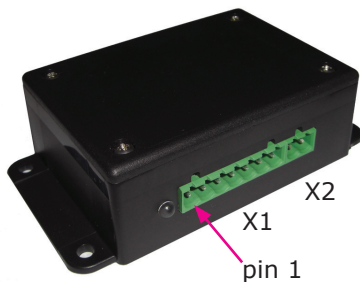
Step plate motor control unit:

ordering code

1400060



Parameter	Type/Conditions	Symbol	Value	Unit
Voltage range	max. typ. min.	V_{supp}	10 12 15	Vdc
Supply current	no load (led off)	I_{supp}	5,2	mA
Input high (3x)	active min. max.	V_{inhigh}	4,0 60	Vdc
Relay (2x) contact switching capacity	(@14,4Vdc)	I_{rly}	30	A
Current sense	max. resolution	V_{ps}	16,5 0,065	A A
Weight			115	gr
Temperature	operating storage	T_j	-25..+80 -40..+125	°C
Dimensions	enclosure		90x64x33	mm
Features	Communication e2prom memory flash program memory		USB 256 16	byte kByte
Connector	cont. max. 1 s.	I_{max}	16 30	A

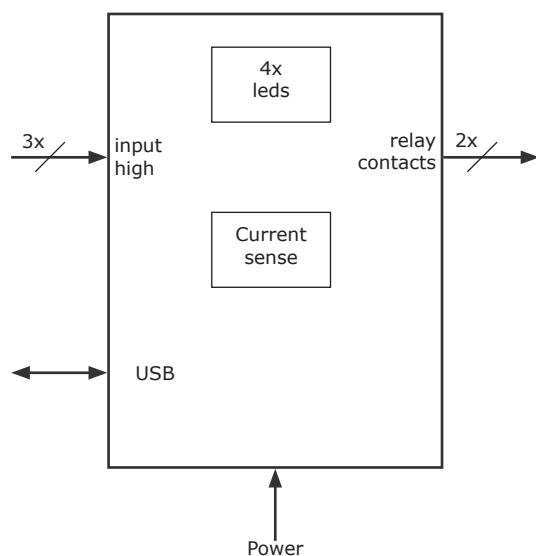


Connections:

X1/1: Door switch
 X1/2: Door switch
 X1/3: On/off switch
 X1/4: On/off switch
 X1/5: GND
 X1/6: Contact
 X1/7: + 12Vdc

X2/1: Motor
 X2/2: Motor

Simplified diagram:



Operation:

The relationship between input and output is fully programmable. TConnect® enables firmware to be loaded into flash, and various parameters (that controls the operation) to be stored in memory.

The step plate motor control unit is shipped with firmware for a standard situation. The proces timing and various options can be set with TConnect®. Also, the status of the connections, motor current en threshold settings can be viewed. The motorstop current thresholds (0..16A) are set with two potmeters (pull out/pull in).

The unit is equipped with 4 leds (blue, yellow, red and green) to show the status of the connected switches and motor control.