PowerTector

OPERATING & ASSEMBLY INSTRUCTIONS
PT20-T-C

ENGLISH

alfatronix
POWER. NO COMPROMISE.
sales@alfatronix.com
T E L: +44 (0)1202 715 517
www.alfatronix.com

SAFETY

■ SAFETY

- **This PowerTector is for ancillary equipment only. It must not be used to disconnect equipment that is critical to the safe operation of the vehicle.**
- The device must not be exposed to severe mechanical shocks.
- The device must not be exposed to extreme temperature, direct sunlight or vigorous vibration.
- The device may only be used within a dry environment, such as a vehicle.
- Do not install this device on hot vehicle parts and ensure there is sufficient space around the device for air circulation and cooling.
- The wiring harness should be protected by fuses.
- Observe the magnitude and polarity of the input/output voltage when installing, incorrect polarity of the output could damage the circuit.
- Isolate the circuit before you connect or remove the device.
- Ensure that the output of the device is not short-circuited.
- Never open the device casing and never repair it. The device must be replaced if it is damaged.

■ INDUCTIVE LOADS

The inductive load rating of this PowerTector is 1mH.
Do not exceed the specified inductive rating.
Inductive equipment includes; motors, pumps, refrigeration, relays, long cables etc.
Conducted voltage transients must not exceed those specified by ISO7637-2:2004 Level III.

■ FUSING

The input, switch and ground wiring must be fused appropriately.
For the ground and switch, minimum 500mA to 1A maximum.

CE This device complies with the EU directive 2014/30/EU.
The type plate is located on the top of the device.

ASSEMBLY

■ PACKING CONTENTS

- 1 x PowerTector
- 4 x Cable ties
- 4 x Crimp Connectors
- 1 x Programming Lead

■ FEATURES

- 12V / 24V Automatic mode selection (12V mode 8<V≤17 , 24V mode 17<V≤35)
- 10 Programmable disconnection times
- 5 Programmable voltage settings
- Supplied with FASTON crimp connectors
- IP65 rated

■ OPERATION

The PowerTector-T will guard against excessive battery discharge by disconnecting the load at a user selectable time after the ignition has been turned off.
The PowerTector-T will also monitor the battery once the ignition has been turned off and disconnect the load when the voltage drops below a user selectable level for over one minute.
The PowerTector will protect the load by disconnecting it if the battery voltage exceeds 19V on a 12V system or 32V on a 24V system.

■ ASSEMBLY

1. Select a cool and ventilated position to install the device which is not exposed to direct sunlight.
2. Mount as close to the battery as possible using a wire of sufficient diameter.
3. Isolate the power to the wiring before commencing installation.
4. Connect the 'ground' terminal.
5. Connect the 'input positive' terminal.
6. Connect the 'switch' terminal to the vehicle ignition switched output.
7. If required program the unit as described below.
8. Connect the 'output positive' once no further programming is required.
9. Secure the PowerTector to cable loom using cable ties.

PROGRAMMING

■ THE CONNECTIONS

Isolate the circuit before you connect or disconnect the device. Connect the unit as detailed in the wiring diagram.

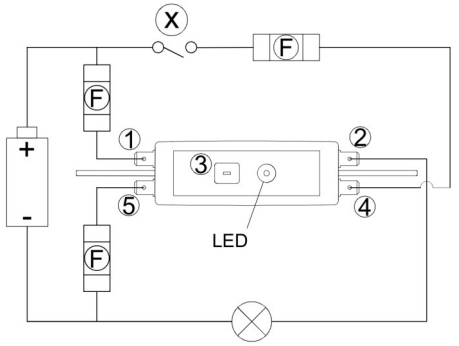
■ PROGRAMMING

The table shows the factory default and user defined settings.
To change a program:

1. Remove the 'input positive' crimp connector just enough to reveal the 'input positive' terminal.
2. Temporally connect together the 'input positive' and the 'program' terminal using the programming lead supplied.
3. The LED will start to flash, each flash indicates the program to be selected.
4. Keep the connection until the LED has flashed the number of times for the desired program then remove the connection.
5. The LED will then flash the number of times to confirm the selected program.
6. Programming of P1 to P10 and P11-P15 are carried out separately.

■ PROGRAM MODES

P1-P10—Disconnect time range. (P10 is default)
P11—15 Disconnection Voltage. (P14 is default)



- **(1)** - Input Positive
- **(2)** - Output Positive
- **(3)** - Program
- **(4)** - Switch
- **(5)** - Ground
- **(F)** - Fuses
- (X) - Vehicle ignition switch

■ **TECHNICAL** DATA

Part Number	Current	Rated Voltage	Dimensions	Weight
PT20-T-C	20A	12V/24V	155x30x15mm	45g

■ PROGRAM MODES

Program Number	Time	
P1	1 hours	
P2	2 hours	
P3	6 hours	
P4	12 hours	
P5	24 hours	
P6	36 hours	
P7	48 hours	
P8	72 hours	
P9	96 hours	
P10*	168 hours	
	12V System	24V System
P11	10.5V	21V
P12	11V	22V
P13	11.5V	23V
P14*	12V	24V
P15	8.5V	8.5V

* Factory default settings

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