



Installation sheet

Climate control EasyTerm Quattro

PRD0275E02en

Description

- This instruction sheet concerns UWE EasyTerm Quattro only.
- On receipt of the goods, remove all packaging material and check all the items for transport damage.
- Check that the delivered goods correspond to the specifications of the delivery note.



Before starting installation work, read the documentation accompanying the product.

Suitable mounting place

The climate control panel shall preferably be placed so that the driver doesn't need to move to reach the buttons and knobs.



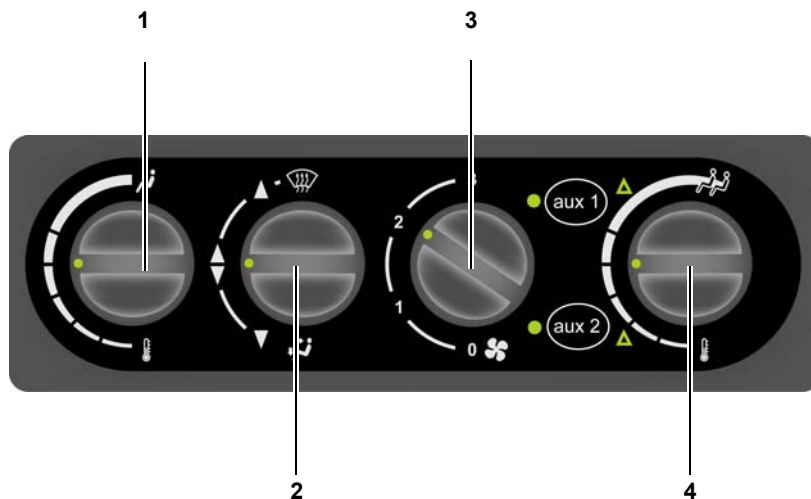
The climate panel must be mounted in a place protected from water.

Further information

Product Information

PRD0274

General information



Common Input

Positive supply - PWR+, Negative supply – GND, Charge indicator – GEN+, backlight supply +12V – BS12, backlight supply 24V-BS24 and backlight supply GND – BS GND. These serve both as power supply and as logical signals used by all function blocks. It is also possible to modulate backlight intensity from either PWR+ or GND side.

Defroster Temperature Control (1)

Set Range: Total of 9 steps. Off – 16 °C- 80 °C in 7 progressive steps – Max.

Input function: Defroster inlet temperature. NTC sensor 4.7k Ohm, TseDef; Sensor Ground TseDefGND.

Output function: Defroster valve (polarity 24V = closed) , Duty cycle controlled 40ms resolution 10 sec cycle time. VaDef.

Regulation task: This function strictly controls the temperature of inlet air.

Floor Screen Flap Position Control (2)

Set Range: 6 steps. All floor; 25-75; 50-50; 75-25; All screen; Demist/Deice .

Input function: Flap position feedback in range 0V – Vbatt. PosFb

Output function: Flap bi-directional drive. Flap_Fl and Flap_Sc.

Regulation task: Performs positioning of the floor/screen flap into 6 pre-selected positions. The last Set position is used to set maximal heat on the windscreen. The system automatically checks for end positions at startup.

Defroster Fan Speed Control (3)

Set Range: 4 steps. 0 – 3.

Input function: None.

Output functions: Fixed speed outputs Sp1, Sp2 and Sp3.

Regulation task: Performs manual setting of the defroster fan speed into zero speed or three fixed speeds.

No automatic control intended except the maximum speed override derived from selecting Demist/Deice on the flap positioning control.

Compartment Temperature Control (4)

Set Range: 10 steps. Off – 18 °C to 26 °C.

Input function: Compartment temperature. NTC sensor 4.7k Ohm. TseComp; Sensor Ground TseCompGND; Mode control input - Mode

Output functions. Convector valve – VaCnv (polarity 24V = closed), Viking pump - Pmp, Blower – Blw. Analog Set out – AOut.

Regulation task (continued on next page):

1. Stand alone operation: A simple on-off algorithm performs regulation. No output signal to an external AC controller is obtained but the temperature setting is converted to an analog output signal (AOut) that can control either a Viper Classic for both Roof system and AC control or a TRH97 if only Roof heating is to be controlled.

As default the system handles a convector system but by applying PWR+ level to the Mode input a two-step blower heating can be controlled.

2. With Viper 2000 compartment unit

In this case the ETQ gives the set temperature for the compartment unit and the compartment climate is controlled in the same way as with a Viper2000 system except that no manual overrides can be performed.

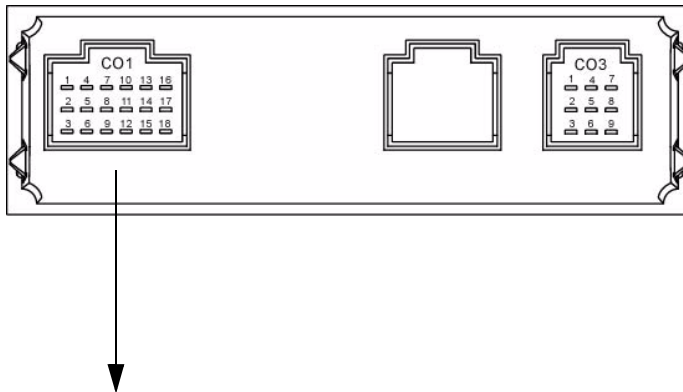
Compartment and roof inlet temperature and optional engine temperature is supplied from the compartment unit. The compartment temperature input on the ETQ is in this case used for ambient temperature.

Auxilliary Outputs

The ETQ can be delivered with one or two extra buttons to control the auxilliary outputs Aux1 and Aux2. The state of these outputs are indicated by a separate LED beside the button. The function does not influence any other function.

An alternative version without button uses the Aux1 output as non-inverted copy of the defroster valve and Aux2 as non-inverted copy of the compartment valve.

Connecting up the climate control panel



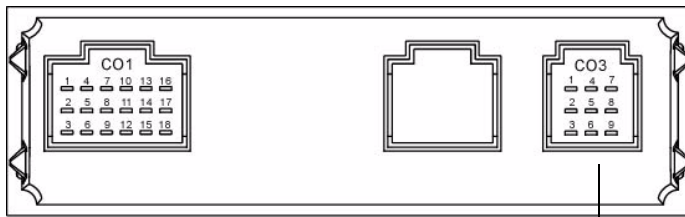
Pin	Description	Remark
1	Viking pump	Solid state output 1,9A
2	Recirculation blower	Solid state output 1,9A
3	Aux 1 (user definable output)	Solid state output 1,9A
4	Valve defroster	Solid state output 1,9A
5	Valve convector	Solid state output 1,9A
6	Aux 2 (user definable output)	Solid state output 1,9A
7	Not used	
8	Defroster inlet air temp sensor (GND)	GND Output to sensor
9	Compartment temp sensor (GND)	GND Output to sensor Note: If sensor is not connected, connect a 4k7 resistor (6 kOhm) between pin 9 and 12.
10	Defroster fixed speed 3	Solid state output 1,9A
11	Defroster inlet air temp sensor	Analog In NTC 4,7 kOhm
12	Compartment temp sensor	Analog In NTC 4,7 kOhm Note: If CAN connection - redirected as external sensor. Compartment temperature derived from node 1.
13	Defroster fixed speed 1	Solid state output 1,9A
14	Defroster fixed speed 2	Solid state output 1,9A
15	Floor/screen flap position feedback	Analog in 0-33V. Connect to flap motor Bosch 0132801141 pin nr 2*
16	Flap_screen, flap actuator output: Direction screen = 24V Direction floor = 0V	Half bridge 2,4A. Connect to flap motor Bosch 0132801141 pin nr 4*
17	Flap_floor, flap actuator output: Direction screen = 0V Direction floor = 24V	Half bridge 2,4A. Connect to flap motor Bosch 0132801141 pin nr 6*
18	Analog Output. Compartment set temperature converted to pot 4 level.	Analog out 0-5V, 10kOhm. For use with other electronics.

* Connection of flap motor Bosch 0132801141 (UWE 13225):

Connect pin nr 1 to -

Connect pin nr 3 to +

Connect pin nr 2, 4, 6 to Easy Term Quattro according to information above. This connection will result in more air to windscreen at clockwise rotation of the flap motor. Link to flap motor product sheet [click here](#) (UWE product info CD only).



Pin	Description	Remark
1	CAN H (for use with Viper 2000 comp. unit)	For use with Viper 2000 compartment unit
2	Backlight supply +24V	Power supply
3	Main supply GND	Power supply
4	Main supply +24V	Power supply
5	CAN L (for use with Viper 2000 comp. unit)	For use with Viper 2000 compartment unit, for stand-alone operation strap this terminal to ground
6	Charge indicator / engine on	Digital in
7	Backlight supply +12V	Power supply (not used for 24 V systems)
8	Backlight supply GND	Power supply
9	Blower/convector	Digital in

UWE Verken AB
 Box 262
 S-601 04 Norrköping, Sweden
 Phone +46 11 24 88 00
 Fax +46 11 12 47 04
 www.uwe.se

