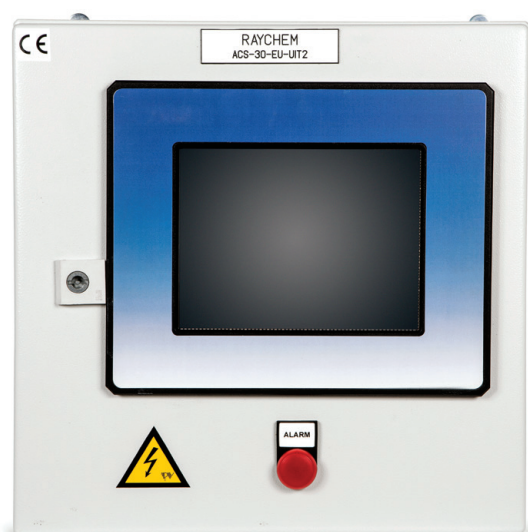# ACS-30-EU-UIT2

MULTI-APPLICATION HEAT TRACING CONTROL & MONITORING IN COMMERCIAL AND RESIDENTIAL BUILDINGS

DESCRIPTION

The nVent RAYCHEM ACS-30 User Interface Terminal (UIT) is a panel mounted touchscreen display for control and monitoring of the ACS-30 system. The unit provides control for up to 260 heating circuits via the 22 cm XGA colour touchscreen display.

It comprises RS485, RS232, or 10/100 Base-T Ethernet communication ports to allow communication with external distributed heating panels or building management systems (BMS).

BACnet, Metasys N2 and LonWorks to Modbus protocol gateways with pre-programmed Modbus registration are also available. A USB interface is included for quick and easy configuration and for firmware system upgrades.

The ACS-30-EU-UIT2 unit is designed for indoor use in non-hazardous locations.

TECHNICAL INFORMATION

Approvals	CE Marked. In accordance with EN 60439 'Low-voltage switchgear and controlgear assemblies'.
Colour	RAL7035 (light grey)
Enclosure Material	Metal
External Panel IP rating	IP54
Internal Panel IP rating	IP20
Installation location	Indoor, non-hazardous
Ambient operating temperature range (Powered)	0-35°C
Operating Voltage	100-240 VAC, −15% +10%, 50/60 Hz
LCD Display	21.7 cm (8.4") XGA, TFT transflective device with integral LCD backlight (Colour). 5-wire resistive touch screen interface for user entry.
Main CB	4A, C-type
Auxiliary CB	1.6A, C-type
Alarm relays	3 relays, 8A @ 250 VAC, 2-PDT. The alarm relays are energised without an alarm condition. They will change state with an an alarm condition or loss of power. May be used for common alarm light.
'Fault' Signal Lamp	1

PANEL DIMENSIONS

Dimensions	380 mm x 380 mm x 210 mm.

NETWORK CONNECTIVITY

Local/Remote Port (RS-232, RS-485-2)	RS-232/RS-485 ports (RS-485, 2 wire isolated). May be used to communicate with host computers, BMS. Local RS232 non isolated, 9 pin D sub male. Maximum connection cable length : RS-485 not to exceed 1200 m. Cable to be shielded twisted pair. Data Rate: 9600 to 57600 baud
Field Port (RS-485-1)	RS-485, 2 wire isolated. Used to communicate with external devices such as ACS-30-EU-MONI-RMM2-E and ACS-30-EU-PCM2-xx-yy. Data Rate : to 9600 baud
LAN	10/100 BASE-T Ethernet port with link and activity status LEDs.
USB Ports	USB 2.0 Host port type A receptacle (x2)

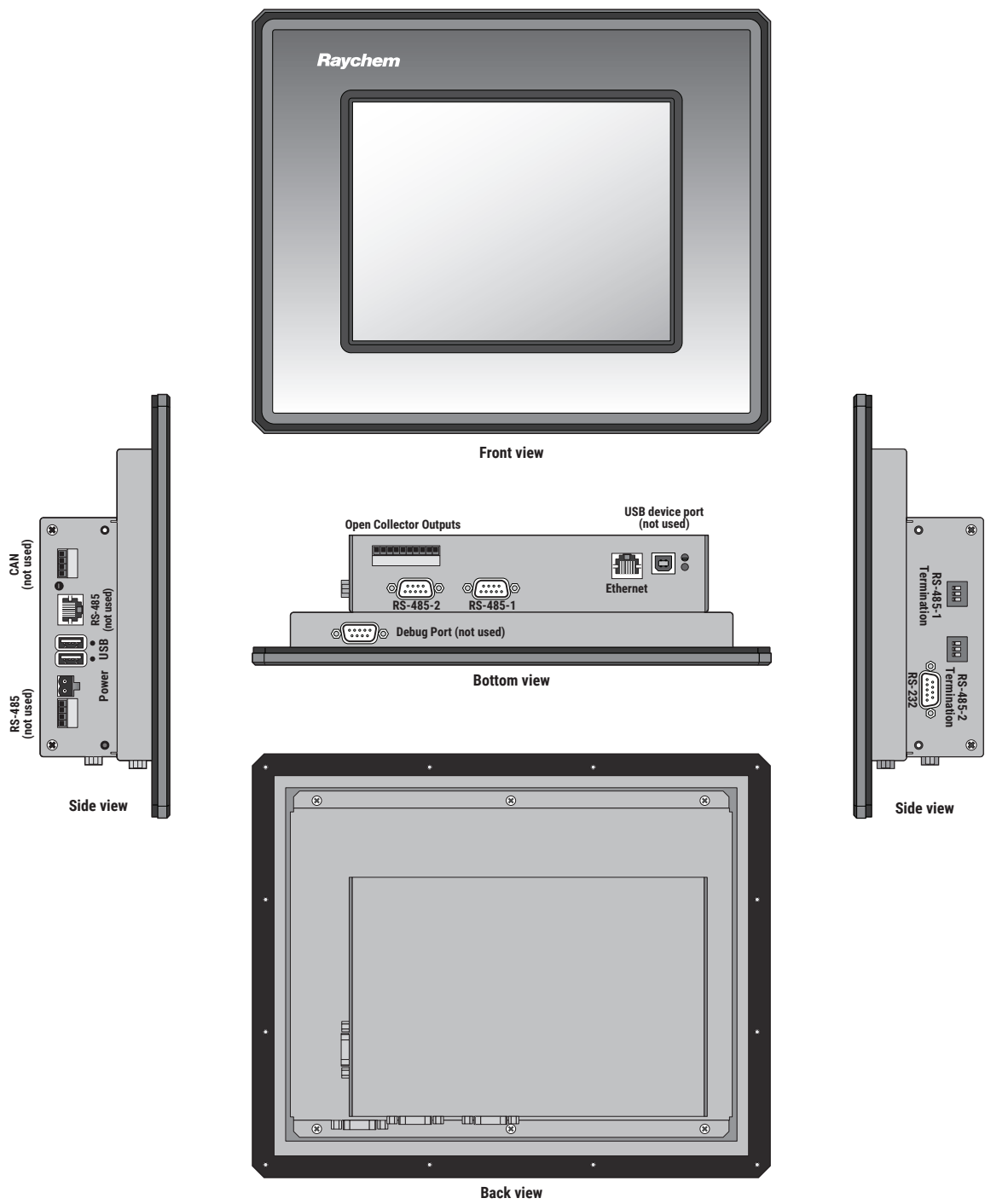## INSTALLATION AND SAFETY REMARKS

Select a suitable location for the enclosure and mount it on a wall using suitable screws.
Install all cables ensuring adequate protection against all the extension leads disconnecting. This can be achieved installing suitable glands on the lower side of the enclosure.
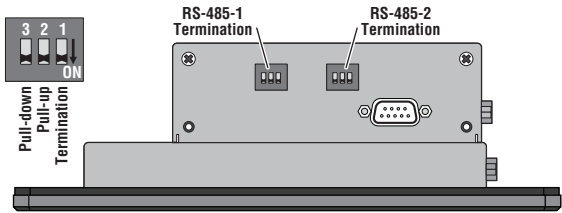
Remarks: Only for electricians!

Attention: mistakes during connecting up the device can cause damage to the control unit. The company is not liable for any damage caused by faulty connections and/or incorrect handling.

- Before working on the device, switch off the power supply!

- The device may only be connected up and serviced by authorized, trained personnel!

- Electrical connection has to be carried out accordingly to the schematics provided with product.

- Local standards for electrical connection must be observed.

- If the device does not work please first check all connections and the mains power supply.

Front view

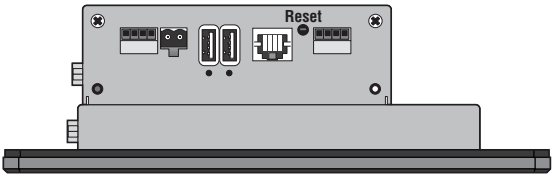**Open Collector Outputs**

USB device port (not used)

Ethernet

RS-485-2   **RS-485-1**

Debug Port (not used)

Bottom view

CAN (not used)

RS-485 (not used)

RS-485 (not used)

Power   **USB**

Side view

RS-485-1 Termination

RS-485-2 Termination

RS-232

Side view

Back view

RS-485 CONFIGURATION SWITCHES

The configuration switches are found on the right side of the ACS-30-EU-UIT2. Refer to the table below for settings.

Switch	Position On	Off	Comments
Pull-down	(As-shipped default) RS-485 network "–" signal is forced to a determinate state when idle.	RS-485 network "–" signal is not forced to a determinate state when idle.	One device (typically this ACS-30-EU-UIT2) on the RS-485 network should force the network "-" signal to a determinate state.
Pull-up	(As-shipped default) RS-485 network "+" signal is forced to a determinate state when idle.	RS-485 network "+" signal is not forced to a determinate state when idle.	One device (typically this ACS-30-EU-UIT2) on the RS-485 network should force the network "+" signal to a determinate state.
Termination	(As-shipped default) RS-485 network is terminated with 120-ohm resistor.	RS-485 network is not terminated.	Terminate the device (ACS-30-EU-UIT2 or other) that is at each end of the RS-485 network, for a total of two terminated devices. No other devices on the network should be terminated.

RESET SWITCH

The Reset switch can be found on the side of the ACS-30-EU-UIT2. A pointed object is required to press the reset switch and restart the ACS-30 software.

CLEANING

The touch screen area of the ACS-30-EU-UIT2 may be cleaned with a damp or dry cloth. Typical window cleaning agents may be applied to aid in the removal of dirt, dust and grease. Do not use abrasive cleaners.

PART NUMBERING AND ORDERING DESCRIPTION

PCN	Product Name	Description	EAN Code
1244-012864	ACS-30-EU-UIT2	User Interface module for the ACS-30 Control and Monitoring System	5414506014303

RELATED PRODUCTS

PCN	Product Name	Description	EAN Code
1244-012865	ACS-30-EU-EMDR-10-MOD	Gutter & Roof snow melting sensor module for the ACWS-30 Control and Monitoring System	5414506014310
1244-012866	ACS-30-EU-VIA-DU-20-MOD	Snow melting and surface de-icing sensor module for the ACS-30 Control and Monitoring System	5414506014327
1244-012867	ACS-30-EU-Moni-RMM2-E	Remote monitoring module for the ACS-30 Control and Monitoring System	5414506014334
1244-012868	ACS-30-EU-PCM2-5-20A	Power Control Module for ACS-30 (5 circuit module with 20 Amp electrical protection per circuit)	5414506014341
1244-012869	ACS-30-EU-PCM2-10-20A	Power Control Module for ACS-30 (10 circuit module with 20 Amp electrical protection per circuit)	5414506014358
1244-012870	ACS-30-EU-PCM2-15-20A	Power Control Module for ACS-30 (15 circuit module with 20 Amp electrical protection per circuit)	5414506014365
1244-012871	ACS-30-EU-PCM2-5-32A	Power Control Module for ACS-30 (5 circuit module with 32 Amp electrical protection per circuit)	5414506014372
1244-012872	ACS-30-EU-PCM2-10-32A	Power Control Module for ACS-30 (10 circuit module with 32 Amp electrical protection per circuit)	5414506014389
1244-012873	ACS-30-EU-PCM2-15-32A	Power Control Module for ACS-30 (15 circuit module with 32 Amp electrical protection per circuit)	5414506014396

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