CCD1200S Compact Controller with Display

- 4 Buttons
- 3.5" colour TFT
- 38 configurable I/O
- Programmable via Guitu
- Designed for operation at both 12V DC and 24V DC
- Real Time Clock

CCD1200S is compact and versatile I/O controller equipped with 3,5-inch colour TFT-display. It has 38 configurable I/O lines.

The unit has a built-in Real-Time Clock, which can be used for logging events with a time stamp.
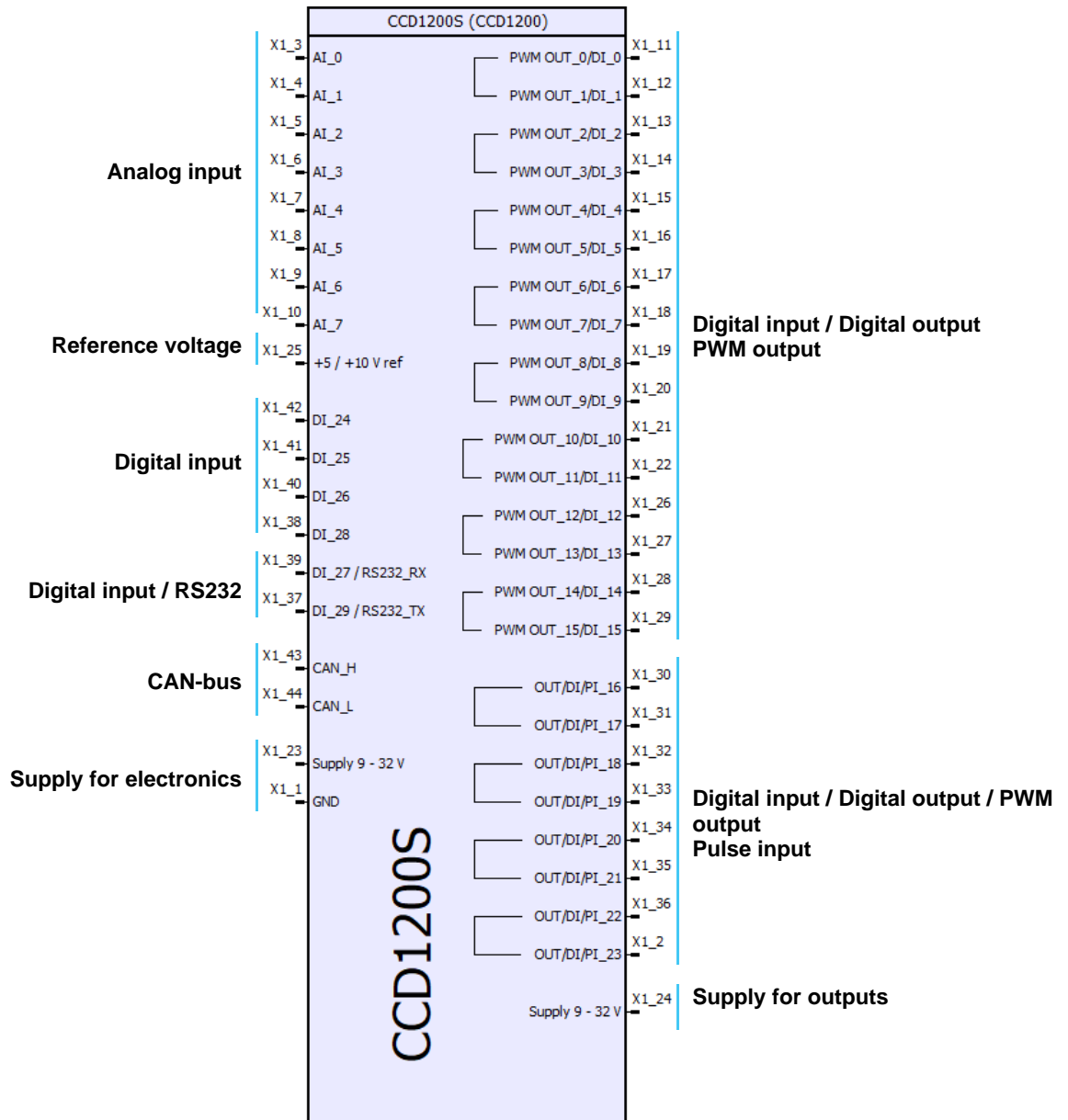
Technical Information

- 9-32 VDC Operating voltage range
  (Protected against reverse polarity)
- -30…+70 °C operating temperature range
- -30…+80 °C storage temperature range
- 3.5" TFT colour display (Resolution QVGA, 320x240)
- 32-bit microprocessor
- 512 kB RAM
- 2 MB flash memory
- IP67 aluminium housing
- Weight 0.7kg
- Main dimensions 127 mm x 146 mm x 37 mm
- One 44 pin AMP Super Seal connector
- CAN interface 2.0B, ISO 11898
- Serial interface RS232
- Real time clock (RTC)

I/O Interface

- Total of 38 configurable IO-lines
- Separate supply for outputs and electronics
- The I/O interface is protected against short to GND and to supply voltage
- Configurable reference voltage: 5V / 10V, max 150mA

| Amount	Configurability	Details
16	Digital input Digital output PWM output	Low < 3 V, High > 5 V, max 100 Hz High side driver, max 3 A High side driver, max 3 A
8	Digital input Analog input	Low < 1,5 V, High > 3,2 V, max 100 Hz 12-bit AD converter 0-10,3 V, 69 kΩ 0-22 mA, 150 Ω
8	Digital input Pulse input Digital output PWM output	Low < 3 V, High > 5 V, max 100 Hz Low < 3 V, High > 5 V, max 20 kHz High side driver, max 3 A High side driver, max 3 A
4	Digital input	Low < 2 V, High > 6,5 V, max 100 Hz
2	Digital input RS232	Low < 2 V, High > 6,5 V, max 100 Hz Note: max 15 V

CCD1200S (CCD1200)

Left side		Right side	
Analog input	X1_3 AI_0	PWM OUT_0/DI_0 X1_11	**Digital input / Digital output PWM output**
	X1_4 AI_1	PWM OUT_1/DI_1 X1_12	
	X1_5 AI_2	PWM OUT_2/DI_2 X1_13	
	X1_6 AI_3	PWM OUT_3/DI_3 X1_14	
	X1_7 AI_4	PWM OUT_4/DI_4 X1_15	
	X1_8 AI_5	PWM OUT_5/DI_5 X1_16	
	X1_9 AI_6	PWM OUT_6/DI_6 X1_17	
	X1_10 AI_7	PWM OUT_7/DI_7 X1_18	
Reference voltage	X1_25 +5 / +10 V ref	PWM OUT_8/DI_8 X1_19	
		PWM OUT_9/DI_9 X1_20	
Digital input	X1_42 DI_24	PWM OUT_10/DI_10 X1_21	
	X1_41 DI_25	PWM OUT_11/DI_11 X1_22	
	X1_40 DI_26	PWM OUT_12/DI_12 X1_26	
	X1_38 DI_28	PWM OUT_13/DI_13 X1_27	
Digital input / RS232	X1_39 DI_27 / RS232_RX	PWM OUT_14/DI_14 X1_28	
	X1_37 DI_29 / RS232_TX	PWM OUT_15/DI_15 X1_29	
CAN-bus	X1_43 CAN_H	OUT/DI/PI_16 X1_30	**Digital input / Digital output / PWM output Pulse input**
	X1_44 CAN_L	OUT/DI/PI_17 X1_31	
Supply for electronics	X1_23 Supply 9 - 32 V	OUT/DI/PI_18 X1_32	
	X1_1 GND	OUT/DI/PI_19 X1_33	
		OUT/DI/PI_20 X1_34	
		OUT/DI/PI_21 X1_35	
		OUT/DI/PI_22 X1_36	
		OUT/DI/PI_23 X1_2	
		Supply 9 - 32 V X1_24	**Supply for outputs**

CCD1200S

Node Id

As default the unit Node address is set by a voltage level at AI_7.

Voltage at AI_7	Node ID offset	Rx / Ω
0V	1	open
0.9V	9	330k
1.7V	3	150k
2.6V	11	68k
3.5V	5	33k
4.3V	13	11k
5.2V	7	Closed
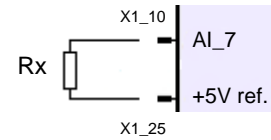
Node ID = Base Node ID (103) + Node ID offset

See also product's CANopen profile for further details.

Connector
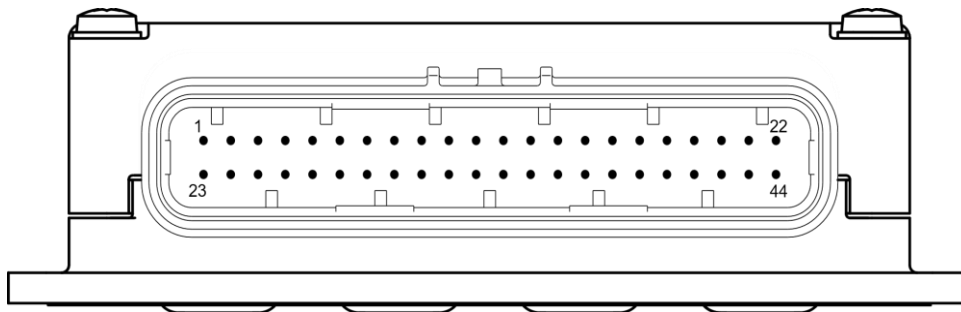

Superseal connector

	Superseal connector needed:
Super Seal Connector Plug Housing	Ø1.6-2.2 mm - AMP 1376886-1 Ø 2.0-2.4 mm - AMP 2-1447232-6
Receptacle Contact (0.75 – 1.25mm^2)	AMP 3-1447221-3
Filler Plug *)	AMP 4-1437284-3 Deutsch 0413-204-2005

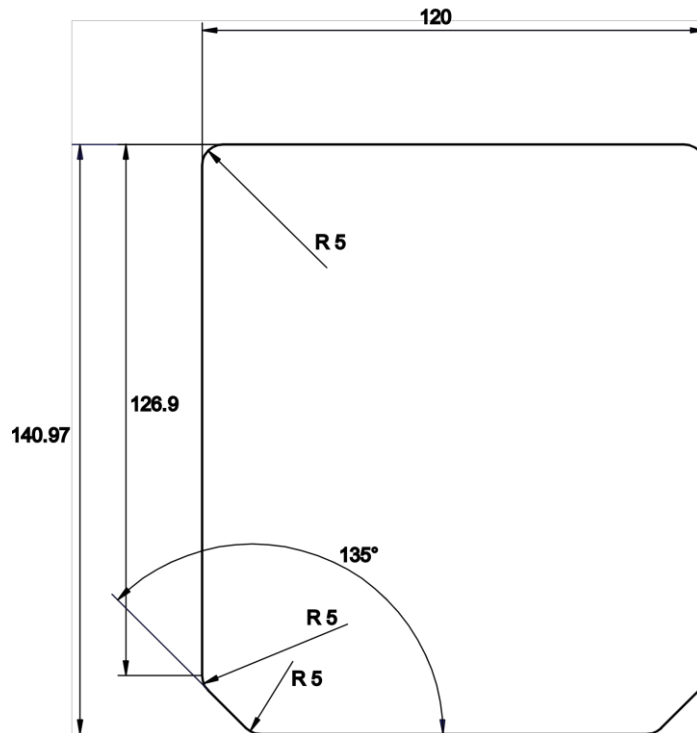*) Filler plugs must be used on empty cavities to reach waterproofness

Dimensions
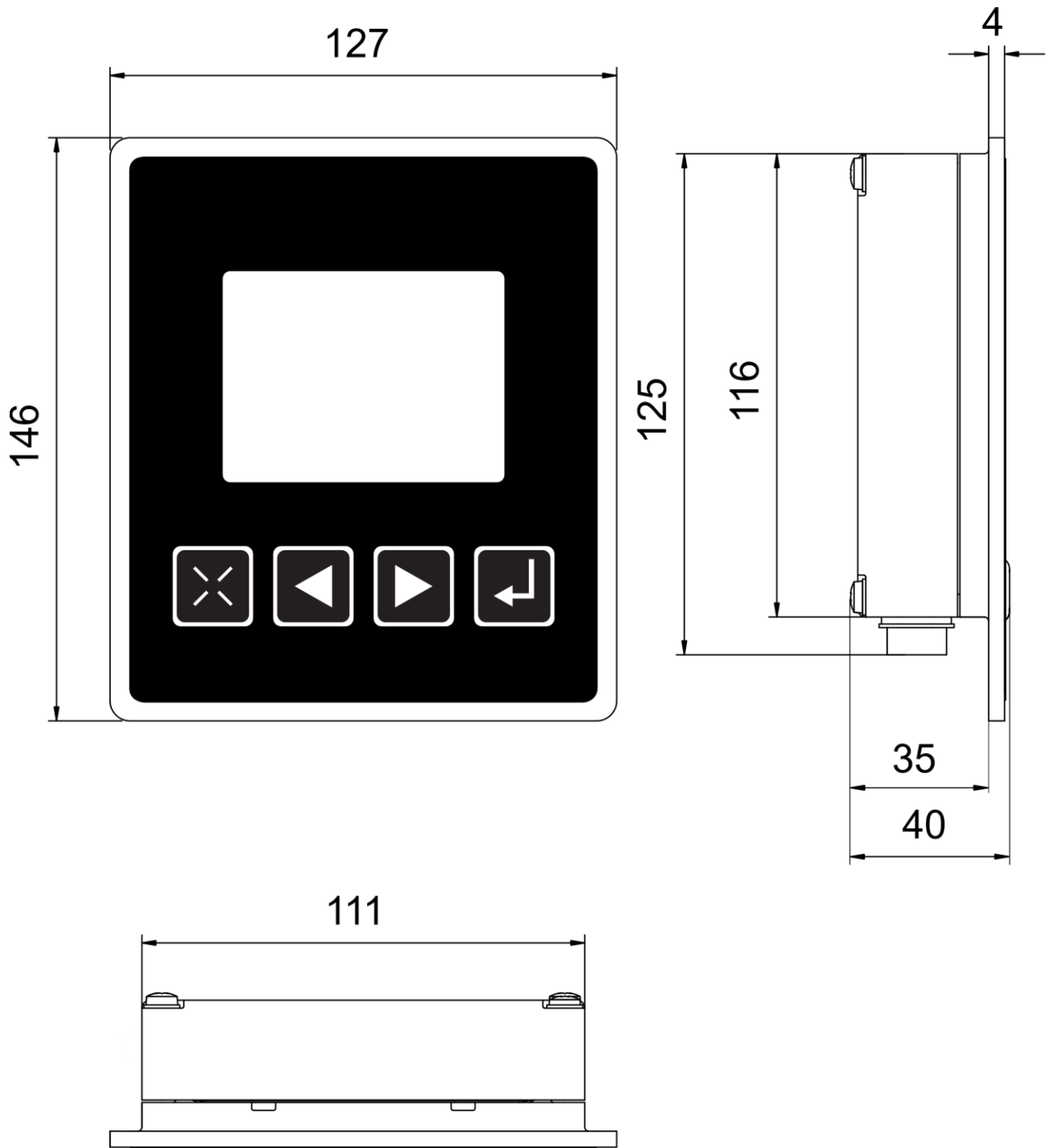
Mounting

CCD1200S can be mounted on panel or used with RAM®-mount. When mounted on panel, maximum panel thickness is 2 mm. There is available bracket for panel mounting. Contact Exertus for additional information.
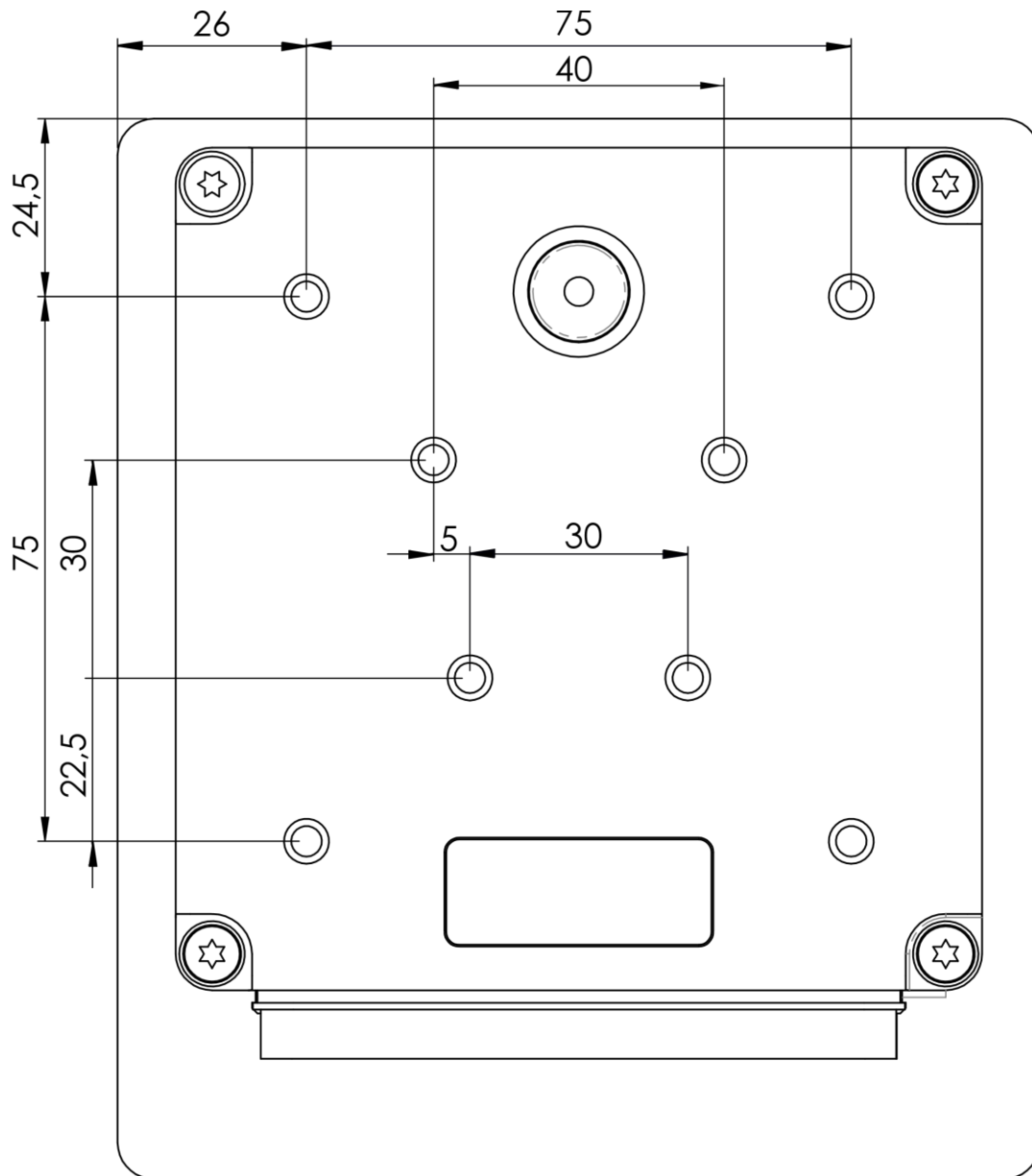
Recommended opening for panel installation.

The preferred mounting position is connectors pointing downwards. If the unit is mounted connectors pointing to the side, then it is vital to leave some loose cable with a downward cue to prevent the ingress of moisture through connector.