5 Panel Slave Controller C200
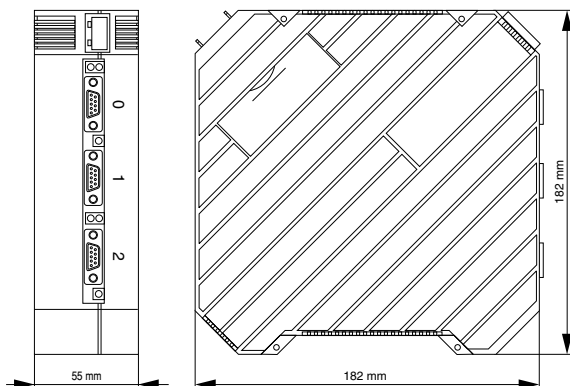
| Technical Data	
Interfaces	IF0:RS232 (not electrically isolated) IF1:RS232 (not electrically isolated) IF2:RS422/RS485 (electrically isolated)
Programming	PG2000 (PL2000); PANELWARE software
Power Supply	24 VDC (min. 18 VDC, max. 30 VDC)
Real Time Clock	YES (non-volatile)

Connection of ....
    Display Modules
    Keypad Modules
	1
	max. 7

Temperature
    Operating
    Storage
	0 to 50 °C (32 to 122 °F)
	-20 to 60 °C (-4 to 140 °F)

Relative Humidity
    Operating
    Storage
	10 to 95 % (non-condensing)
	10 to 95 % (non-condensing)

Shock	Conforms to IEC 60068-2-27 15g equivalent, 150 m/sec^2, 11 msec, 3 axes (pos. and neg.)

Vibration	Conforms to IEC 60068-2-6
	      1g equivalent, 10-58 Hz; 0.075 mm
	                           58-150 Hz; 9.8m/sec^2
	      20 Cycles per axis

Memory
    User RAM
    System ROM
    User ROM
	256 kByte
	256 kByte
	256 kByte

Current Requirements	110 mA at 24 VDC

5.1 Overview of Connections and Operational Elements
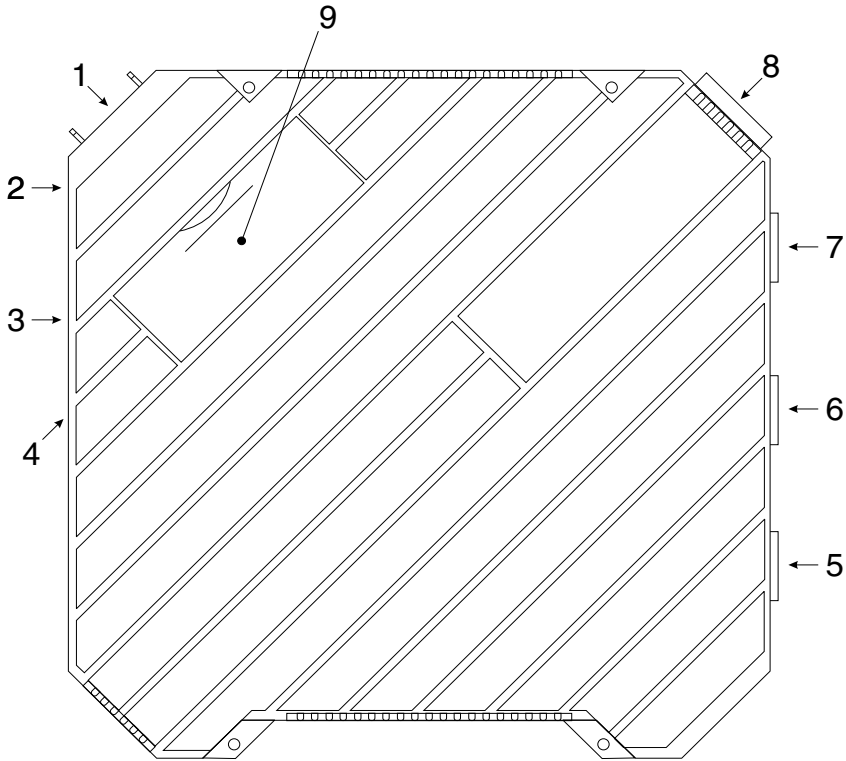
1 Display Module
2 RESET Button
3 Number Switch - Operating Mode
4 Keypad Module Connection
5 IF2: RS422/RS485
6 IF1: RS232
7 IF0: RS232 (to PC)
8 Supply Voltage Connection (24 VDC)
9 Cover for Lithium Battery

5.1.1 RESET Button

A hardware reset can be executed with this key. Depending on the number switch settings and the boot selection switch setting, different functions can be executed. These functions are all explained in the description of the connections and operational elements (see *General Information about* C200/C300).
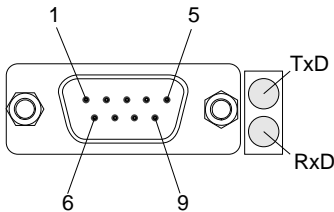

RESET Button
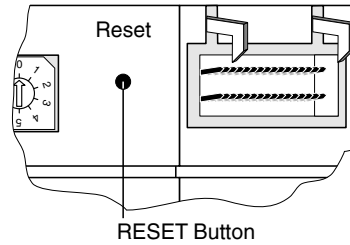
5.1.2 Number Dial - Operation Mode

The mode of operation for the panel controller is set with number switch four (see *General Information about* C2xx/C300).

Operating Mode
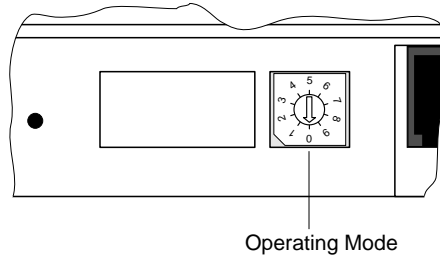
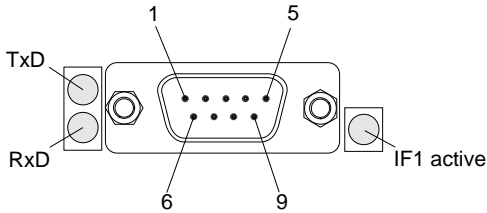### 5.1.3 IF0 - RS232

9 Pin D-Type Connector (M)

Pin		Description
1	NC	
2	RxD	Receive Data
3	TxD	Transmit Data
4	+ 5 V	Power Supply (200 mA)
5	GND	Ground
6	NC	
7	RTS	Request To Send
8	CTS	Clear To Send
9	NC	

LED	Meaning
TxD	Send data over interface
RxD	Receive data over interface

5.1.4 IF1 - RS232

9 Pin D-Type Connector (M)

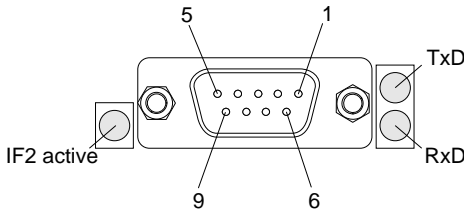

LED	Meaning
TxD	Send data over interface
RxD	Receive data over interface
IF1 active	Interface IF1 is active and IF2 is inactive.

Pin		Description
1	NC	
2	RxD	Receive Data
3	TxD	Transmit Data
4	12 V	Power Supply for external converter (200 mA)
5	GND	
6	NC	
7	RTS	Request To Send
8	CTS	Clear To Send
9	NC	

5.1.5 IF2 - RS422 / RS485
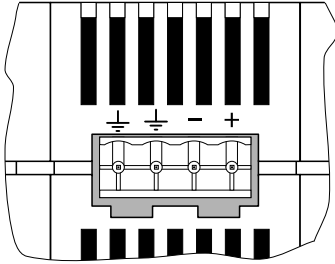
9 Pin D-Type Connector (F)

LED	Meaning
TxD	Send data over interface
RxD	Receive data over interface
IF2 active	Interface IF2 is active and IF1 is inactive.

	Description	
Pin	RS422	RS485
1	Shield	
2	TxD	NC
3	RxD	DATA
4	NC	NC
5	GND	
6	+5V$_{DC}$ (200 mA) Galvanic isolation	
7	$\overline{\text{TxD}}$	NC
8	$\overline{\text{RxD}}$	$\overline{\text{DATA}}$
9	NC	NC

Interfaces IF1 and IF2 are basically only one interface. Because of the triple assignment with different interface types, they are however routed through one male and one female connector. This means that only one of the interfaces can be used at any given time. The active interface is indicated with an LED.

5.1.6 Supply Voltage (24 VDC)

Pin		Description
1	**+**	+24 VDC
2	**-**	GND ⊥
3	⏚	Ground
4	⏚	Ground

All components must be properly grounded. (If in a rack, the ground cable length must not exceed 15 cm.). This is particularly important for the reasons listed below.

- A low resistance path from all parts of a system to earth minimizes exposure to shock in the event of short circuits or equipment malfunction.

- PANELWARE operator panels require proper grounding for correct operation.

The importance of a properly grounded system cannot be over emphasized.

5.1.7 Lithium Battery

The lithium battery is held in its own compart-ment and is covered for protection and for safety reasons.

Attention
Lithium batteries fall into the category of harm-ful waste. Please consider the legal provision regarding disposal in your area.