(10) Input Indicators

The input indicators light when input terminal contacts turn ON.

(11) Expansion I/O Unit Connector

CP-series Expansion I/O Units and Expansion Units (Analog I/O Units, Temperature Sensor Units, CompoBus/S I/O Link Units, or DeviceNet I/O Link Units) can be connected. Up to three Expansion Units or Expansion I/O Units can be connected to a CPU Unit with 30, 40 or 60 I/O points and one Expansion Unit or Expansion I/O Unit can be connected to a CPU Unit with 20 or 14 I/O points. (For details on using Expansion Units and Expansion I/O Units, refer to SECTION 7 Using Expansion Units and Expansion I/O Units.)

(12) Output Indicators

The output indicators light when output terminal contacts turn ON.

(13) External Power Supply and Output Terminal Block

External power supply terminals	CPU Units with AC power supply specifications have external 24-VDC, 300-mA, power supply terminals. (except for the CP1L-L□DR-A, which has a 200-mA power supply terminals). They can be used as service power supplies for input devices.
Output terminals	Used for connecting output devices.

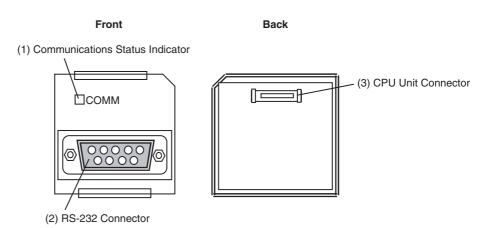
### 2-1-2 CP1W-CIF01 RS-232C Option Boards

An RS-232C Option Board can be mounted to an Option Board slot on the CPU Unit. With a CPU Unit with 30, 40 or 60 I/O points, either Option Board slot may be used.

When mounting an Option Board, first remove the slot cover. Grasp both of the cover's up/down lock levers at the same time to unlock the cover, and then pull the cover out.

Then to mount the Option Board, check the alignment and firmly press it in until it snaps into place.

**Caution** Always turn OFF the power supply to the PLC before mounting or removing an Option Board.



#### **RS-232C Connector**



Pin	Abbr.	Signal name	Signal direction
1	FG	Frame Ground	
2	SD (TXD)	Send Data	Output
3	RD (RXD)	Receive Data	Input
4	RS (RTS)	Request to Send	Output
5	CS (CTS)	Clear to Send	Input
6	5V	Power Supply	
7	DR (DSR)	Data Set Retry	Input
8	ER (DTR)	Equipment Ready	Output
9	SG (0V)	Signal Ground	
Connector hood	FG	Frame Ground	

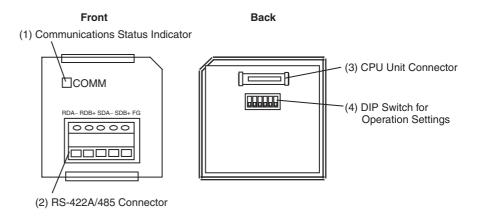
### 2-1-3 CP1W-CIF11/CIF12 RS-422A/485 Option Boards

An RS-422A/485 Option Board can be mounted to an Option Board slot on the CPU Unit. With a CPU Unit with 30, 40 or 60 I/O points, either Option Board slot may be used.

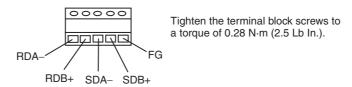
When mounting an Option Board, first remove the slot cover. Grasp both of the cover's up/down lock levers at the same time to unlock the cover, and then pull the cover out.

Then to mount the Option Board, check the alignment and firmly press it in until it snaps into place.

**Caution** Always turn OFF the power supply to the PLC before mounting or removing an Option Board.



#### RS-422A/485 Terminal Block



Specifications Section 2-2

#### **DIP Switch for Operation Settings**



Pin	Settings			
1	ON	ON (both ends)	Terminating resistance selection	
	OFF	OFF		
2	ON	2-wire	2-wire or 4-wire selection (See note 1.)	
	OFF	4-wire		
3	ON	2-wire	2-wire or 4-wire selection (See note 1.)	
	OFF	4-wire		
4			Not used.	
5	ON	RS control enabled	RS control selection for RD (See note 2.)	
	OFF	RS control disabled (Data always received.)		
6	ON	RS control enabled	RS control selection for SD (See note 3.)	
	OFF	RS control disabled (Data always sent.)		

Note

- (1) Set both pins 2 and 3 to either ON (2-wire) or OFF (4-wire).
- (2) To disable the echo-back function, set pin 5 to ON (RS control enabled).
- (3) When connecting to a device on the N side in a 1: N connection with the 4-wire method, set pin 6 to ON (RS control enabled).

  Also, when connecting by the 2-wire method, set pin 6 to ON (RS control enabled).

# 2-2 Specifications

### 2-2-1 CP1L CPU Units

## **General Specifications**

Power supply		AC power supply	DC power supply
Model 60 I/O points numbers		CP1L-M60DR-A, CP1L-M60DT-A	CP1L-M60DR-D, CP1L-M60DT-D, or CP1L-M60DT1-D
	40 I/O points	CP1L-M40DR-A, CP1L-M40DT-A	CP1L-M40DR-D, CP1L-M40DT-D, or CP1L-M40DT1-D
	30 I/O points	CP1L-M30DR-A, CP1L-M30DT-A	CP1L-M30DR-D, CP1L-M30DT-D, or CP1L-M30DT1-D
	20 I/O points	CP1L-L20DR-A, CP1L-L20DT-A, or CP1L-J20DR-A	CP1L-L20DR-D, CP1L-L20DT-D, CP1L-L20DT1-D, CP1L-J20DR-D, or CP1L-J20DT1-D
	14 I/O points	CP1L-L14DR-A, CP1L-L14DT-A, or CP1L-J14DR-A,	CP1L-L14DR-D, CP1L-L14DT-D, CP1L-L14DT1-D, CP1L-J14DR-D, or CP1L-J14DT1-D
	10 I/O points	CP1L-L10DR-A, CP1L-L10DT-A	CP1L-L10DR-D, CP1L-L10DT-D, or CP1L-L10DT1-D
Power supply		100 to 240 VAC 50/60 Hz	24 VDC
Operating voltage range		85 to 264 VAC	20.4 to 26.4 VDC