## **Appendix A**

## Comparison with C200H-CT001-V1

The C200H-CT021 High-speed Counter Unit has two-axis pulse input functions. These functions are not identical with the pulse input functions of the C200H-CT001-V1 High-speed Counter Unit. Refer to the following table.

| Function                                     | C200H-CT021   | C200H-CT001-V1  |
|--|---|---|
| Pulse input performance                      | Voltage input: 50,000 cps<br>Line driver input: 75,000 cps  | 50,000 cps  |
| Pulse input specification                    | With line driver input and without 5-V input  | With 5-V input and without line driver input  |
| Input setting                                | DM area   | DIP switch  |
| Reset mode                                   | Number of modes set with DM: 11   | Number of modes set with DIP switch: 17   |
| Output specification                         | NPN or PNP (selectable)<br>8 points/common<br>8 points/two axes   | NPN output only<br>4 points/common<br>8 axes/axis   |
| Operating mode                               | Newly added: Simple counter mode<br>Canceled: Latch mode  | Unavailable: Simple counter mode<br>Available: Latch mode   |
| Data transfer function                       | Impossible to change the transfer area or number of transfer data blocks after the Unit is turned ON.                                     | Impossible to change the transfer area or number of transfer data blocks after the Unit is turned ON. |
|  | Transfer area: DM 0000 to DM 1999 for the C200H and DM 0000 to DM 6655 for the C200HS, C200HX, C200HG, and C200HE                         | Transfer area: DM 0000 to DM 1999 for the C200H, C200HS, C200HX, C200HG, and C200HE                   |
| IORD/IOWR instructions                       | Available   | Unavailable   |
| External forced output                       | Set with IR bits. Not controlled with ladder programs. Available only when external outputs are not inhibited. Enabled with a DM command. | Set with IR bits.<br>Enabled with IR command. (Enable forced output)                                  |
| Sign indication                              | +: 0, -: F  | +: 0, -: 1  |
| Number of comparative upper and lower limits | 16 sets for two counters  | 16 sets/counter   |
| Number of preset values                      | 20 sets for two counters  | 20 sets/counter   |
| Count input signal                           | Up and down pulses input<br>Input A: Down<br>Input B: Up  | Up and down pulses input<br>Input A: Up<br>Input B: Down  |
|  | Pulse and direction input A: Direction Input B: Pulse   | Pulse and direction input<br>Input A: Pulse<br>Input B: Direction                                     |
| Set value<br>range/Present<br>counter value  | BCD/Hexadecimal data  | BCD data only   |
| Error clear                                  | The error clear command can be issued with the data transfer or IOWR instruction.   | With the error read operation.  |
| Error Flag                                   | Kept on hold while the Unit has the error.<br>Cleared with the error clear command.   | Cleared when the error is read.   |
|  | Read repeatedly.  | Read only once.   |
| Error code                                   | Trodd ropodiodry.   | Trodd orny orloo:   |