

SENSORLESS SERVO

New Product RELEASE

No.17-1E

Release of the plug-in option FR-A7AP-EX kit for position control (pulse train input)

For the FR-E700EX series drive units,
the plug-in option FR-A7AP-EX kit is now available.

Features

Position control by pulse train input

The amount of motor rotation (stop position) can be controlled by the pulse train signals output from the positioning module of the programmable controller.

Compatible pulse output form	Open collector*1
	Differential line driver
Compatible pulse train signal type	Forward pulse train + reverse pulse train
	Pulse train + sign
	A phase pulse train + B phase pulse train
Maximum input pulse	100k pulses/s

*1: Connect a 2W1kΩ pull-up resistor to the power supply.

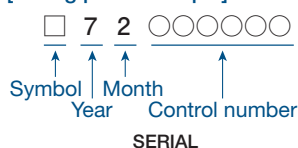
Compatible drive unit (FR-E700EX series)

The drive units manufactured in February 2017 or later are compatible.*2

Check the SERIAL number indicated on the rating plate of the drive unit for the manufactured year and month.

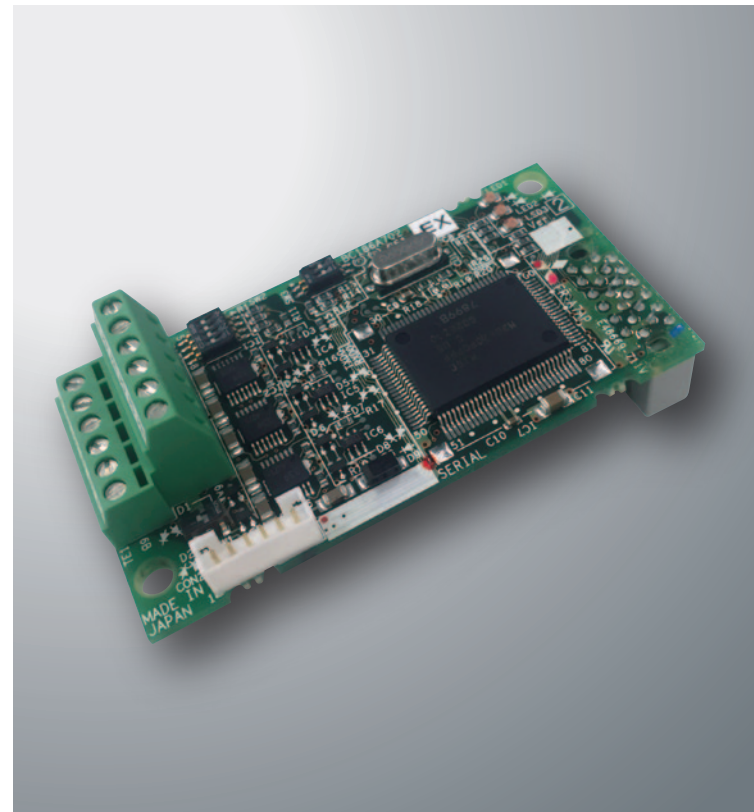
*2: The FL remote communication model is not compatible.

[Rating plate example]



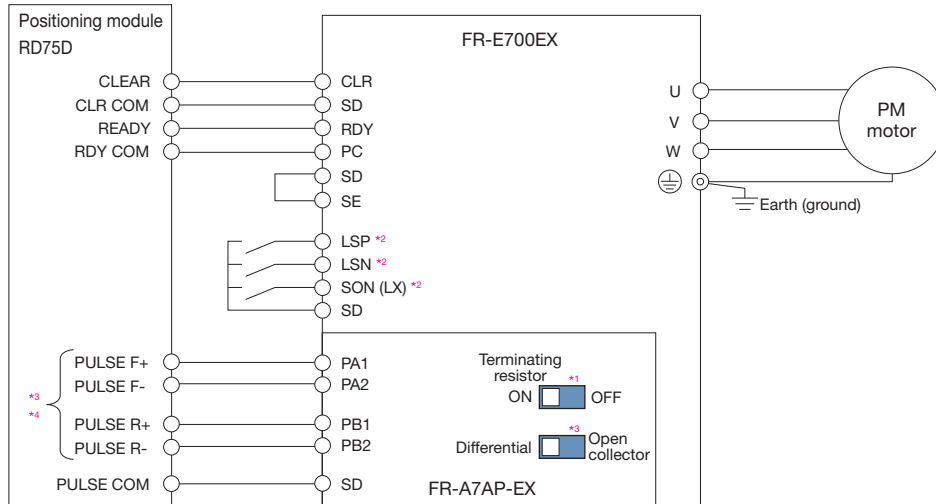
The SERIAL consists of one symbol, two characters indicating the production year and month, and six characters indicating the control number.

The last digit of the production year is indicated as the Year, and the Month is indicated by 1 to 9, X (October), Y (November), or Z (December).



Connection example

Connection with the positioning module of MELSEC iQ-R series RD75D



*1: For the open-collector output, set the terminating resistor selection switch to the OFF position (initial status).

*2: Use Pr.178 to Pr.184 (Input terminal function selection) to assign the function.

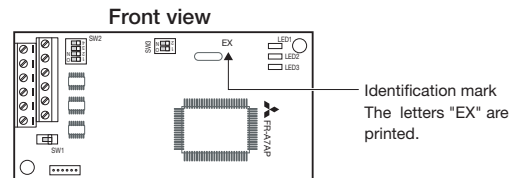
*3: The position of the switch differs depending on the form of the pulse signals input from the positioning module.
(This example shows the position for the differential line driver form.)

*4: When Pr.428 Command pulse selection \neq "1 or 4", connect the terminals of the positioning module (PULSE F+, PULSE F-, PULSE R+, and PULSE R-) with the terminals of the FR-A7AP-EX (PA1, PA2, PB1, and PB2) respectively as shown in the connection diagram.
When Pr.428 = "1 or 4", connect terminal PULSE R+ with terminal PA1, terminal PULSE R- with terminal PA2, terminal PULSE F+ with terminal PB1, and terminal PULSE F- with terminal PB2.

For the details of terminal connection, refer to the Instruction Manual of the FR-A7AP-EX kit.

[Note]

This product cannot be used for any drive unit other than the FR-E700EX series drive unit. Its specifications are different from the FR-A7AP (inverter option). Be sure to check the identification letters "EX" marked on the circuit board of this product before use.



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