

Control Products International Business Department
Product Business Headquarters
Advanced Automation Company

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Date: March 4, 2006
To: Those listed
Issued by: I. Yuminaga, Control Products International Business Department
Subject: The ECM3000/MY3000 and Motor-Synchronous Instrumentation
Purpose: To announce the unsuitability of the ECM3000 and MY3000 for motor-synchronous instrumentation using auxiliary potentiometers

Background: In some cases two Modutrol motors are operated to be same opening using a built-in auxiliary potentiometer or Q181A auxiliary potentiometer (mainly for air-conditioning applications). Since the ECM3000 is unsuitable for this use, we have suggested replacement with dual-potentiometer Modutrol motors (BSC products).

Dual-potentiometer Modutrol motors were obsoleted in December 2005 (refer to 05-A-0097E). Therefore the instrumentation of the system must be reconsidered. In any case, when replacing the Modutrol motor in a motor-synchronous instrumentation, the motor input should be changed to a 4–20mA signal.

In cases where the Q181A is mounted on the Modutrol motor, it can be used for motor-synchronous operation.

Required actions:

- (1) When a user wants to replace a potentiometer input Modutrol motor, check the user instrumentation.

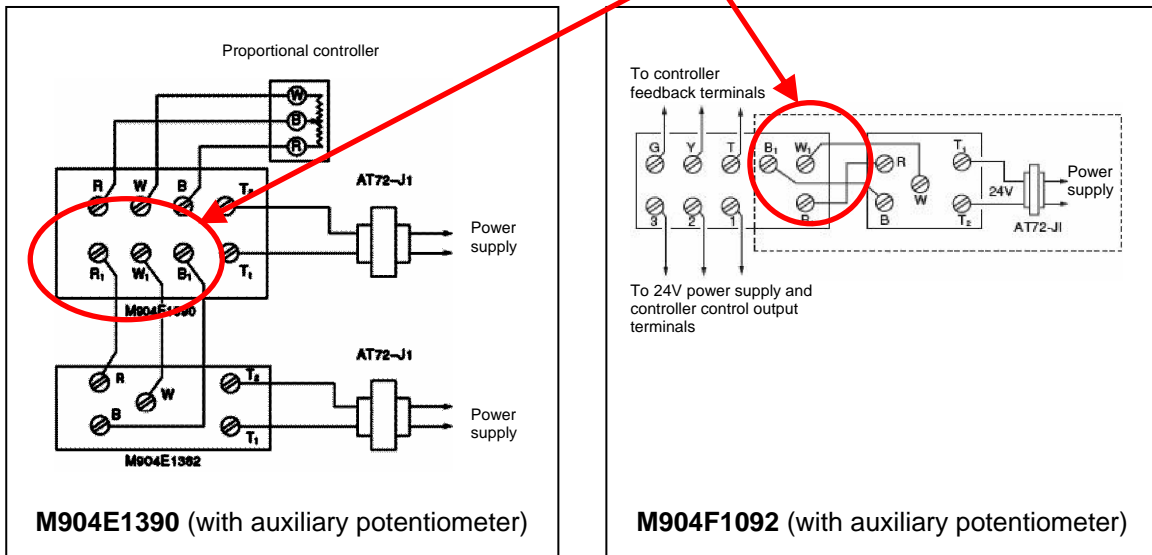
Input signal	Typical signal source	Possibility of motor replacement with the ECM3000 or MY3000
135 Ω potentiometer output of mechanical controller	L91, TY9800	Can be replaced with the ECM3000E or MY3000E .
Auxiliary potentiometer output of Modutrol motor (obsoleted)	M904F1092, M904E1390, Q181A	ECM3000E or MY3000E is not recommended (Can be used but has large operating delay). Change the input to a 4–20mA signal and replace with ECM3000G or MY3000G .

- (2) When a user wants to replace a dual-potentiometer Modutrol motor, check the user instrumentation.

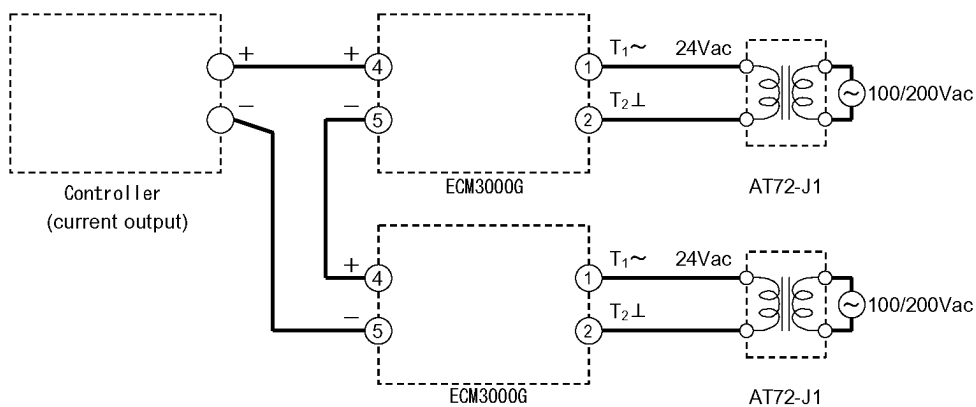
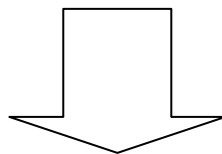
Recent Modutrol motor	Use of auxiliary potentiometer	Possibility of motor replacement with the ECM3000 + auxiliary potentiometer
M904F1092, M904E1390 or Motor + Q181A	For motor-synchronous operation	Auxiliary potentiometer on ECM3000 cannot be used. Change the input to a 4–20mA signal and replace with ECM3000G or MY3000G .
	For motor-opening indicator	Can be replaced with ECM3000 + auxiliary potentiometer. (Check specifications of connected device.)

Recommended instrumentation for replacement:

Auxiliary potentiometer output



Before replacement



After replacement

Review all of the instrumentation, change the motor input to a 4–20mA signal, and install a G type of ECM3000/MY3000.