

TOSVERT VF-A7/P7

Instruction Manual for Parameter *F631*

Thank you for purchasing the Toshiba industrial inverter "TOSVERT VF-A7/P7".
 This manual describes the functions of the *F631* parameter for the inverter TOSVERT VF-A7/P7.

Title	Communication No.	Function	Adjustment range	Minimum setting unit (Panel/Communication)	Default setting
<i>F631</i>	0631	Position deviation limit	0.1 to 6553 revolutions	0.1/0.1	16

Title	Write during running	Vector control			V/f Constant
		Speed control	Torque control	Position control	
<i>F631</i>	Disabled	-	-	-/●	-

Sensorless vector / Vector with sensor (● : valid, - : invalid)

1. Functions

This parameter has the function of tripping the inverter (*E-14* trip: excessive positional deviation) when the deviation of the motor from the position calculated using a position pulse command is larger than the value set with *F631*. This parameter also allows you to detect abnormal conditions in the encoder wiring and a tracking deviation of the motor.

* To use this function, position control needs to be exercised using the optional control unit VEC001Z. For the method of position control, refer to the instruction manual E6580768 (optional unit for vector control).

2. Parameter setting

Title	Function	Adjustment range	Setting value
<i>Pt</i>	Motor control mode selection	0~9	9
<i>F367</i>	Number of PG input pulses	1 to 9999 pulses/revolution	Set according to the PG
<i>F368</i>	Number of PG input phases	1: Single-phase input, 2: Two-phase input	Set according to the PG
<i>F370</i>	Electronic gear	100 to 4000 pulses/revolution	Set to specified value
<i>F631</i>	Position deviation limit	0.1 to 6553 revolutions	Set to specified value or maximum displacement

$$\text{Maximum displacement} = \frac{\text{Maximum input pulse}}{\text{Electronic gear (F370) setting value}} \quad [\text{revolution}]$$

3. Block diagram

