

## ■Version upgrade information

Following information is changed specification points by software version up (Ver. V132 → V134).

The software version can be checked by the "CPU1 version" of status monitor. Refer to "8.1 Screen display of [Monitor mode]" of VF-AS3 Instruction Manual (E6582062).

The software version would be changed without preliminary announcement.

### Added parameters

| Title                                       | Communication No.                           | Description                                                                                                                                                                                                                                                                              | Software version | *Instruction manual reference             |
|---------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------|
| C672                                        | C672                                        | [C672: Emb Eth. RSTP function]<br>0: Disabled (Default setting)<br>1: Enabled<br>■Function<br>If [C672] is set 1, you can use RSTP function on the Embedded Ethernet.                                                                                                                    | Ver.134 or later | E6582488: Embedded Ethernet RSTP function |
| C673 – C675                                 | C673 – C675                                 | Added parameter for manufacturer                                                                                                                                                                                                                                                         | Ver.134 or later | -                                         |
| F106                                        | 0106                                        | [F106: Opposite direction command during 3-wire running]<br>0: Enabled (Default setting)<br>1: Stop<br>■Function<br>If [F106] is set 1, when you input a command for the opposite direction during 3-wire operation, the motor will stop instead of operating in the opposite direction. | Ver.132 or later | [7.2.1]                                   |
| F456                                        | 0456                                        | Changed the default setting of [F456: Exciting forcing level] for the following models at ND rating.<br><br>4550PC : 100 → 95%<br>4132KPC : 100 → 85%<br>4160KPC : 100 → 95%<br>4200KPC : 100 → 85%                                                                                      | Ver.132 or later | [5.3.2]<br>[6.23.1]                       |
| C668                                        | C668                                        | Change the default setting of [C668: Emb Eth. Web server] from 1: Enabled to 0: Disabled.<br>0: Disabled (Default setting)<br>1: Enabled<br><br>Note: If the CPU version is Ver132 or later and you are use the Webserver, set [F668] to 1.                                              | Ver.132 or later | E6582125: Embedded Ethernet function      |
| A275 – A279<br>A287<br>A288<br>A289<br>A677 | A275 – A279<br>A287<br>A288<br>A289<br>A677 | Added parameter for manufacturer                                                                                                                                                                                                                                                         | Ver.132 or later | -                                         |
| F111 – F124<br>F151 – F158<br>A973 – A976   | 0111 – 0124<br>0151 – 0158<br>A973 – A976   | In order to add the following "Setting for manufacturer", the upper limit of parameters related to input terminal functions has been changed from 203 to 219.<br><br>204 - 205 : -<br>206/207 : Setting for manufacturer<br>208/209 : Setting for manufacturer<br>210 - 219 : -          | Ver.132 or later | -                                         |

| Title                                                        | Communication No.                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Software version | *Instruction manual reference |
|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| AUF                                                          | 0093                                                         | When [AUF: Guidance function] = "1: Embedded Ethernet setting", "MAC address monitor" was added to the display information of the operation panel.<br>Title: MAC address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Ver.130 or later | [4.2.1]                       |
| F169<br>F404<br>F406<br>F407<br>F408<br>F410<br>F411<br>F422 | 0169<br>0404<br>0406<br>0407<br>0408<br>0410<br>0411<br>0422 | [F169: V/f Pattern 2]<br>0-9<br>0: V/f constant<br>1:-<br>2: Automatic torque boost<br>3: Vector control 1<br>4-8:-<br>9: Vector control 2 (speed / torque)<br>[F404: 2nd motor automatic torque boost]<br>Adjustment range: 0.01 - 30.00 [Unit: %]<br>[F406: 2nd motor rated capacity]<br>Adjustment range: 0.01 - 315.0 [Unit: kW]<br>[F407: 2nd motor leakage inductance]<br>Adjustment range: 0.0 - 25.0 [Unit: %]<br>[F408: 2nd motor rated current]<br>Adjustment range: Depends on drive capacity [Unit: A]<br>[F410: 2nd motor no load current]<br>Adjustment range: 10 - 90 [Unit: %]<br>[F411: 2nd motor rated speed]<br>Adjustment range: 100 - 64000 [Unit: min <sup>-1</sup> ]<br>[F422: Motor constant select]<br>Extended the range from 2 to 3<br>Changed the name of the selection 0,1 and 2<br>0: Use motor1 const. for motor2<br>1: Use motor2 const. for motor2<br>2: 0 + special auto-tuning<br>3: 1 + special auto-tuning<br>■Function<br>Added V/f Pattern 2 and 2nd motor constant<br>Vector control can also be selected for the second motor. | Ver.130 or later | Information1<br>Information2  |
| F484<br>F485                                                 | 0484<br>0485                                                 | [F484: Load inertia ratio 2]<br>Adjustment range: 0.1 to 100.0 [Unit: Times]<br>[F485: Speed control response select]<br>0: 2 level spd gain, 2nd gain: F459<br>1: 2 level spd gain, 2nd gain: F484<br>2: 4 point setting for speed gain<br>■Function<br>Added 2nd Load inertia function.<br>Selection of load inertia ratio 2 and auto-tuning of load inertia ratio 2 are possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ver.130 or later | Information3                  |

| Title                                                | Communication No.                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Software version | *Instruction manual reference |
|------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------|
| A687<br>A688<br>A689<br>A690<br>A691<br>A694<br>A695 | A687<br>A688<br>A689<br>A690<br>A691<br>A694<br>A695 | [A687: Speed control response switching frequency 2]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[A688: Speed control response switching frequency 3]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[A689: Speed control response switching frequency 4]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[A690: Load inertia ratio 3]<br>Adjustment range: 0.1 - 100.0 [Unit: Times]<br>[A691: Speed control response 3]<br>Adjustment range: 0.1 - 25.0 [Unit: -]<br>[A694: Load inertia ratio 4]<br>Adjustment range: 0.1 - 100.0 [Unit: Times]<br>[A695: Speed control response 4]<br>Adjustment range: 0.1 - 25.0 [Unit: -]<br>■Function<br>Added the point conversion function to speed control gain | Ver.130 or later | Information4                  |
| F436<br>F437<br>F438<br>F439                         | 0436<br>0437<br>0438<br>0439                         | [F436: Torque limit point frequency 1]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[F437: Torque limit point frequency 2]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[F438: Torque limit point frequency 3]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>[F439: Torque limit point frequency 4]<br>Adjustment range: 0.0 - FH [Unit: Hz]<br>■Function<br>Added point conversion function to torque limit                                                                                                                                                                                                                                                                                            | Ver.130 or later | Information5                  |
| A986<br>A987<br>A988<br>A989                         | A986<br>A987<br>A988<br>A989                         | [A986: Analog input function target 31]<br>Adjustment range: 0 to 6<br>[A987: Analog function setting destination 31]<br>Adjustment range: 0 to 23<br>[A988: Analog input function target 41]<br>Adjustment range: 0 to 6<br>[A989: Analog function setting destination 41]<br>Adjustment range: 0 to 23<br>■Function<br>Added channel 3,4 to analog My function                                                                                                                                                                                                                                                                                                                                    | Ver.130 or later | E6582114: My function manual  |
| A691<br>A694                                         | A691<br>A694                                         | [A961: Analog function setting destination 11]<br>[A964: Analog function setting destination 21]<br>Added function to selection 12 of [A961] and [A964]<br>12: Load inertia ratio (F459)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ver.130 or later | E6582114: My function manual  |
| F701                                                 | 0701                                                 | [F701: Current, voltage units select]<br>Added function to selection 2,3<br>(selection of parameter for manufacturer) of [F701]<br>2,3 : -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ver.130 or later | [5.2.7]                       |
| F789                                                 | 0789                                                 | Added parameter for manufacturer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ver.130 or later | -                             |
| A678                                                 | A678                                                 | Added parameter for manufacturer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ver.130 or later | -                             |

\*Refer to 「VF-AS3 Instruction manual」 (E6582062)

## \*Information1: Switching two to four types of motor characteristics

### ■ Function

These parameters are used for setting when you want to switch up to four types of motors for a single inverter or when you want to switch the motor V/f characteristics (four types) according to the purpose or operation style.

V/f1-V/f4 are switched by the input terminal signals.

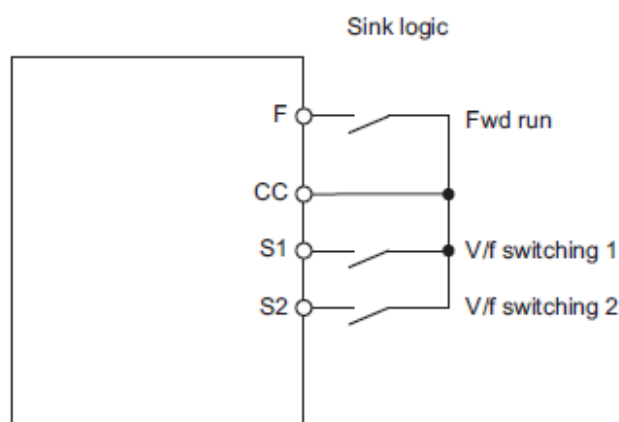
### Memo

- [Pt: V/f Pattern 1] is valid only for V/f1, and [F169: V/f Pattern 2] is valid only for V/f2.  
When V/f3 or V/f4 is selected, V/f pattern is V/f constant mode.
- For the parameters that are selected when V/f1-V/f4 are switched, refer to the following table.

### ■ Switch terminal setting

As default setting, V/f1-V/f4 switching functions are not assigned to the input terminals. Assign the functions to unused input terminals.

Example: When "28: V/f switching 1" is assigned to terminal [S1], and "30: V/f switching 2" to terminal [S2].



| Input terminal |       | Parameters to be selected                                                                                                                                                                                                                        | V/f              | Output terminal<br>(function number) |        |
|----------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------|--------|
| S1-CC          | S2-CC |                                                                                                                                                                                                                                                  |                  | No.186                               | No.188 |
| OFF            | OFF   | Base frequency 1: [vL]<br>Base frequency voltage 1: [vLv]<br>Manual torque boost 1: [vb]<br>Motor overload protection current 1: [tHrA]<br>1st motor parameter *1                                                                                | 1 *3*4<br>(V/f1) | OFF                                  | OFF    |
| ON             | OFF   | Base frequency 2: [F170]<br>Base frequency voltage 2: [F171]<br>Manual torque boost 2: [F172]<br>Motor overload protection current 2: [F182]<br>When [F422] = "0", "2": 1st motor parameter *1<br>When [F422] = "1", "3": 2nd motor parameter *2 | 2 *4<br>(V/f2)   | ON                                   | OFF    |
| OFF            | ON    | Base frequency 3: [F174]<br>Base frequency voltage 3: [F175]<br>Manual torque boost 3: [F176]<br>Motor overload protection current 3: [F183]<br>1st motor parameter *1                                                                           | 3 *5<br>(V/f3)   | OFF                                  | ON     |
| ON             | ON    | Base frequency 4: [F178]<br>Base frequency voltage 4: [F179]<br>Manual torque boost 4: [F180]<br>Motor overload protection current 4: [F184]<br>1st motor parameter *1                                                                           | 4 *5<br>(V/f4)   | ON                                   | ON     |

\*1 1st motor parameter: [F402], [F405], [F412], [F415], [F416], [F417]

\*2 2nd motor parameter: [F404], [F406], [F407], [F408], [F410], [F411]

Regarding [F422] setting, refer to the [Information2]

\*3 When you want to use [Pt] of "1", "4" - "8", or "10" - "12", select V/f1.

\*4 When you want to use [Pt] of "2", "3", or "9", select V/f1 or V/f2.

\*5 When you select V/f3 or V/f4, V/f is assumed to be constant (control equivalent to control with [Pt] = "0").

- Be sure to perform V/f switching in the stop state. Switching is impossible during run. It takes 0.2 seconds before switching. Therefore, be sure to wait at least 0.2 seconds after inputting a switching signal, and then start operation.
- When you use an input terminal where a variety of functions can be assigned, you can link the switching of torque limit or acceleration/deceleration time to V/f switching.

For operation panel run, you can also set the acceleration/deceleration time for [F504: Panel Acc/Dec select].

## \* Information2: Setting motor parameters

### 1) Parameter setting

| Title | Parameter name        | Adjustment range                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Default setting |
|-------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| F400  | Offline auto-tuning   | 0: -<br>1: Reset motor parameters (0 after execution)<br>2: Auto-tuning at run command (0 after execution)*1<br>3: Auto-tuning at TB ON*1 (0 after execution)<br>4: Motor parameters auto calculation (0 after execution)<br>5: 4+2 (0 after execution)<br>6: Auto-tuning at run command during TB ON*1<br>7: Auto-tuning F402 only at run command during TB ON<br>8: Auto-tuning at TB on each time<br>9: Auto-tuning at run command (only one time after power on) | 0               |
| F422  | Motor constant select | 0: Use 1st motor parameter for 2nd motor, Standard auto-tuning<br>1: Use 2nd motor parameter for 2nd motor, Standard auto-tuning<br>2: Use 1st motor parameter for 2nd motor, Special auto-tuning<br>3: Use 2nd motor parameter for 2nd motor, Special auto-tuning                                                                                                                                                                                                   | 0               |

\*1 When auto-tuning the 2nd motor, it is necessary to set [F422]="1" or "3".

\*2 The parameters to be tuned are different between standard and special auto tuning.

Refer to "2) Selecting auto-tuning setting".

## 2) Selecting auto-tuning setting

### 1: Reset motor parameters (0 after execution)

Set motor parameters [F402: Automatic torque boost], [F412: Leakage inductance], and [F416: Motor no load current] to default setting values (motor parameter values of a 4P Toshiba IE3 motor which has the same capacity as the inverter's applicable motor capacity).

### 2: Auto-tuning at run command (0 after execution)

An auto-tuning is performed when the motor starts for the first time after settings are made and the motor parameters<sup>\*1</sup> are automatically set with the motor wiring considered.

### 3: Auto-tuning at TB ON (0 after execution)

Assign "66: Offline auto-tuning (67 is the inversion signal)" to the digital input terminal.

When that input terminal is turned ON, an auto-tuning is performed. The motor parameters<sup>\*1</sup> are automatically set.

This setting allows an auto-tuning while the motor is stopped; use this function when the motor cannot start operation directly after the auto-tuning due to some reason related to the operation of the machinery.

However, if the standby signal is OFF, this function will not be enabled.

To make an auto-tuning again, turn the input terminal OFF and set [F400] to "3" first and then turn the terminal ON again.

### 4: Motor parameters auto calculation (0 after execution)

Execute motor parameters auto calculation.

### 5: 4+2 (0 after execution)

Execute "4: Motor parameters auto calculation". "2: Auto-tuning at run command" is set.

When the motor starts for the first time after settings are made, an auto-tuning is executed.

### 6: Auto-tuning at run command during TB ON

Assign "66: Offline auto-tuning (67 is the inversion signal)" to the digital input terminal.

While that input terminal is ON, an auto-tuning is always performed at startup. The motor parameters<sup>\*1</sup> are automatically set.

### 7: Auto-tuning F402 only at run command during TB ON

Assign "66: Offline auto-tuning (67 is the inversion signal)" to the digital input terminal.

While that input terminal is ON, an auto-tuning is always performed at startup. Only [F402: Automatic torque boost] is set.

### 8: Auto-tuning at TB on each time

Assign "66: Offline auto-tuning (67 is an inverted signal)" to the digital input terminal.

By only turning on the assigned input terminal, the auto-tuning automatically executes every time and sets the motor parameters<sup>\*1</sup>.

**9: Auto-tuning at run command (only one time after power on)**

When the power is turned off after setting and when the power is turned on again for the first time, the auto-tuning automatically executes 1 time and sets the motor parameters<sup>\*1</sup>.

<sup>\*1</sup> Tuned motor parameters by [F400] = "2", "3", "6", "8", and "9".

| [F422] setting | Motor constant to be tuned                                                                                                 | [F422] setting | Motor constant tuned when the second motor is selected                                                                                                 |
|----------------|----------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0              | [F402: Automatic torque boost]<br>[F412: Leakage inductance]                                                               | 1              | [F404: 2nd Motor Automatic torque boost]<br>[F407: 2nd Motor Leakage inductance]                                                                       |
| 2              | [F402: Automatic torque boost]<br>[F412: Leakage inductance]<br>[F416: Motor no load current]<br>[F417: Motor rated speed] | 3              | [F404: 2nd Motor Automatic torque boost]<br>[F407: 2nd Motor Leakage inductance]<br>[F410: 2nd Motor no load current]<br>[F411: 2nd Motor rated speed] |

If [F422] = "1" or "3" is set and 1st/3rd/4th motor is selected, the motor constant for 1st motor will be tuned.

## \* Information3: Speed gain adjustment

You can adjust speed gain as below to set [F485].

| Title | Communication No. | Parameter name                | Adjustment range                                                                                                         | Default setting | Write during Running <sup>*1</sup> |
|-------|-------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------|
| F485  | 0485              | Speed control response select | 0: F466 enabled and use F459 in 2nd gain<br>1: F466 enabled and use F484 in 2nd gain<br>2: 4-point of speed control gain | 0               | N                                  |

\*1: Y: Writable N: Not writable

### ■ Use Load inertia ratio 2

#### 1) How to switch speed control gains

In case [F485]="1", load inertia ratio is switched as well as Speed control response, Speed control stabilization coefficient, Speed reference filter coefficient at speed gain switching.

(1) To switch the gain by the parameter

During high-speed or low-speed operation, you need to change the speed control gain before adjusting it in some cases for reasons of machine characteristics. In this case, use the gain switching.

Gains are switched according to the setting frequency in [F466] as shown in the following figure. When [F466] = "0.0", the speed control gain switching is disabled. Speed control gain 1 is enabled.

[F459: Load inertia ratio 1]

[F460: Speed control response 1]

[F461: Speed control stabilization coefficient 1]

[F462: Speed reference filter coefficient 1]

Speed control gain 1

[F484: Load inertia ratio 2]

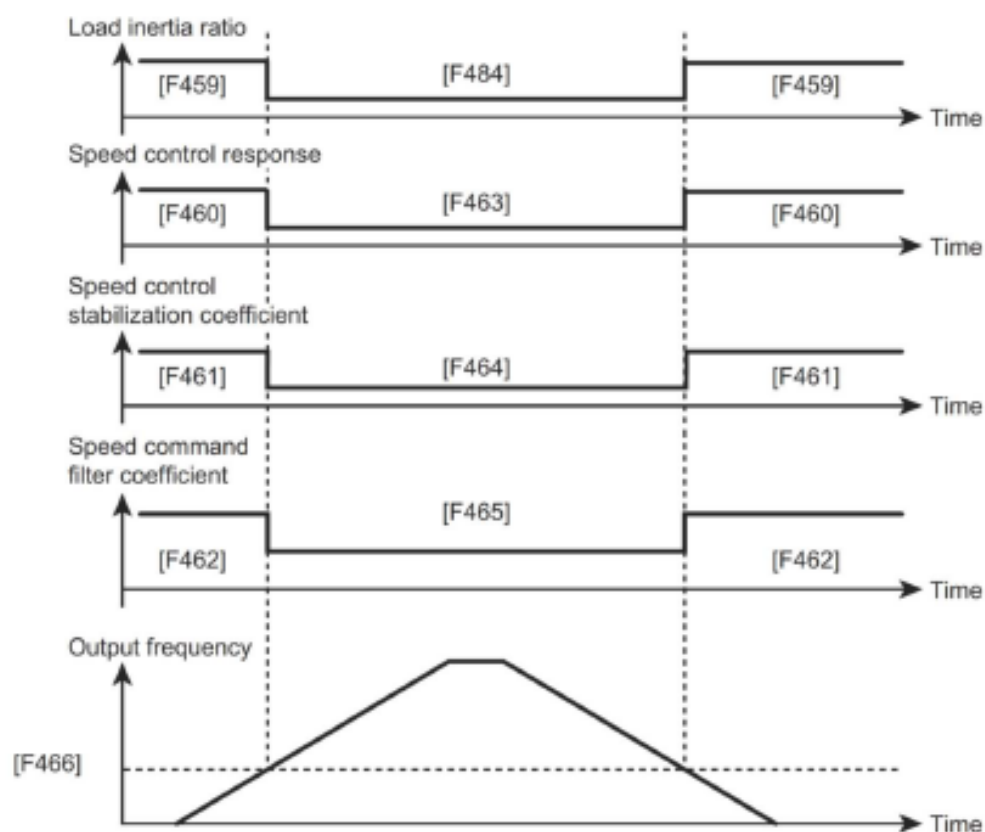
[F463: Speed control response 2]

[F464: Speed control stabilization coefficient 2]

[F465: Speed reference filter coefficient 2]

[F466: Speed control response switching frequency 1]

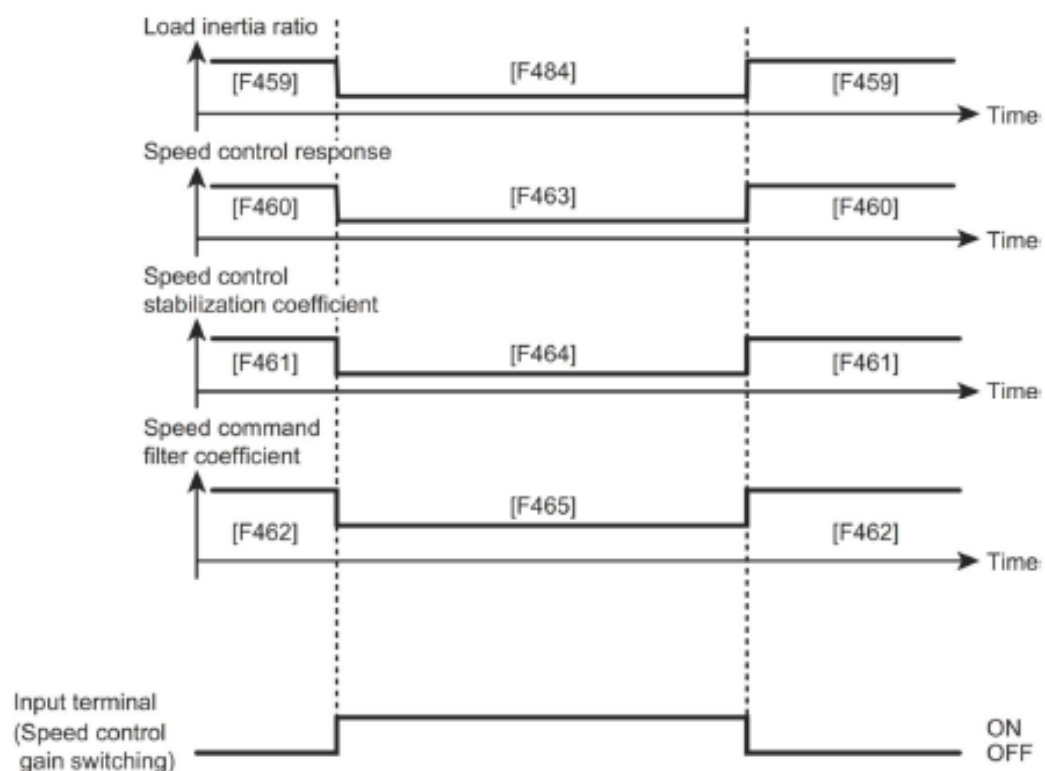
Speed control gain 2



In a range where the output frequency is [F466] or less, [F460], [F461], and [F462] are enabled. In a range where the output frequency is over [F466], [F463], [F464], and [F465] are enabled.

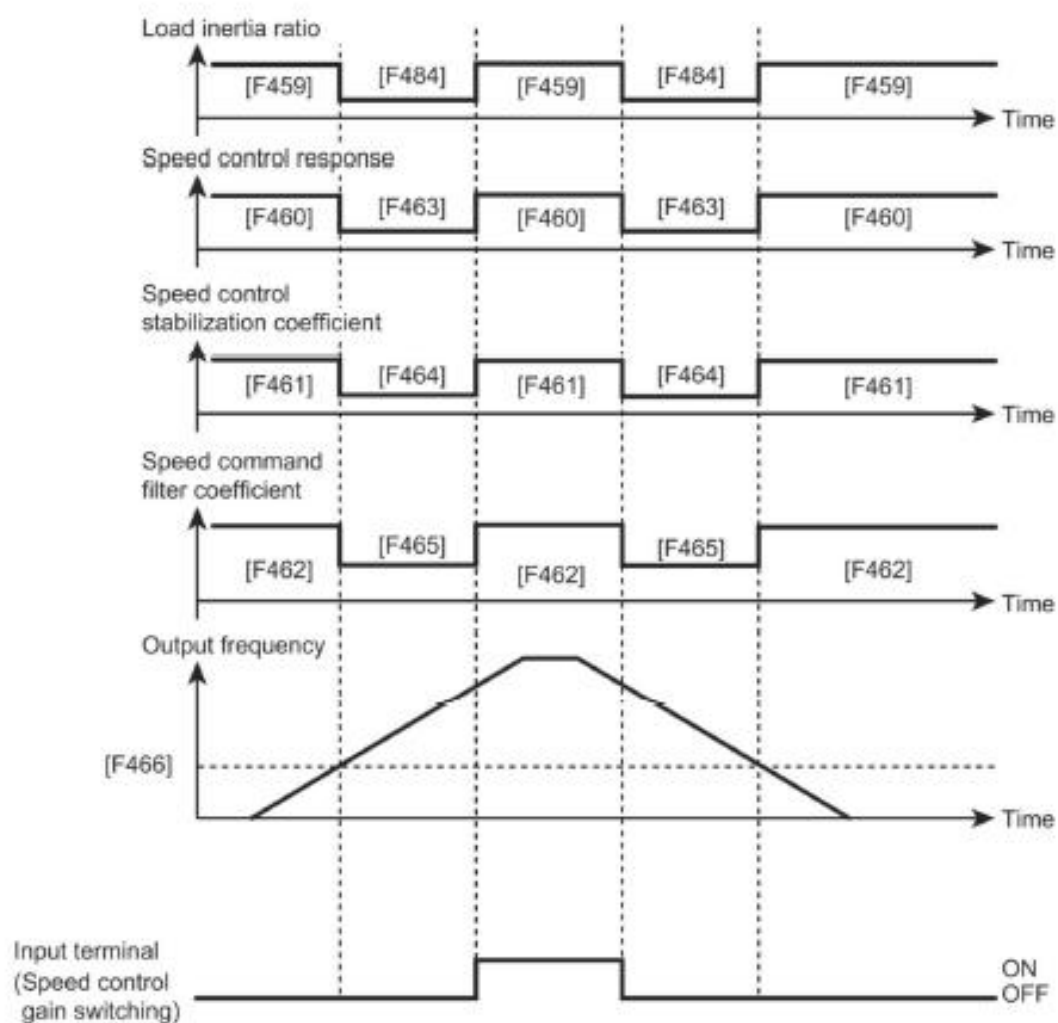
## (2) To switch gains by the input terminal

Use the input terminal "68: Speed control gain switching" to switch between speed control gain 1 and speed control gain 2. Gains are switched according to the input terminal signal as shown in the following figure.



By using [F466] together with the speed gain switching by the input terminal, you can switch between speed control gain 1 and speed control gain 2.

Gains are switched by the output frequency and the input terminal signal.



---

**2) Auto tuning for [459: Load inertia ratio 1], [F484: Load inertia ratio 2]**

In case [F485] = "1", the auto tuning for Load inertia 1 and Load inertia 2 can be operated separately.

In case you want to tune [F459: Load inertia ratio 1], execute load inertia auto tuning with input terminal "68: Speed control gain switching" = OFF.

In case you want to tune [F484: Load inertia ratio 2], execute load inertia auto tuning with input terminal "68: Speed control gain switching" = ON.

In case [F485] = "0", only [F459: Load inertia ratio 1] can be auto tuned. In case [F485] = "2", load inertia ratio auto tuning is not available.

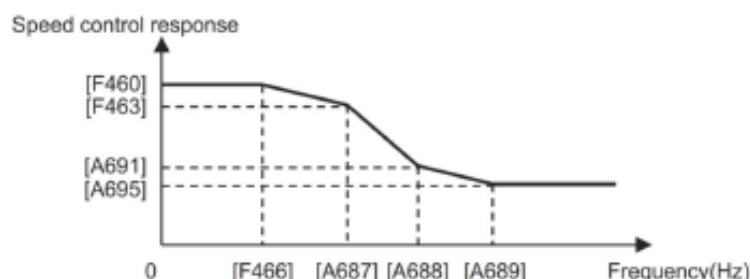
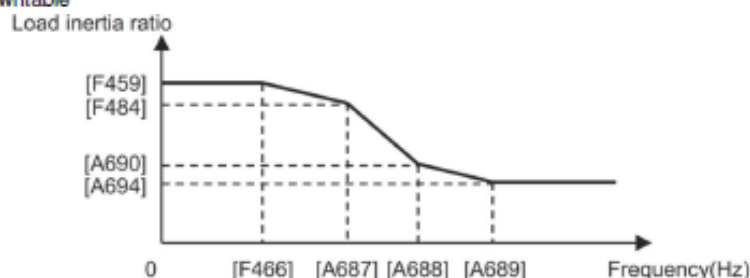
## \* Information4: The point change of speed control gains

### ■ The point change of speed control gains

In case [F485] = "2", you can set frequency characteristic for load inertia ratio, and speed control response with 4 points linear interpolation as below.

| Title | Communication No. | Parameter name                               | Adjustment range | Default setting | Write during Running <sup>*1</sup> |
|-------|-------------------|----------------------------------------------|------------------|-----------------|------------------------------------|
| F466  | 0466              | Speed control response switching frequency 1 | 0.0 - FH (Hz)    | 0.0             | Y                                  |
| A687  | A687              | Speed control response switching frequency 2 | 0.0 - FH (Hz)    | 0.0             | Y                                  |
| A688  | A688              | Speed control response switching frequency 3 | 0.0 - FH (Hz)    | 0.0             | Y                                  |
| A689  | A689              | Speed control response switching frequency 4 | 0.0 - FH (Hz)    | 0.0             | Y                                  |
| F459  | 0459              | Load inertia ratio 1                         | 0.1 - 100.0      | 1.0             | Y                                  |
| F484  | 0484              | Load inertia ratio 2                         | 0.1 - 100.0      | 1.0             | Y                                  |
| A690  | A690              | Load inertia ratio 3                         | 0.1 - 100.0      | 1.0             | Y                                  |
| A691  | A691              | Load inertia ratio 4                         | 0.1 - 100.0      | 1.0             | Y                                  |
| F460  | 0460              | Speed control response 1                     | 0.0 - 25.0       | 0.0             | Y                                  |
| F463  | 0463              | Speed control response 2                     | 0.0 - 25.0       | 0.0             | Y                                  |
| A694  | A694              | Speed control response 3                     | 0.1 - 25.0       | 1.0             | Y                                  |
| A695  | A695              | Speed control response 4                     | 0.1 - 25.0       | 1.0             | Y                                  |

\*1: Y: Writable N: Not writable



- The points Speed control response switching frequency ([F466], [A687] to [A689]) is set to "0" are invalid.
- Do not set same value without 0Hz to more than 2 parameters of Speed control response switching frequency ([F466], [A687] to [A689]). If do so, "A-07" alarm is displayed to LED panel.
- The points speed control response ([F460], [F463]) is set to "0.0" are invalid.
- In case all 4 points are invalid, speed response gain 1 is valid.

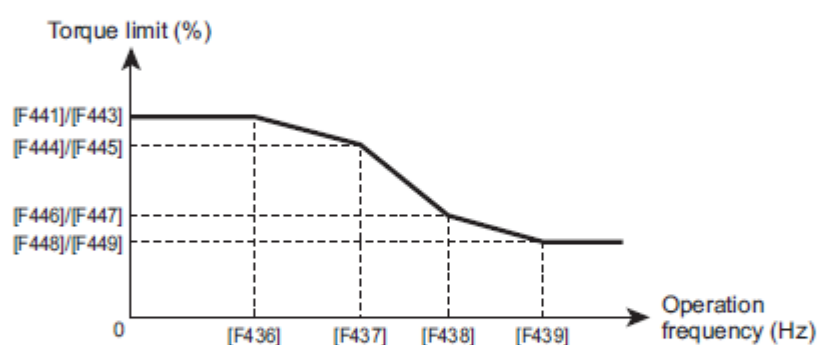
About Speed control stabilization coefficient, and Speed reference filter coefficient, [F461], [F462] are valid respectively. The input terminal "68: Speed control gain switching" is not available.

## \* Information5: Switching between torque limit levels

### When torque limits are applied with the run frequency

You can switch between torque limit levels 1 to 4 with the run frequency.

| Title | Parameter name                 | Adjustment range | Unit | Default setting |
|-------|--------------------------------|------------------|------|-----------------|
| F436  | Torque limit point frequency 1 | 0.0 - FH         | Hz   | 0.0             |
| F437  | Torque limit point frequency 2 | 0.0 - FH         |      | 0.0             |
| F438  | Torque limit point frequency 3 | 0.0 - FH         |      | 0.0             |
| F439  | Torque limit point frequency 4 | 0.0 - FH         |      | 0.0             |



Set four points, (F436, F441/F443), (F437, F444/F445), (F438, F446/F447), and (F439, F448/F449). You can change the torque limit level with the run frequency.

### Memo

If multiple values other than 0 Hz are set for [F436] - [F439], the "A-08" alarm appears and only the value with the smallest parameter number becomes effective.

Of [F436] - [F439], any points for which 0 Hz is set are ineffective.

If 250% is set for a torque limit at at least one of the effective points on the power running side, a torque limit of 250% applies to all speed areas on the power running side.

This is also true of the regenerating side. If 250% is set at at least one point, a torque limit of 250% applies to all speed areas on the regenerating side.

## Errata sheet

| Instruction manual                            | Page | Content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "Pump control function Manual"<br>(E6582124③) | 30   | <p>9. Combination with Sleep function (Note)</p> <p>When [A200] = "2", the sleep function cannot be used regardless of the [A213] setting.</p> <p>Error</p> <ul style="list-style-type: none"><li>- Sleep function can not be used in case these 2 conditions are both satisfied. (in this case, not recovering from sleep state.)</li></ul> <p>[A200] = "2"<br/>[A213] = "0"</p> <p>Correct</p> <ul style="list-style-type: none"><li>- The sleep function cannot be used when [A200] = "2". (in this case, not recovering from sleep state.)</li></ul> |

©Toshiba Schneider Inverter Corporation 2023