YASKAWA

YASKAWA AC Drive GA700
Supplemental Technical Manual

Introduction

Thank you for purchasing YASKAWA AC Drive GA700.
This supplemental technical manual describes the functions added or changed with a GA700 software upgrade, and should be read to ensure proper usage. Read this manual together with the manual (TOEP C710617 xx) included with the product and the GA700 Technical Manual (SIEP C710617 xx) that can be found on our documentation website. Observe the safety messages and precautions to ensure correct application of the product.

Applicable Software Version

This manual applies to GA700 for software versions S1038 or later.
The software version is indicated on the nameplate affixed to the side of the product, and also can be viewed by using monitor parameter U1-25.

Modified Contents

This supplemental manual explains about these modifications:

1. A parameter that is not initialized by A1-03=2220, 3330 [2-Wire Initialization, 3-Wire Initialization] has been added
2. The C6-05 [Carrier Freq Proportional Gain] setting range has been changed
3. Support of Ethernet/IP protocol Forward Close command operation (F7-43 [PLC Communication Disconnect Selection] has been added)
4. CE [Modbus Communication Error] detection function has been expanded (H5-05=2 [CE Detection: Enabled During Run])
5. Operation of the output voltage limit operating range when PM motor energy-saving control is disabled has been improved (nA-04 [Output Voltage Limit q-Axis Current Command Reference Switch Hysteresis] has been added)
6. Adjustment parameters for PM motor control have been added (E5-08 [PM q-Axis Inductance (at Flux Saturation)], n8-71 [Speed Observer Control D Gain], n8-91 [Id Limit at Output Voltage Limit])
7. Parameter description details used in fine-tuning during test run have been changed
8. Troubleshooting description details when the power supply for the fan and inrush current prevention circuit fails have been changed
9. Support for JOHB-SMP3 BACnet/IP Communication Protocol <1>
10. Support for JOHB-SMP3 BACnet/IP Communication Protocol Parameters <1>
11. L8-32 [Cooling Fan Failure Selection] Incompatible <2>

Document No.: EZZ024701<2>
Prepared in September 2025

1. A parameter that is not initialized by A1-03=2220, 3330 [2-Wire Initialization, 3-Wire Initialization] has been added

A1-12 [Bluetooth ID] has been added to parameters that are not initialized by A1-03=2220, 3330 [2-Wire Initialization, 3-Wire Initialization]. (Underlined parts are added items)

No.	Name
A1-00	Language Selection
A1-02	Control Method Selection
A1-07	DriveWorksEZ Function Selection
A1-12	**Bluetooth ID**
E1-03	V/f Pattern Selection
...	...

2. The C6-05 [Carrier Freq Proportional Gain] setting range has been changed

The upper limit value of C6-05 [Carrier Freq Proportional Gain] which is the gain to linearly change the carrier frequency depending on the output frequency has been changed to 300. (Underlined parts are changed items)

No. (Hex.)	Name	Description	Default Setting (Range)
C6-05 (0227)	Carrier Freq Proportional Gain	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the proportional gain for the carrier frequency. Set C6-02 = F [Carrier Frequency Selection = User Defined (C6-03 to C6-05)] to set this parameter.	Determined by C6-02 (0 - **300**)

3. Support of Ethernet/IP protocol Forward Close command operation

Operation stop/run continuous operation when the Forward Close command in the EtherNet/IP protocol is received while the drive is running can be selected at F7-43 [PLC Communication Disconnect Selection].

No. (Hex.)	Name	Description	Default Setting (Range)
F7-43 (1BCE)	PLC Communication Disconnect Selection	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the operation when the Forward Close command (PLC communication disconnect command) in the Ethernet/IP protocol is received from the network during run. 0: Operation continued 1: Clear Run command from communication option 2: bUS [Option Communication Error]	0 (0 - 2)

Note: This parameter is supported by JOHB-SMP3 option cards with EtherNet/IP communication protocol software version PRG: 3003 and later.

Refer to U6-97 [OPT SPARE 4] to check the EtherNet/IP communication protocol software version of the JOHB-SMP3 option card. <1>

4. CE [Modbus Communication Error] detection function has been expanded

Option 2 [Enabled during Run] has been added to H5-05 [Comm Fault Detection Selection] and the detection function of CE [MEMOBUS Communication Error] has been expanded. (Underlined parts are changed items)

No. (Hex.)	Name	Description	Default Setting (Range)
H5-05 (0429)	Comm Fault Detection Selection	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the function that detects CE [Modbus Communication Error] issues during MEMOBUS/Modbus communications. 0: Disabled Does not detect CE. The drive continues operation. 1: Enabled Detects CE. If the drive detects CE, it will operate as specified by the setting of H5-04 [Communication Error (MEMOBUS/Modbus Communication Error) Stop Method]. **2: Enabled during Run** **If the drive detects CE during Run, it will operate as specified by the setting of H5-04 [Communication Error (MEMOBUS/Modbus Communication Error) Stop Method]. If the drive detects CE while it is stopped, it will detect a CE minor fault.**	1 (0 - **2**)

5. Operation of the output voltage limit operating range when PM motor energy-saving mode is disabled has been improved

A function for suppressing shock has been added as shock sometimes occurs on some PM motors at the output voltage limit with b8-01=0 [Energy Saving Control Disabled] set. Sets the switch hysteresis of the q-axis current command referenced to the d-axis current command at nA-04 [Output Voltage Limit q-Axis Current Switch Hysteresis]. Usually it is not necessary to change this parameter.

No. (Hex.)	Name	Description	Default Setting (Range)
nA-04 (1BF5) Expert	Output Voltage Limit q-Axis Current Command Reference Switch Hysteresis	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the switch hysteresis of the q-axis current command referenced to the d-axis current command to suppress shock at the output voltage limit. Sets the switch hysteresis of the q-axis current command as a percentage of motor rated current.	-10% (-20% - 0%)

6. Adjustment parameters for PM motor control have been added

E5-08 [PM q-Axis Inductance (at Flux Saturation)], n8-71 [Speed Observer Control D Gain], and n8-91 [Id Limit at Output Voltage Limit] have been added as adjustment parameters for PM motor control. The adjustment procedure is given in "7. Parameter description details used in fine-tuning during test run have been changed."

No. (Hex.)	Name	Description	Default Setting (Range)
E5-08 (0330) Expert	PM q-Axis Inductance (Lq at Flux Saturation)	V/f CL-V/f OLV CLV AOLV OLV/PM **AOLV/PM** CLV/PM EZOLV Sets the q-axis inductance (Lq at flux saturation) that the drive uses for speed estimation. Adjust this parameter when STPo [Motor Step-Out Detected] or OC [Overcurrent] occurs.	0.00 mH (0.00 mH – 600.00 mH)
n8-71 (065F) Expert	Speed Observer Control D Gain	V/f CL-V/f OLV CLV AOLV OLV/PM **AOLV/PM** CLV/PM EZOLV Sets the derivative gain that the drive uses for speed estimation. Adjust this parameter when STPo [Motor Step-Out Detected] or OC [Overcurrent] occurs.	5.00 (0.00 - 10.00)
n8-91 (02F7) Expert	Id Limit at Output Voltage Limit	V/f CL-V/f OLV CLV AOLV **OLV/PM** AOLV/PM CLV/PM EZOLV Sets the Id limit value at output voltage limit. Adjust this parameter when STPo [Motor Step-Out Detected] or OC [Overcurrent] occurs.	-50% (-200% - 0%)

7. Parameter description details used in fine-tuning during test run have been changed

Because of "6. Adjustment parameters for PM motor control have been added," n8-91 [Id Limit at Output Voltage Limit], n8-71 [Speed Observer Control D Gain] and E5-08 [PM q-Axis Inductance (Lq at Flux Saturation)] have been added to the parameters that are used for fine-tuning during a test run in the "Open Loop Vector Control for PM" and "Advanced Open Loop Vector Control Method for PM Motors" modes. N8-69 [Speed Observer Control P Gain], n8-39 [HFI LPF Cutoff Freq] and n8-11 [Observer Calculation Gain 2] have also been added to enable flexible fine-tuning during test run. (Underlined parts in the table below are added items)

◆A1-02=5 [OLV/PM: Open Loop Vector Control for PM Mode]

Issue	Parameter Number	Possible Solutions	Default	Recommended Setting
The drive detected stalling, STPo [Motor Step-Out Detected] or OC [Overcurrent] at high speed and maximum output voltage.	N8-62 [Output Voltage Limit Level]	Set to a value lower than the actual input voltage.	• 200.0V • 400.0V	Set this parameter lower than the input power supply voltage.
	n8-91 [Id Limit at Output Voltage Limit] *1	**Decrease the setting in -5%-unit decrements.**	**-50%**	**-150% to -50%**

*1 n8-91 [Id Limit at Output Voltage Limit] is enabled on drives with software versions PRG:01038 and later.

◆A1-02=6 [AOLV/PM: Advanced Open Loop Vector Control for PM Mode]

Issue	Parameter Number	Possible Solutions	Default	Recommended Setting
Hunting or fault occurs when the load/speed fluctuates. (Fault is detected at impact load)	**n8-69 [Speed Observer Control P Gain]**	**• If torque or speed response are slow, increase the setting value in 0.20 increments. • If hunting or oscillation occurs, decrease the setting value in 0.20 decrements.**	**1.00**	**0.20 - 5.00**
	n8-71 [Speed Observer Control D Gain]*2	**Decrease the setting in 0.50-unit decrements.**	**5.00**	**1.00 - 5.00**
	E5-08 [PM q-Axis Inductance (Lq at Flux Saturation)]*2	**• Set the q-axis inductance value at flux saturation shown on the motor nameplate or test report. • Set the value of E5-06 [PM q-Axis Inductance] and increase the setting value until vibration is suppressed. (Set E5-08 within the range of values of E5-06 and E5-07. The function is disabled when the value is set to 0.00.)**	**0.00 mH**	**E5-06 and E5-07**
Hunting, vibration or abnormal noise from the motor occurs when n8-57=1 [High Frequency Injection Function: Enabled]	**n8-39 [HFI LPF Cutoff Freq]**	**Set the setting value to 50% of the setting value of n8-36 [HFI Frequency Level for L Tuning].**	**250 Hz**	**50% of n8-36 [HFI Frequency Level for L Tuning]**
Speed drops when a load is applied. (When a torque limit state has not occurred)	**n8-11 [Observer Calculation Gain 2]**	**Decrease the setting in 10-unit decrements.**	**Determined by n8-72**	**50.0 - 300.0**

*2 n8-71 [Speed Observer Control D Gain] and E5-08 [PM q-Axis Inductance (Lq at Flux Saturation)] are enabled on drives with software versions PRG:01038 and later.

8. Troubleshooting description details when the power supply for the fan and inrush current prevention circuit fails have been changed

The troubleshooting description details for when the power supply for the fan and inrush current prevention circuit has failed have been added. (Underlined parts are changed items)
One of the FAn1 [Drive Cooling Fan Failure], Uv1 [DC Bus Undervoltage] and Uv3 [Soft Charge Answerback Fault] faults or a Uv [DC Bus Undervoltage] minor fault is detected when the power supply for the fan and inrush current prevention circuit has failed.

Faults

◆FAn1 [Drive Cooling Fan Fault]

Code	Name	Causes	Possible Solutions
FAn1	Drive Cooling Fan Fault	The cooling fan stopped operating correctly.	• Examine cooling fan operation. • Re-energize the drive. • Examine U4-03 [Cooling Fan Ope Time] and U4-04 [Cool Fan Maintenance]. If the performance life of the cooling fan is expired or if there is damage to the fan, replace the fan.
		The circulation fan is damaged.	• Examine circulation fan operation. • Re-energize the drive. • Examine U4-03 [Cooling Fan Ope Time] and U4-04 [Cool Fan Maintenance]. If the performance life of the circulation fan is expired or if there is damage to the circulation fan, replace the circulation fan.
		The power supply for the fan and inrush current prevention circuit has failed. **(Models 2257 to 2415, 4208 to 4H12)**	**• Re-energize the drive and check to see if the fault stays.** **• If the fault stays, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.**

◆Uv1 [DC Bus Undervoltage]

Code	Name	Causes	Possible Solutions
Uv1	DC Bus Undervoltage	There is a phase loss in the drive input power.	Correct errors with the wiring for main circuit drive input power.
		There is loose wiring in the drive input power terminals.	Tighten the terminal screws to the correct tightening torque.
		The drive input power voltage is changing too much.	• Examine the input power for problems. • Make the drive input power stable.
		There was a loss of power.	Use a better power supply.
		The main circuit capacitors have become unserviceable.	Examine the capacitor maintenance time in monitor U4-05 [CapacitorMaintenance]. If U4-05 is more than 90%, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.
		The relay or contactor on the soft-charge bypass relay is damaged.	U4-06 [PreChargeRelayMainte] shows the performance life of the soft-charge bypass relay. If U4-06 is more than 90%, replace the control board or the drive. For information about replacing the board, contact Yaskawa or your nearest sales representative.
		The power supply for the fan and inrush current prevention circuit has failed. **(Models 2257 to 2415, 4208 to 4H12)**	**• Re-energize the drive and check to see if the fault stays.** **• If the fault stays, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.**

◆Uv3 [Soft Charge Answerback Fault]

Code	Name	Causes	Possible Solutions
Uv3	Soft Charge Answerback Fault	There is damage to the relay or contactor on the soft-charge bypass relay.	• Re-energize the drive. • If the fault stays, replace the control board or the drive. • Monitor U4-06 [PreChargeRelayMainte] shows the performance life of the soft-charge bypass relay. If U4-06 is more than 90%, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.
	The power supply for the fan and inrush current prevention circuit has failed. (Models 2257 to 2415, 4208 to 4H12)	**• Re-energize the drive and check to see if the fault stays. • If the fault stays, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.**

Minor fault

◆Uv [Undervoltage]

Code	Name	Causes	Possible Solutions
Uv	Undervoltage	The drive input power voltage is changing too much.	• Examine the input power for problems. • Make the drive input power stable. • If the input power supply is good, examine the magnetic contactor on the main circuit side for problems.
		There is a phase loss in the drive input power.	Correct errors with the wiring for main circuit drive input power.
		There is loose wiring in the drive input power terminals.	Tighten the terminal screws to the correct tightening torque.
		There was a loss of power.	Use a better power supply.
		The main circuit capacitor circuit has become unserviceable.	Examine the capacitor maintenance time in monitor U4-05 [CapacitorMaintenance]. If U4-05 is more than 90%, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.
		The drive input power transformer is too small, and voltage drops when the power is switched on.	• Check for an alarm when a molded-case circuit breaker, leakage breaker (ELCB, GFCI, or RCM/RCD) (with overcurrent protective function), or magnetic contactor is ON. • Check the capacity of the drive power supply transformer.
		Air inside the drive is too hot.	Check the ambient temperature of the drive.
		The Charge LED is broken.	Replace the board or the entire drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.
		The power supply for the fan and inrush current prevention circuit has failed. (Models 2257 to 2415, 4208 to 4H12)	**• Re-energize the drive and check to see if the fault stays. • If the fault stays, replace the control board or the drive. For information about replacing the control board, contact Yaskawa or your nearest sales representative.**

9. Support for JOHB-SMP3 BACnet/IP Communication Protocol <1>

JOHB-SMP3 BACnet/IP communication protocol is now supported. JOHB-SMP3 BACnet/IP communication protocol descriptions have been added to compatible options and related monitors and registers.
(Underlined parts are added items.)
GA700 drives with software version S1038 or later are compatible with JOHB-SMP3 option cards with software version S8207 (BACnet/IP:Ver7001*1) or later.

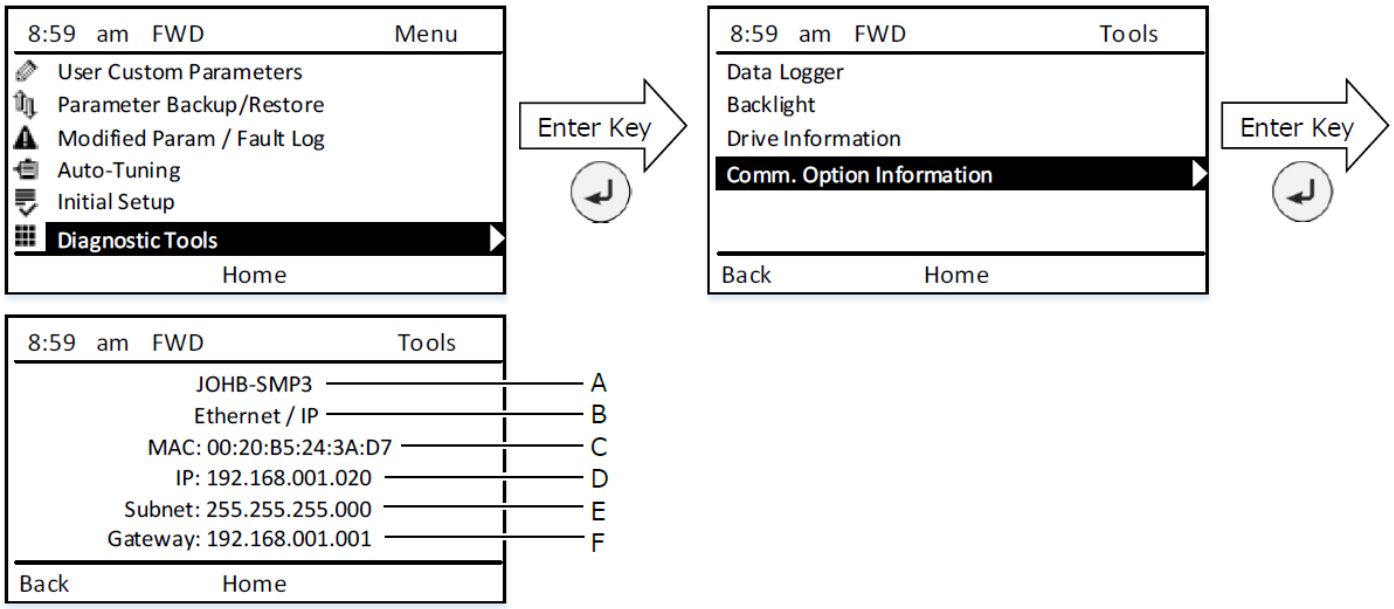
*1: JOHB-SMP3 option cards have an overall software version and a separate software version for each communication protocol. Check the PRG number on the purchased box for the overall software version. Start the applicable communication protocol and check U6-97 described below to check the communication protocol software version.

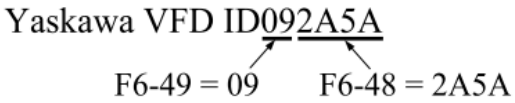
◆ U6: Operation Status Monitors

No. (Hex.)	Name	Description	MFAO Signal Level
U6-97 (07F7)	OPT SPARE 4	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Shows the software version of the option card. (When using JOHB-SMP3.) Note: When using other option cards, refer to the technical manual of the option card used.	No signal output available

◆ Display Communication Options Information

When JOHB-SMP3 is connected, the various information of the communication options can be checked as follows by selecting [Diagnostic Tools] > [Comm. Option Information] from the menu screen.



Code	Name	Description
A	Station Name or **BACnet/IP Device Object Name**	Displays the station name in the PROFINET protocol. **Displays the device object name in the BACnet/IP protocol.** "JOHB-SMP3" is displayed in the case of other protocols. Note: With PROFINET, the station name set on the PLC is displayed. However, when the station name is not set, "No Station Name" is displayed. **With BACnet/IP, the device object name set on the building automation controller is displayed. However, when the device object name is not set, ""Yaskawa VFD ID" + F6-49 (Hex.) + F6-48 (Hex.)" is displayed.** **Example: For F6-49=09 (Hex.) and F6-48=2A5A (Hex.):**  **If the station name or device object name is longer than 32 characters, only the first 32 characters are displayed.**
B	Protocol	Displays the protocol set by JOHB-SMP3.
C	MAC Address	Shows the currently available MAC Address (same content as U4-76 to U4-78 is displayed).
D	IP Address	Shows the currently available local IP Address (same content as U6-80 to U6-83 is displayed). In the case of protocols that do not have an IP address, "000.000.000.000" is displayed.
E	Subnet Mask	Shows the currently available subnet mask (same content as U6-84 to U6-87 is displayed). In the case of protocols that do not have an IP address, "000.000.000.000" is displayed.
F	Gateway Address	Shows the currently available gateway address (same content as U6-88 to U6-91 is displayed). In the case of protocols that do not have an IP address, "000.000.000.000" is displayed.

◆ Available Communication Options

Type of Communications	Option model
Modbus TCP/IP	SI-EM3
PROFINET	SI-EP3
EtherNet/IP	SI-EN3
EtherCAT	SI-ES3
BACnet/IP	**JOHB-SMP3**
...	...

◆ Communications Data Table

■ Monitor Data

Register No. (Hex.)	Description	
00B0	Option codes connected to CN5-A	The drive stores option codes in the register. AI-A3 = 0003 (Hex.) AO-A3 = 0004 (Hex.) DI-A3 = 0001 (Hex.) DO-A3 = 0002 (Hex.) PG-B3 = 0011 (Hex.) PG-F3 = 0021 (Hex.) PG-RT3 = 0023 (Hex.) PG-X3 = 0012 (Hex.) SI-C3 = 5343 (Hex.) SI-EM3 = 1005 (Hex.) SI-EN3 = 1006 (Hex.) SI-ET3 = 1004 (Hex.) SI-N3 = 534E (Hex.) SI-P3 = 5350 (Hex.) SI-S3 = 5353 (Hex.) SI-T3 = 5354 (Hex.) SI-W3 = 1003 (Hex.) **JOHB-SMP3 (BACnet/IP) = 100C (Hex.)**
...		...

◆ Peripheral Devices and Options

Name	Model	Intended Use	Document No.
PROFINET	SI-EP3	This option uses the host controller over PROFINET communication to: • Operate and stop the drive • Set and view parameters • Monitor output frequency, output current, and other statuses	TOBPC73060089 SIxPC73060089
EtherCAT	SI-ES3	This option uses the host controller over EtherCAT communication to: • Operate and stop the drive • Set and view parameters • Monitor output frequency, output current, and other statuses	TOBPC73060096 SIxPC73060096
BACnet/IP	**JOHB-SMP3**	**This option uses the host controller over BACnet/IP communication to: • Operate and stop the drive • Set and view parameters • Monitor output frequency, output current, and other statuses**	**TOBPC7306000H SIxPC7306000M**
...		...	

◆U4: Maintenance Monitors

No. (Hex.)	Name	Description	MFAO Signal Level
U4-75 (1BC4)	Comm Option Type	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Displays the protocol of the communication option currently connected to the drive. For details on the relationship between protocols and displayed values, refer to Table 9.1.	No signal output available

Table 9.1 Relationship Between *U4-75* Value and Communication Protocol

Communication Protocol (Communication Option)	*U4-75* value (Hex.)
Modbus TCP/IP (SI-EM3)	1
EtherNet/IP (SI-EN3) or PROFINET (SI-EP3)	2
EtherCAT (SI-ES3)	4
CC-Link (SI-C3)	8
DeviceNet (SI-N3)	9
PROFIBUS-DP (SI-P3)	A
CANopen (SI-S3)	B
MECHATROLINK-II (SI-T3)	D

Communication Protocol (Communication Option)	*U4-75* value (Hex.)
LONWORKS (SI-W3)	11
MECHATROLINK-III (SI-ET3)	12
Protocol not set (JOHB-SMP3)	70
Modbus TCP/IP (JOHB-SMP3)	71
EtherNet/IP (JOHB-SMP3)	72
EtherCAT (JOHB-SMP3)	74
BACnet/IP (JOHB-SMP3)	**75**
PROFINET (JOHB-SMP3)	78
Communication Option not Connected	FF

◆F6, F7: Communication Options and Ethernet Options

Parameter	Modbus TCP/IP SI-EM3	PROFINET SI-EP3	EtherNet/IP SI-EN3	BACnet/IP JOHB-SMP3
F6-01 to F6-03	○	○	○	○
F6-04	-	-	-	-
F6-06	○	○	○	-
F6-07, F6-08	○	○	○	○
F6-10, F6-11	-	-	-	-
F6-14	○	○	○	○
F6-16	○	○	○	○
F6-20, F6-21	-	-	-	-
F6-22	-	-	-	-
F6-23 - F6-26	-	-	-	-
F6-30 - F6-32	-	-	-	-
F6-35, F6-36	-	-	-	-
F6-45 - F6-47	-	-	-	-
F6-48, F6-49	-	-	-	○
F6-50 to F6-53	-	-	-	-
F6-54	-	-	○	-
F6-55 - F6-71	-	-	-	-
F7-01 - F7-15	○	○	○	○
F7-16	○	-	-	-
F7-17 - F7-42	-	○	○	-
F7-50 - F7-57	-	-	-	○
F7-60 to F7-79	-	-	-	-

10. Support for JOHB-SMP3 BACnet/IP Communication Protocol Parameters <1>

When the JOHB-SMP3 BACnet/IP communication protocol is connected, the parameters below can be used with GA700 drives with software versions S1038 and later.

No. (Hex.)	Name	Description	Default (Range)
F7-50 (1BC1)	BACnet/IP Port	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the UDP port on which the drive will receive incoming BACnet messages.	47808 (1024 - 65535)
F7-51 (1BE9)	BBMD Foreign Register Addr 1	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the first octet of the IP Address of the BACnet Broadcast Management Device (BBMD) to which the drive will register as a foreign device.	0 (0 - 255)
F7-52 (1BEA)	BBMD Foreign Register Addr 2	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the second octet of the IP Address of the BACnet Broadcast Management Device (BBMD) to which the drive will register as a foreign device.	0 (0 - 255)
F7-53 (1BEB)	BBMD Foreign Register Addr 3	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the third octet of the IP Address of the BACnet Broadcast Management Device (BBMD) to which the drive will register as a foreign device.	0 (0 - 255)
F7-54 (1BEC)	BBMD Foreign Register Addr 4	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the fourth octet of the IP Address of the BACnet Broadcast Management Device (BBMD) to which the drive will register as a foreign device.	0 (0 - 255)
F7-55 (1BED)	BBMD Foreign Port #	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the UDP port of the BBMD device to which the drive will register.	47808 (1024 - 65535)
F7-56 (1BEE)	BBMD Foreign Register Time	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the time interval in which the drive will repeat BBMD foreign registration.	3600 s (0 - 65535 s)
F7-57 (1BEF)	BACnet/IP BUS Timeout Value	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets the length of time that the drive will wait after it receives a Run command or frequency reference command before it detects a *bUS* fault.	3600 s (0 - 65535 s)

11. L8-32 [Cooling Fan Failure Selection] Incompatible <2>

When the cooling fan or internal fan is abnormal, FAn1 [Drive Cooling Fan Fault] is detected. Therefore, L8-32 [Cooling Fan Failure Selection] is incompatible (deleted).

No. (Hex.)	Name	Description	Default Setting (Range)
L8-32 (04E2)	Cooling Fan Failure Selection	V/f CL-V/f OLV CLV AOLV OLV/PM AOLV/PM CLV/PM EZOLV Sets operation when the drive detects FAn [Internal Fan Fault].	1 (0 - 4)

Note: If you need to set the operation of the drive when FAn1 is detected, refer to EZZ024767, Section 3 (Support of Emergency Operation Function at Cooling Fan Fault).