

[Issue No.] T99-0032-J

[Title] Cautions when using MELSEC-Q/L/QS/AnS series, MELSEC iQ-R series, and GOT-A900/GOT1000/GOT2000 series connected to a personal computer with the RS-232/USB interface

[Date of Issue] July 2003 (Ver.J: June 2016)

[Relevant Models] MELSEC-Q/L/QS/AnS series, MELSEC iQ-R series, GOT-A900/GOT1000/GOT2000 series

Thank you for your continued support of Mitsubishi MELSEC-Q/L/QS/AnS series, MELSEC iQ-R series, and Mitsubishi Graphic Operation Terminal GOT-A900/GOT1000/GOT2000 series.

The relevant models mentioned in this bulletin include an RS-232/USB interface. (GOT-A900 series does not include USB) Therefore, take precautions when connecting to a personal computer via the RS-232/USB interface, as an electric shock or a module/GOT^{*1} failure may occur. We recommend to carefully follow these cautions, in order to help prevent an accident from occurring. (Also, refer to the manufacturers own safety guidelines for further reference)

1. Cautions

When connecting the module/GOT^{*1} to the RS-232/USB interface of the personal computer, refer to the personal computer manufacturers handbook as an addition to observing the following cautions.

1.1 When operating a personal computer using AC power.

- (1) **For a personal computer that uses a 3-pin power plug or power plug with a ground lead type, make sure to use a plug socket including a ground input electrode or ground the earth lead, respectively.**

In addition, be sure to ground a personal computer and the programmable controller/GOT to the protective ground conductor.

- (2) **For a personal computer that uses a 2-pin power plug without ground lead, make sure to connect the module/GOT^{*1} to the personal computer according to the following procedures. And, it is recommended to supply the same power supply line to a personal computer and the programmable controller/GOT.**

(a) When connecting to the personal computer

- 1) Pull out the power plug of the personal computer from the AC outlet.**
- 2) Confirm that the power plug of the personal computer has been pulled out from the AC outlet, and connect RS-232/USB cables.**
- 3) Insert the power plug of the personal computer into the AC outlet.**

(b) When connecting extension cables/GOT bus connection cables

- 1) Pull out the power plugs of all personal computers connected to the target module/GOT^{*1} from the AC outlets.**
- 2) Confirm that the power plugs of all personal computers have been pulled out from the AC outlets, and connect extension cables/GOT bus connection cables.**
- 3) Insert the power plugs of all personal computers into the AC outlets.**

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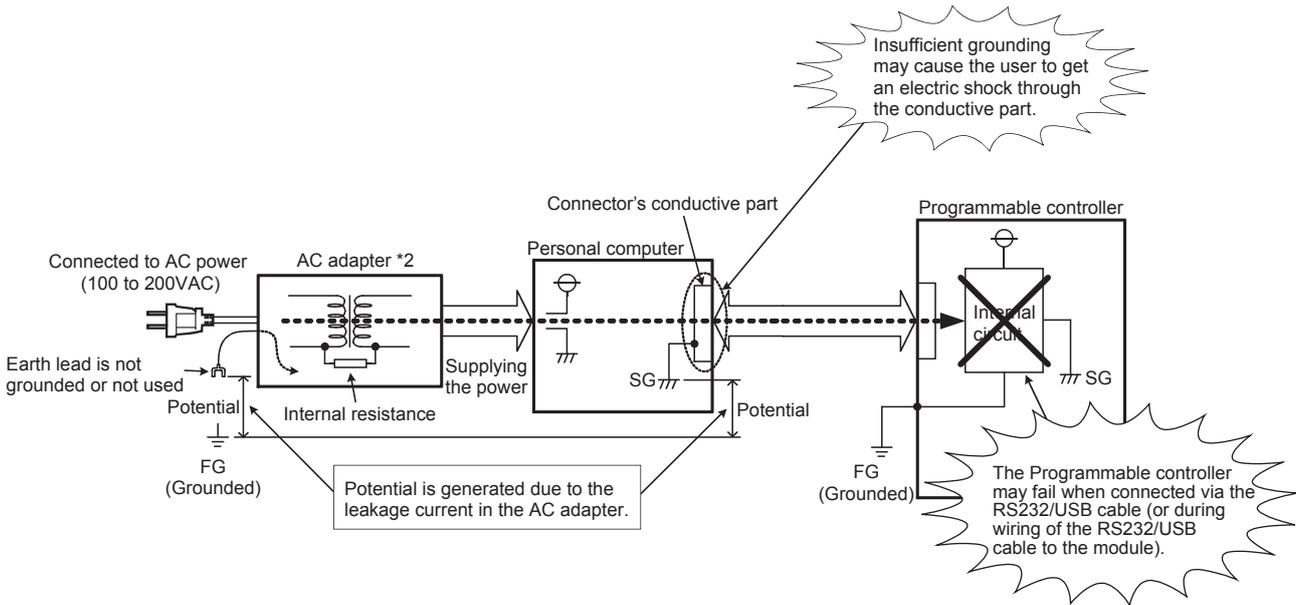
1.2 When operating personal computer using battery power.

No restrictions.

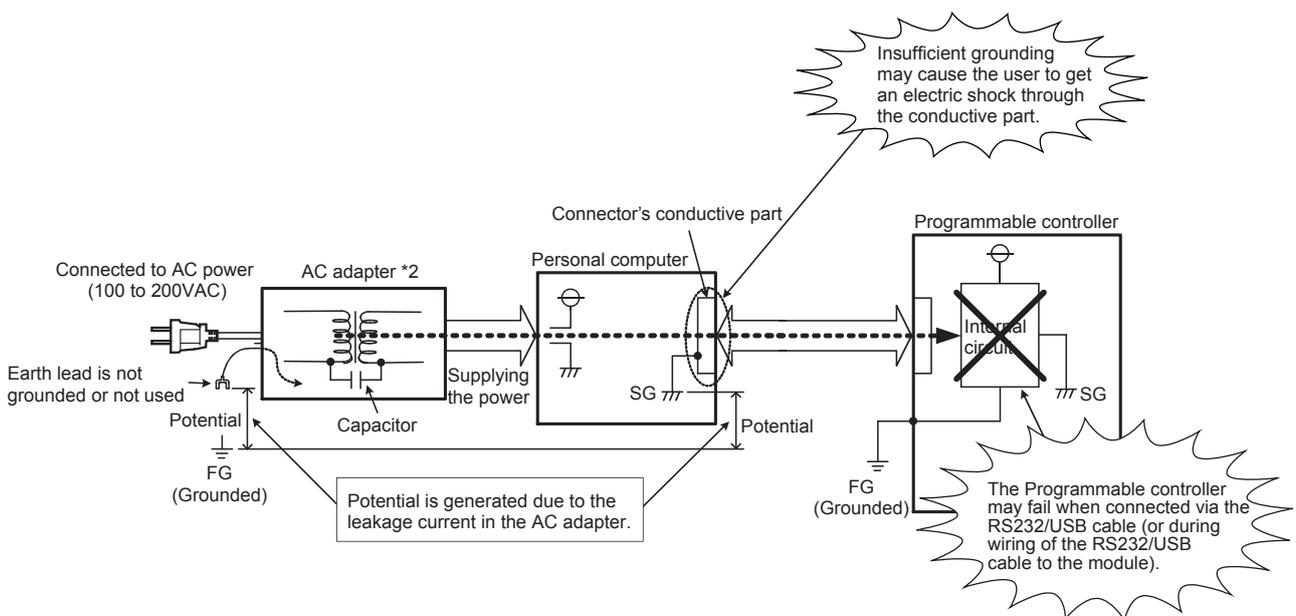
Note that failure to observe the above cautions may result in an electric shock or the MELSEC-Q/L/QS/AnS series module, the MELSEC iQ-R series module, GOT, bus connection board, or bus connection module may develop a fault.

*1 The relevant models are listed in Section 2.

The diagrams below show connection examples which may result in an electric shock or module failure.



Connection Example 1



Connection Example 2

*2 Corresponds to the power supply inside the personal computer. (This applies when a desktop computer is used.)

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2. Relevant Models

These cautions apply to models that include an RS232/USB interface.

Take care when connecting the following models to a personal computer.

Type	Product	Model	
MELSEC-Q series	CPU module	All models	
	Motion CPU module	All models	
	C Controller module	All models	
	MELECNET/H remote module		QJ72LP25-25, QJ72LP25G, QJ72LP25GE
			QJ72BR15
	Serial communication module		QJ71C24, QJ71C24-R2
			QJ71C24N, QJ71C24N-R2
	MODBUS interface module	QJ71MB91	
Web server module	QJ71WS96		
Intelligent communication module	QD51, QD51-R24		
MELSEC-L series	CPU module	All models	
	Serial communication module	LJ71C24, LJ71C24-R2	
	CC-Link IE Field Network head module	LJ72GF15-T2	
	SSCNET III/H head module	LJ72MS15	
	RS-232 adapter	L6ADP-R2	
MELSEC-QS series	CPU module	All models	
MELSEC-AnS series	AnS-Q module compatible adapter	A1SADP-Q-SET1, A1SADP-Q-SET2	
CC-Link	RS-232C interface module	AJ65BT-R2, AJ65BT-R2N	
MELSEC iQ-R series	CPU module	All models	
	Serial communication module	RJ71C24, RJ71C24-R2	
	CC-Link IE Field Network remote head module	RJ72GF15-T2	

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Type	Product	Model
GOT-A900 series ^{*3 *4}	A985GOT	A985GOT-TBA-V, A985GOT-TBD-V, A985GOT-TBA, A985GOT-TBD, A985GOT-TBA-EU
	A975GOT	A975GOT-TBA-B, A975GOT-TBD-B, A975GOT-TBA, A975GOT-TBD, A975GOT-TBA-EU
	A970GOT	A970GOT-TBA-B, A970GOT-TBD-B, A970GOT-TBA, A970GOT-TBD, A970GOT-TBA-EU, A970GOT-SBA, A970GOT-SBD, A970GOT-SBA-EU, A970GOT-LBA, A970GOT-LBD, A970GOT-LBA-EU
	A960GOT	A960GOT-EBA, A960GOT-EBD, A960GOT-EBA-EU
	A956WGOT	A956WGOT-TBD
	A956GOT	A956GOT-TBD, A956GOT-TBD-M3, A956GOT-SBD(-B), A956GOT-SBD-M3(-B), A956GOT-LBD, A956GOT-LBD-M3
	A953GOT	A953GOT-TBD, A953GOT-TBD-M3, A953GOT-SBD(-B), A953GOT-SBD-M3(-B), A953GOT-LBD, A953GOT-LBD-M3
	A951GOT	A951GOT-QTBD, A951GOT-QTBD-M3, A951GOT-QSBD(-B), A951GOT-QSBD-M3(-B), A951GOT-QLBD, A951GOT-QLBD-M3
GOT1000 series ^{*3 *5}	GT16 model	All models
	GT15 model	All models
	GT14 model	All models
	GT12 model	All models
	GT11 model	All models
	GT10 model	All models
GOT2000 series ^{*3 *5}	GT27 model	All models
	GT25 model	All models
	GT23 model	All models

*3 These cautions apply when connected to MELSEC-Q series programmable controller via the bus type connection or RS-232 interface.

*4 Discontinued models

*5 These cautions apply when connected to MELSEC-L series programmable controller via the RS-232 interface.

REVISIONS

Version	Print date	Revision
-	Jul., 2003	First edition
A	Aug., 2004	<ul style="list-style-type: none">• USB is added as an interface for connecting to a personal computer.• Connection examples that may result in an electric shock or module/GOT failure are provided in "1. Cautions".• "2. Relevant Models" is modified.• "3. Checking if the personal computer includes shock protection" is modified.• The product models listed in "4. Personal computers including shock protection" are modified.
B	Apr., 2005	<ul style="list-style-type: none">• Item 1.1 (1) and (2) in "1. Cautions" is modified.• Connection examples (1 and 2) that may result in an electric shock or module/GOT failure in "1. Cautions" are modified.• "2. Relevant Models" is modified.• "3. Checking if the personal computer includes shock protection" is deleted.• "4. Personal computers including shock protection" is deleted.
C	Oct., 2006	<ul style="list-style-type: none">• "2 Relevant Models" is modified.
D	Jun., 2007	<ul style="list-style-type: none">• "2 Relevant Models" is modified.
E	May, 2010	<ul style="list-style-type: none">• "2 Relevant Models" is modified.
F	Feb., 2013	<ul style="list-style-type: none">• "2 Relevant Models" is modified.
G	Apr., 2014	<ul style="list-style-type: none">• "2 Relevant Models" is modified.
H	July, 2014	<ul style="list-style-type: none">• MELSEC iQ-R series is added to "Title".• MELSEC iQ-R series is added to "Relevant Models".• MELSEC iQ-R series is added to "2. Relevant Models".• A note about discontinued models is added to GOT-A900 series.
I	October, 2014	<ul style="list-style-type: none">• GOT2000 series is added to "Title".• GOT2000 series is added to "Relevant Models".• GOT2000 series and GT12 model are added to "2. Relevant Models".
J	June, 2016	<ul style="list-style-type: none">• The LJ72MS15 and RJ72GF15-T2 are added to "2. Relevant Models".

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