

2. ALARM NUMBERS AND
BRIEF DESCRIPTIONS

TROUBLESHOOTING

B-65165E/02

Alarm No.	SVM	SPM	PSM	Description	Remarks
441				Current offset error	3.3.8
442			05	Converter: DC link charging/inverter DB	3.1
443			02	Converter: cooling fan stopped	3.1
444	1			Inverter: internal cooling fan stopped	3.2
445				Soft disconnection alarm	3.3.4
446				Hard disconnection alarm	Not issued
447				Hard disconnection alarm (separate)	3.3.4
448				Feedback mismatch alarm	3.3.8
449	8. 9. A. b. C. d. E.			Inverter: IPM alarm (L axis) (M axis) (N axis) (L and M axes) (M and N axes) (L and N axes) (L, M, and N axes)	3.2
453				Soft disconnection alarm (α pulse coder)	3.3.4

Spindle alarm (n represents a spindle number. Example: n = 1 for the first spindle)

Alarm No.	SVM	SPM	PSM	Description	Remarks
749		A		Program ROM error	3.4
749		A0		Program ROM error	3.4
749		A1		Program RAM error	3.4
749		A2		Program RAM error	3.4
749		A3		SPM control circuit clock error	3.4
749		A4		SRAM parity error	3.4
7n01		01		Motor overheat	3.4
7n02		02		Excessive speed deviation	3.4
7n03		03		DC link fuse blown	3.4
7n04		04	06	Input power supply open phase and power supply failure	3.4
7n07		07		Excessive speed	3.4
7n09		09		Main circuit overload	3.4
7n11		11	07	DC link overvoltage	3.4
7n12		12		DC link overcurrent/IPM alarm	3.4
750		13		CPU internal data memory error	3.4
7n15		15		Output switching/spindle switching alarm	3.4
750		16		RAM error	3.4
750		19		Excessive offset of the phase U current detection circuit	3.4
750		20		Excessive offset of the phase V current detection circuit	3.4

3.3.4 Feedback Disconnected Alarm

(Alarm identification method)

	#7	#6	#5	#4	#3	#2	#1	#0
<1> Alarm 1	OVL	LVA	OVC	HCA	HVA	DCA	FBA	OFA
<2> Alarm 2	ALD			EXP				
<6> Alarm 6					SFA			

FBA	ALD	EXP	SFA	Alarm description	Action
1	1	1	0	Hard disconnection (separate phase A/B)	1
1	0	0	0	Soft disconnection (closed loop)	2
1	0	0	1	Soft disconnection (α pulse coder)	3

(Action)

Action 1: This alarm is issued when a separate phase A/B scale is used. Check if the phase A/B detector is connected correctly.

Action 2: This alarm is issued when the position feedback pulse variation is small relative to the velocity feedback pulse variation. This means that this alarm is not issued when a semi-full is used. Check if the separate detector outputs position feedback pulses correctly. If position feedback pulses are output correctly, it is considered that the motor alone is rotating in the reverse direction at the start of machine operation because of a large backlash between the motor position and scale position.

	#7	#6	#5	#4	#3	#2	#1	#0
1808	8X03						TGAL	
2003	1003							

TGAL (#1) 1: Uses the parameter for the soft disconnection alarm detection level.

1892	8X64	Soft disconnection alarm level						
2064	1064							

Standard setting 4: Alarm issued for a 1/8 rotation of the motor. Increase this value.

Action 3: This alarm is issued when synchronization between the absolute position data sent from the built-in pulse coder and phase data is lost. Turn off the power to the CNC, then detach the pulse coder cable then attach it again. If this alarm is still issued, replace the pulse coder.