Fuji Electric
Innovating Energy Technology

MESI
ELEVATOR

FRENIC-Lift

LM2A series

Reference Manual

Supplementary materials

This document is an addendum to the "FRENIC-Lift LM2A Series Reference Manual (24A7-E-1909b)", and extracts of the chapters2 and some function codes, adds some contents.
For pages other than those described in this manual, read the "FRENIC-Lift LM2A Series Reference Manual" carefully to ensure correct use.

INR-SI47-2354-E

2.1 Function Code Tables

■ F codes: Fundamental Functions

Code	Name	Data setting range	Increment	Unit	Change when running	Data copying	Default setting	Data format No.	Torque vector control	Software version which can be used
F81	230V mode	0: Disable 1: Enable	-	-	N	Y	0	1	Y	1500

2.3.1 F codes (Fundamental functions)

F81 **230V mode**

F81 specifies the 230V mode enabled or disabled.

F81 setting value	Function
0	230V mode is disabled.
1	230V mode is enabled.

When 230V mode is enabled, three-phase 400V series LM2 can be used with three-phase 230V input. The 230V mode is valid only in a specific models. Please refer to the Instruction Manual for the valid models.

In addition, changing F81 affects the behaviour of following points.

1. Switching function code attribute

Setting range and value of following function code will change automatically at changing 230V mode Enable/Disable. Current setting value will be overwritten by the following setting value.

Function code	Disable (F81 = 0)		Enable (F81 =1)	
	Setting range	Setting value	Setting range	Setting value
F05	160 to 500V	380V	80 to 240V	230V
L125	30 to 440V	30V	20 to 220V	24V
P02	Not change	Factory default	Not change	Half of factory default
P03 to P08*	Not change	Factory default	Not change	Depends on P02

* These function code are changed only when F81 is change by Keypad.

2. DC-Link capacitance measurement

DC-Link capacitance measurement is disabled when 230V mode is Enabled.

⚠WARNING

Use the correct combination of power supply, 230V mode and motor.

Risk of fire and risk of accidents exist

2. 3. 8 L codes (Lift functions)

L01 **Pulse Encoder (Selection)**

L01 specifies the specifications of a pulse encoder system to be used for speed detection.

Data for L01	Applicable encoder specifications		Required option	Applicable motor
	A/B phase output	Absolute signal spec.		
0	12/15V complementary 12,15V open collector	None	OPC-G1-PG OPC-PG3 OPC-PG3ID	Asynchronous motor
	5V line driver	None	OPC-G1-PG2 OPC-PMPG	
1	12/15V complementary	Z	OPC-G1-PG OPC-PG3 OPC-PG3ID	Synchronous motor
	5V line driver	Z	OPC-G1-PG2 OPC-PMPG	
2	5V line driver	UVW 3bit code	OPC- PMPG	Synchronous motor
3	5V line driver	4bit gray cod	OPC- PMPG	Synchronous motor
4	Sinusoidal differential voltage 1 Vp-p	EnDat2.1 (HEIDENHAIN ECN1313 or its equivalent)	OPC-PS or OPC-PSH	Synchronous motor
5	Sinusoidal differential voltage 1 Vp-p	SIN/COS (HEIDENHAIN ERN1387 or its equivalent)	OPC-PR	Synchronous motor
6	Sinusoidal differential voltage 1 Vp-p	BiSS-C (Kubler Sendix5873 or its equivalent)	OPC-PS or OPC-PSH	Synchronous motor
7	Sinusoidal differential voltage 1 Vp-p	SSI (HEIDENHAIN ECN1313 or its equivalent)	OPC-PS or OPC-PSH	Synchronous motor
8	Sinusoidal differential voltage 1 Vp-p	Hiperface (SICK SRS50 or its equivalent)	OPC-PSH	Synchronous motor