



# **APPLICATION NOTE**

### AN-Lift2-0010v100EN

# 230V mode limitation

Inverter type FRENIC-Lift (LM2A & LM2C)

**Software version** LM2A/LM2C: 1500

Required options -

Related documentation INR-SI47-1894f-E

INR-SI47-1909b-E INR-SI47-2354-E

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Version 1.0.0 Languages English

#### 1. Introduction

LM2 ROM 1500 includes 230V mode (F81=1). This mode allows -4 version to be supplied with 3ph 230 VAC. On the other hand, this mode has a limitation regarding 24 VDC input terminal. This document describe this limitation.

#### 2. 230V mode limitation

Due to internal DC/DC converter characteristics, when LM2 -4 is supplied with 3ph 200 VAC, it cannot be supplied at same time by 24 VDC input terminal. If this connection is used for long time, DC/DC converter might be destroyed. Therefore, when 230V mode is used follow below instructions regarding 24 VDC input terminal:

## a) Normal operation

In normal operation 24 VDC input terminal cannot be used.

#### b) Battery operation

During Battery operation, 24 VDC input terminal can be connected to 24 VDC, as long as this connection is done only during rescue time. Figure 1 shows connection method.



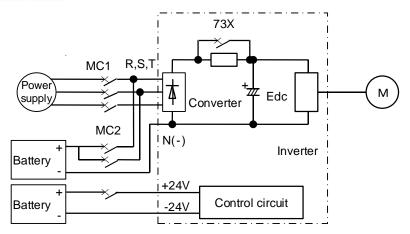


Figure 1. Battery operation connection in 230V mode

In case of UPS operation, normally 24 VDC input terminal is not needed, but if for any reason, it is needed, please follow above advice and use them only during UPS operation.

230V mode limitation has no influence on the capacities where 24 VDC input terminal does not exist (FRN0039LM2\_ and above).

### 3. Conclusions

In this document, 230V mode (F81=1) restrictions are explained. Please do not use 24 VDC input terminals in normal operation when this mode is used, otherwise hardware failure may occur.

## 4. Document history

Version	Changes applied	Date	Written	Checked	Approved
1.0.0	First version	11/12/2020	J. Alonso	C. Arjona	J. Català