

# **EM Brno Ltd.**

## **VOLTAGE CONTROL UNIT**

**LUN 2167.03-8 (3 GN 016)**

**and**

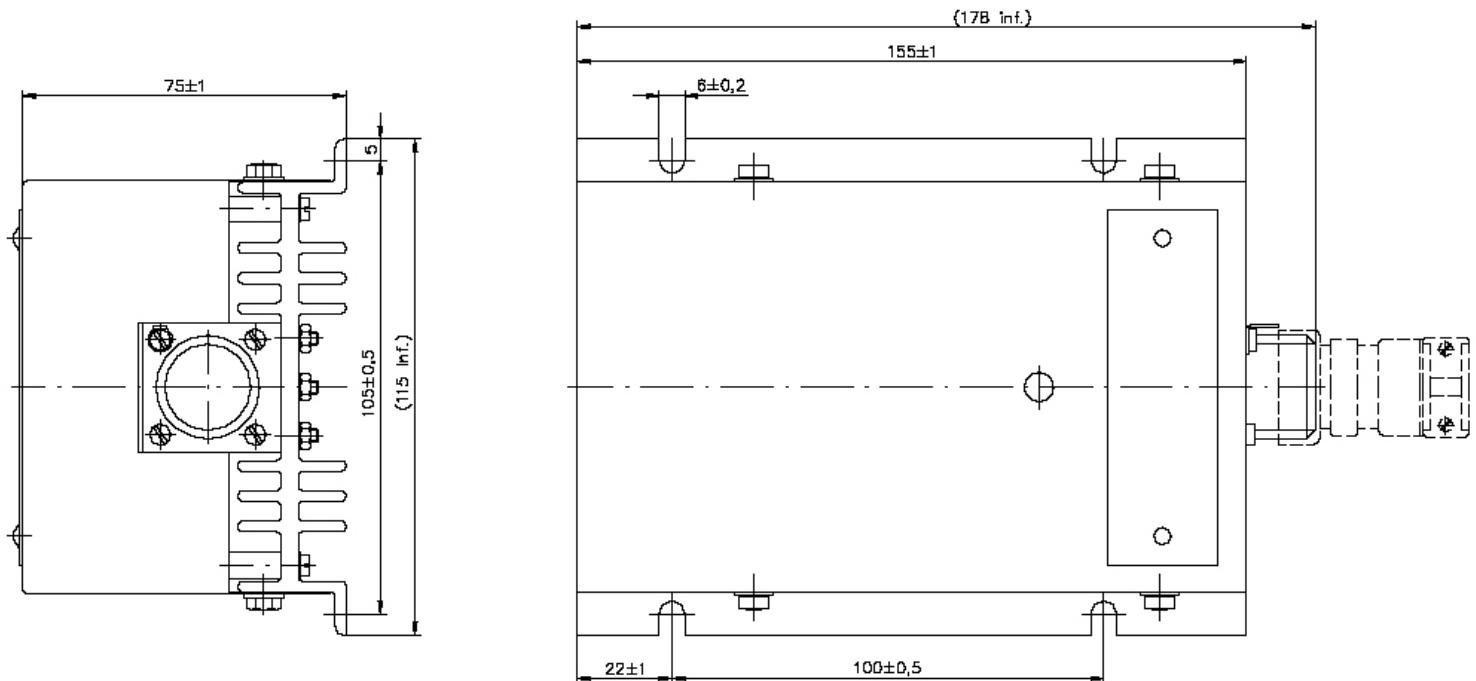
**LUN 2167.04-8 (4 GN 016)**



# LUN 2167.03-8

a

# LUN 2167.04-8



Designation of the Voltage control unit 3 GN 016 for order:

**Voltage control unit LUN 2167.03-8**

or

Designation of the Voltage control unit 4 GN 016 for order:

**Voltage control unit LUN 2167.04-8**

## 1. Description

The Voltage control unit LUN 2167.03-8 (LUN 2167.04-8), producer's type designation 3 GN 016 (4 GN 016), is determinated for control and protection of the starter-generator with the rated voltage 28 V and max. excitation current 7 A.

## 2. Technical data

In a set with a starter-generator there are guaranteed following data:

Rated voltage and control accuracy

$28 \pm 0,75$  V

Continuous output current

7 A

Range of the controlled voltage in working regime

27 – 29 V

Range of the controlled voltage by overloading and ambient temperatures

26 – 29 V

Range of the working temperatures	-55°C till +60°C
Range of the not-working temperatures	-60°C till +85°C
Allowed working over-sea level	11 500 m (37 800 ft)
Allowed not-working over-sea level	15 200 m (50 000 ft)
Protection	IP 10
Environment	WW 27
Mass max.	1,2 kg
Humidity acc. RTCA/DO-160C	category „C“
Electromagnetic compatibility acc. RTCA/DO-160C	category „B“
Vibrations acc. RTCA/DO-160C (for jet engines aircraft)	category „C“

Frequency [Hz]	Power spectral density [g <sup>2</sup> /Hz]
10	0,00105
40 – 500	0,02
2 000	0,0015

### 3. Protection functions

- Over voltage generator protection with an inverse time delay  
for LUN 2167.03-8 31,4 V/ 10 s  
for LUN 2167.04-8 30,5 V/ 10 s
  - Over voltage protection of the excitation voltage with an inverse time delay  
for LUN 2167.03-8 29,0 V/ 10 s  
for LUN 2167.04-8 26,5 V/ 3 s
  - Current restriction of the starter-generator adjusted acc.  
the input voltage (voltage drop on the generator winding). 2,8 till 5,2 V

#### 4. Connection

Connection of the voltage control unit with devices is made by conductors with the cross-section min. 0,75 mm<sup>2</sup> by means of a multiple pin socket of the type 772S30-E40, which is part of delivery.

## 5. Life time

The voltage control unit during the whole life demands no overhauls, in case of a breakdown it should be sent to producer.

The life time is determinated to:

for LUN 2167.03-8                            9 000 working hours or 9 000 starts or 30 years  
for LUN 2167.04-8                            3 000 working hours or 9 000 starts or 25 years

6. The Voltage control unit was designed, tested and it complies with following standards:

ČSN EN 60034-1	ČSN EN 60034-5	ČSN EN 60064-6	ČSN 33 4200
ČSN 34 2860	ČSN 35 0000-1-1	ČSN 35 0010	ČSN 35 0101
ČSN IEC 721-2-1	ČSN ISO 9227	ČSN ISO 6988	RTCA/DO-160B
RTCA/DO-160C	MIL-STD-704E	ČNL 0600	

Manufacturer and supplier:



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