MOOG Teilenummer/Part Number: **D128F016-A001**

Teilebezeichnung/Description: Netzteil / power supply

Technische Merkmale:
Technical features:

19" Kassette 3HE/14TE mit Frontplatte eloxiert.
19" cassette 3U-14HP with anodised frontpanel.
Steckverbinder / connector: DIN41612H15
Eingang / input: 230VAC +15%; -20%; 45-440Hz
Ausgang / output: +15VDC/3A; -15VDC/3A; +5V/6A
Nennleistung / nominal output power: 80W

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Power Supply

MOOG GmbH
D-71034 Böblingen
Hanns-Klemm-Str. 28
Telefon (07031) 622-0

Zeichnungs-Nr.:

B58902-001

Features:

- **NOT** compatible to MOOG 120 electronics series
- especially for use with D127-065-A001 (Z-Rack)
- 80 watt in 3U/14HP format (primary switched regulator)
- high operating temperature range 0…70°C without derating
- test sockets on frontpanel

Technical data

General characteristics:

theory of operation:	primary switching regulator
cooling:	heat sink, air convection
mains selection:	internal jumper setting only
outputs:	stabilized ±15VDC/3A and +5V/6A; test sockets
protection:	short circuit and thermal protection; fuse protected
+5V power fail output:	optocoupler output

Electrical:

plug connector:	DIN 41612 H15 with leading PE conductor
input voltage:	184 - 264VAC, 45 - 440Hz (D128F016-A001) 92 - 132VAC, 45 - 440Hz (D128G016-A001)
mains failure buffer time:	30ms
output:	2x 15VDC ± 0.5% / 0 - 3A 1x 5VDC ±0.1% / 0 - 6A
max. output current:	8A at 5V; 3.1A at 15V (each)
nominal output power:	80W (0...70°C ambient temperature)
efficiency:	> 77%
temp. coefficient:	200 ppm / K
output ripple (100Hz):	≤ 0,2%
noise (50kHz):	≤ 0,1%
switching spikes:	≤ 2%
load regulation:	≤ 0,1% (output load 0...100%)
dynamic load regulation:	<200mV (65 ... 100% load change)
recovery time:	≤ 200µs (65 ... 100% load change)
line regulation:	≤ 0,1%
output indicator:	LED green (2x 15VDC / 1x 5V)
power fail output:	optocoupler output (conducting if not power fail)
optocoupler rating:	U_{max} = 50V, I_{max} = 200mA

Mechanical:

design:	19" all metal cassette
overall dimension:	see drawing
frontpanel:	3U/14HP
weight:	1,1kg

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Operating data

ambient temperature:	0...70°C without derating
storage temperature:	-25...85°C
vibration:	2g at 5...500Hz, test according to Fc at DIN40046
shock:	10g, 11ms according to DIN40046

Application notes

Protective earth

To comply with the safety standard as per EN60950 / IEC950 and also for the built-in filter circuits to become effective, the PE conductor must be connected to pin 32.

Starting currents

The mains input should provide under worst case condition a starting current of up to 22A for a duration of 5,7 ms.

$(\int idt = 0{,}6\,A^2\,s)$

Cooling

In order to ensure that the components within the unit and also other electronics within the rack are heated as little as possible, sufficient air convection on top and bottom of the unit and beside the heat-sink must be provided for.

Thermal protection

The thermal protection circuit disables the outputs (both simultaneously) if the temperature exceeds the allowed limit. After the temperature has dropped into safe ares the power supply recovers by itself.

Power fail output

The optocoupler is conducting if no power fail is detected. The power fail detection covers the mains input and the 5V output voltage.

Parallel operation

Parallel operation of two or more power supllies is not allowed.

Safety Instructions

* Do not touch live components.
* Do not operate without connecting the PE terminal.
* Do not operate in an environment of explosive gases.

Please Observe

* for authorised personnel only (valid for Switzerland).
* check mains voltage for correctly adjusted value before placing device into operation.
* do not operate without connecting the PE terminal.
* opening or alteration of device by operator / user will extinguish guarantee and liability.
* servicing by authorised personnel only.

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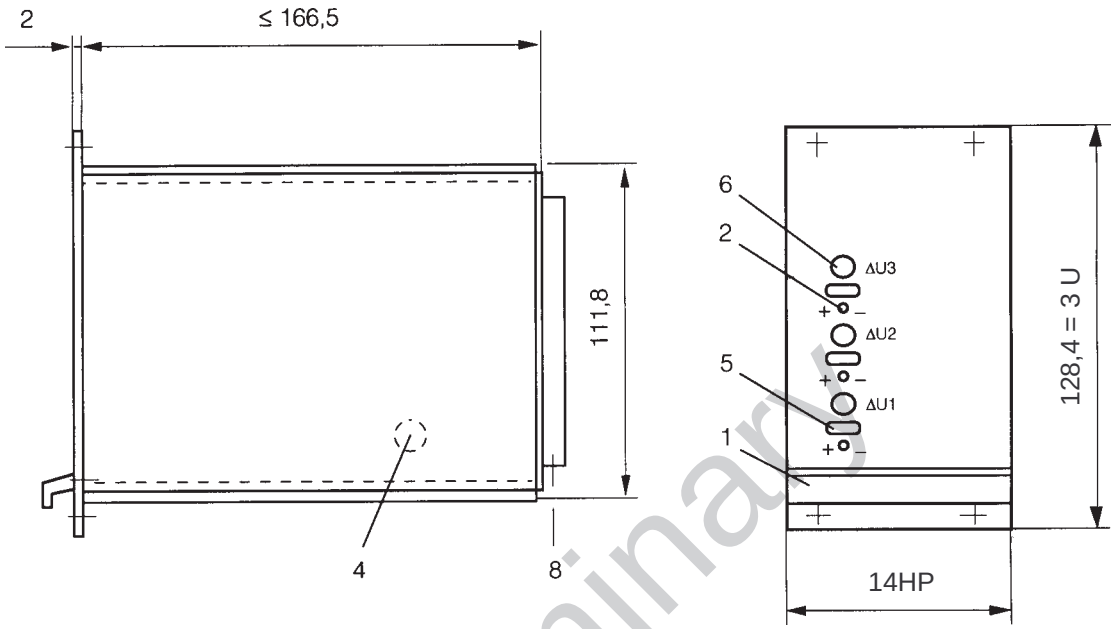
Dimensions (in mm):



1HP = 5,08mm

1	=	handle
2	=	LED green
4	=	primary fuse
5	=	test point
6	=	potentiometer
8	=	connector H15

Connector Pinout:

Pin	Description
4	+ Output 5V
6	+ sense 5V
8	- Output 5V
10	- sense 5V
12	do not use
16	+ Output A 15V
18	- Output A 15V

Pin	Description
20	+ Output B 15V
22	- Output B 15V
24	PFS collector
26	PFS emmitter
28	L1
30	N
32	PE

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