Triple Power Supply HM 7042-4

- **2 x 0 - 32 V / 2 A + 0...5,5 V / 5 A**
- **3 independent floating outputs**
- **Pushbutton for activating/deactivating outputs**
- **Separate voltage and current displays for each output**
- **Adjustable current limit and electronic fuse for each output**
- **Low ripple, high output power, good regulation**
- **Temperature-controlled fan**
- **Parallel and series operation**

In this instrument concept the advantages of SMPS (high efficiency) and linear regulators (good regulation, low ripple) are combined avoiding the high losses typical of purely linear power supplies.

The current limit of each output is continuously adjustable. Reaching the current limit will cause automatic switchover from voltage to current regulation which is indicated by a LED. In order to protect sensitive loads or such loads which require multiple voltages an electronic fuse is provided which if activated switches all outputs off if the current limit of one output is touched. Practical application is enhanced by a power relay which switches all outputs on/off if the associated pushbutton is depressed, hence it is not necessary to turn the whole instrument on/off and wait for the voltages to build up resp. decrease to zero The fan is temperature-controlled and remains inactive below 50 degrees C. The low ripple, good regulation as well as its various saftety features recommend this instrument for daily practical use. The **HM 7042-4** known and proven for many years will continue to serve our customers in the future.

Accessories included: Manual, warranty certificate.
Optional accessories: HZ10: Silicon-insulated cable

HAMEG

Specifications

Valid at 23 degrees C after a 30 minute warm-up period.

Outputs

2 x 0-32 V + 0..5,5 V	On/off pushbutton control. SMPS followed by a linear regulator with overtemperature protection. All outputs floating allowing parallel and series operation. Current limit each output, electronic fuse.

Output 0 ... 32 V

Range:	2 x 0 – 32 V, continuous adjustment 2 knobs (coarse/fine)
Ripple:	≤1 mV_{rms}
Current:	max. 2 A
Current limit, electronic fuse:	0 – 2 A, continuously variable (knob)

Dynamic behaviour:

Load change from 10 to 90 % full load:	115 µs to within 15 mV Dynamic impedance 10 mohms
Load change at 50 % basic load ±10 % of full load:	50 µs to within 10 mV Dynamic impedance 25 mohms

Displays:

7segment LED displays:	32.00V (4 digits) / 2,000A (4 digits)
Resolution:	0.01V / 1mA
Accuracy:	±3 digits voltage / ±4 digits current
LED:	shows current limit

Output 5.5 V

Range:	0 – 5.5 V, continuously variable (knob)
Ripple:	≤2 mV_{rms}
Current:	max. 5 A
Current limit, electronic fuse:	0 – 5 A, continuously variable (knob)

Dynamic behaviour:

Load change from 10 to 90 % full load:	330 µs to within 35 mV Dynamic impedance 9 mohms.
Load change at 50 % basic load ±10 % of full load:	100 µs to within 20 mV Dynamic impedance 20 mohms

Displays

7segment LED:	5.50 V (3 digits) / 5.00 A (3 digits)
Resolution:	0.01 V / 10 mA
Accuracy:	±3 digits voltage / ±1 digits current
LED:	shows current limit

Maximum rates

Reverse voltage:	max. 60 V, each output
Reverse current:	max. 5 A, each output
Voltage with respect to ground:	150 V, each output terminal
Mains voltage:	max. 253 V_{ac}

Miscellaneous

Protection class:	I acc. to EN 61010 (IEC 1010) with protective earth
Mains supply:	**Part no. 23-7042-040A 230 V ±10% ac; 45 – 60 Hz**
Mains fuse:	2 x 2.5 A slow blow 5 x 20 mm
Mains supply:	**Part no.23-7042-040B 115V ±10% ac; 45 – 60 Hz**
Mains fuse:	2 x 5 A slow blow 5 x 20 mm
Power consumption:	max. 330 VA / 250 W
Operating temperatuare:	0°....+40 degrees C
Storage temperature:	–20 ....+70 degrees C
Rel. humidity:	< 80% no condensation
Size (W x H x D):	285 x 90 x 389 mm (this includes any protruding parts)
Weight:	approx. 7,4 kg

Subject to change without notice

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Optional accessories: HZ10: Silicon-insulated cable