

---

## Meters and Power Supplies

---

### Demonstration Meters

1070	Electronic Multimeter
1075	RMS Multimeter
1077	Electronic Power Meter
1079 USB	AC Multifunction Tester
2288	Synchronoscope
2289	Synchronisation
5511	Speed Indicator
5511.1	Speed Indicator
1091 USB	Mains Power Meter
2257	Dual Voltmeter
2280.1	Dual Frequency Meter
2283	Phase-Sequence Indicator
2284.1	Power Factor Meter

### Isolation Amplifier

8630	Isolation Amplifier
------	---------------------

### Universal Power Meter

1091	Universal Power Meter
------	-----------------------

### Table Meters

8701	RMS Multimeter
8705	Electronic Power Meter
8706	Electronic Phase-Angle Meter

### Power Supplies

1002.1	DC Supply Board, +15 V DC / +5 V DC / -15 V DC
1002.3	5 V Supply Board
1002.4	24 V Supply Board, +30 V DC / +24 V DC
1005.2	Variable Supply Board, 0 ... 30 V DC / 0 ... 24 V AC
2140	24 V / 4 A Supply Board
1005.3	Variable Supply Board, 2 ... 30 V DC / 0 ... 24 V AC
8625	DC Power Supply, 0 ... 250 V DC

### Universal Power Supply

2740.1	Universal Power Supply 230 V AC / 400 V AC / 200 V DC / 0 ... 250 V DC
--------	---

### Isolating Transformer

8626	Isolating Transformer
------	-----------------------







## Demonstration Meters



**Electronic Multimeter  
1070**



**Mains Power Meter  
1091 USB**

## Demonstration Meters

- To be used in demonstration racks or as table instruments
- Application in all fields of technology
- With big dual scales
- Protected against overload
- With built-in power supply

The Demonstration Meters can be used for measuring values when experimenting with hps Training Systems.

They have the same dimensions as the Demonstration Boards and can be suspended in hps bench racks or demonstration racks during experimenting.

All measuring ranges of the Demonstration Meters are protected against overload by internal circuits or fuses.

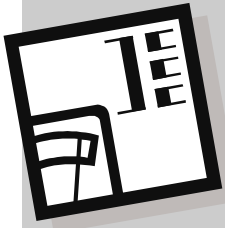
Large dual scales with figures up to 19 mm height make accurate reading possible even at far distances.

The front panel of the Demonstration Meters is made of 5 mm thick laminate, matt blue in colour with white printing representing the built-in function groups.

The rear of the Meters is protected with a grey plastic cover.

Connections are made via 4 mm safety sockets which are integrated in the front panel.

The following pages contain further technical data and illustrations of the Demonstration Meters.



## Demonstration Meters

### Demonstration Meters

#### Electronic Multimeter

**Type 1070**



Type 1070

##### Measuring ranges

- Voltage: (DC) 0.2 V / 2.0 V / 20 V / 200 V / 600 V  
(AC) 2.0 V / 20 V / 200 V / 600 V  
input impedance: 10 M $\Omega$   
input capacitance: < 100 pF  
frequency range: 40 ... 400 Hz
- Current: (DC / AC) 0.2 mA / 2 mA / 20 mA / 200 mA / 10 A  
frequency range: 40 ... 400 Hz  
shunt resistor: < 50 m $\Omega$
- Resistance: 200  $\Omega$  / 2 k $\Omega$  / 20 k $\Omega$  / 200 k $\Omega$  / 2 M $\Omega$  / 20 M $\Omega$
- Battery tester 1.5 V und 9 V
- Diode tester
- Continuity tester with audible signal

##### Other

- Current and voltage input via 4 mm safety jacks

##### Mains connection

- 100 ... 240 V AC; 50 ... 60 Hz; 15 VA

##### Dimensions / weight

- 266 x 297 x 90 mm (w x h x d) / 1.6 kg

#### RMS Multimeter

**Type 1075**



Type 1075

##### Measuring ranges

- Voltage (AC / DC): 0 ... 3 / 10 / 30 / 100 / 300 / 1000 V
- Current (AC / DC): 0 ... 0.1 / 0.3 / 1 / 3 / 10 A
- Resistance: 0 ... 100 / 300 / 1k / 3k / 10k / 30k / 100k / 300k / 1M / 3M / 10M

##### Other

- Input impedance: 10 M
- Frequency range: 10 Hz ... 10 kHz
- Crest factor: 10
- Error limit: 2.5 % (0 ... 5 kHz)  
5.0 % (5 kHz ... 10 kHz)

##### Mains connection

- 230 V AC / 115 V AC (110 V AC); 50 ... 60 Hz; 4 VA

##### Dimensions / weight

- 266 x 297 x 150 mm (w x h x d) / 2.8 kg



## Demonstration Meters

### Demonstration Meters

#### Electronic Power Meter

Type 1077



Type 1077

##### Measuring ranges

- Voltage (AC / DC): 0 ... 3 / 10 / 30 / 100 / 300 / 1000 V
- Current (AC / DC): 0 ... 0.1 / 0.3 / 1 / 3 / 10 A
- Active power: 0 ... 10 kW (crest factor 4)
- Reactive power: 0 ... 10 kVar (capacitive and inductive)
- Apparent power: 0 ... 10 kVA

##### Mains connection

- 230 V AC / 115 V AC (110 V AC); 50 ... 60 Hz; 20 VA

##### Dimensions / weight

- 266 x 297 x 150 mm (w x h x d) / 3.3 kg

#### AC Multifunction Tester

Type 1079 USB



Type 1079 USB

##### Measuring ranges

- Voltage: 5 V ... 250 V (rms)
- Current: 0.1 A ... 10 A (rms)
- Frequency: 45 Hz ... 65 Hz

##### Meter

- Phase angle: -90° ... 0° ... +90°  
inductive / capacitive display via LED
- cos  $\varphi$ : 0 ... 1 (leading), 1 ... 0 (lagging)  
Phase angle measurement between  $U_1$  / I oder  $U_1$  /  $U_2$

- USB Interface

##### Mains connection

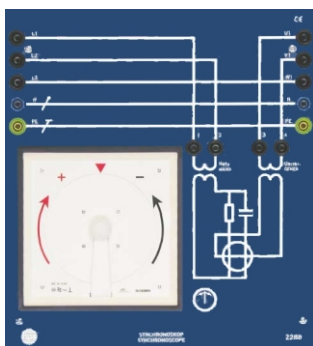
- 100 V ... 240 V AC; 50 ... 60 Hz; 10 VA

##### Dimensions / weight

- 266 x 297 x 150 mm (w x h x d) / 2.7 kg

#### Synthescope

Type 2288



Type 2288

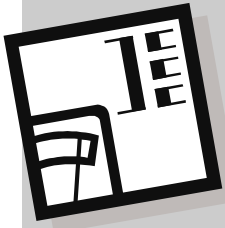
For synchronisation of a generator to the mains

##### Rated Voltage

- 230 V AC / 400 V AC; 50 ... 60 Hz

##### Dimensions / weight

- Casing: 266 x 297 x 135 mm (w x h x d)
- Meter: 144 x 144 mm (w x h)
- Weight: 2.3 kg

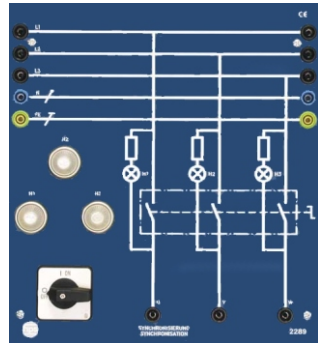


## Demonstration Meters

### Demonstration Meters

#### Synchronisation

**Type 2289**



Type 2289

For synchronisation of a generator to the mains

##### Voltage

- For three-phase connection:  
220 V ... 240 V AC / 380 V ... 415 V AC; 50 ... 60 Hz

##### Indication

- Through three lamps

##### Dimensions / weight

- 266 x 297 x 120 mm (w x h x d) / 1.25 kg

#### Speed indicator

**Type 5511**



Type 5511

##### Measuring range

- Speed: 0 ... 1500 min<sup>-1</sup> (for both directions of rotation)
- Voltage: 10 V DC (full-scale deflection)

##### Dimensions / weight

- Casing: 266 x 297 x 90 mm (w x h x d)
- Meter: 144 x 144 mm (w x h)
- Weight: 1.55 kg

#### Speed indicator

**Type 5511.1**



Type 5511.1

##### Measuring range

- Speed: 0 ... 3000 min<sup>-1</sup> (for both directions of rotation)
- Voltage: 10 V DC (full-scale deflection)

##### Dimensions / weight

- Casing: 266 x 297 x 90 mm (w x h x d)
- Meter: 144 x 144 mm (w x h)
- Weight: 1.55 kg



## Demonstration Meters

### Mains Power Meter

### Type 1091 USB



Type 1091 USB

#### Measuring range

- Voltage: 0 ... 250 V (rms)
- Current: 0 ... 10 A
- Power factor:  $\cos \varphi$  0 ... 1 ( U / I )  
inductive / capacitive display via LED
- Active power: 0 ... 2500 W
- Apparent power: 0 ... 2500 VA
- Reactive power: 0 ... 2500 Var
- Frequency: 45 ... 65 Hz
- Interface: USB

#### Mains connection

- 100 ... 240 V AC; 50 ... 60 Hz; app. 15 VA

#### Dimensions / weight

- 266 x 297 x 95 mm (w x h x d) / 0.9 kg

## Demonstration Meters

### Further Demonstration Meters (without illustration)

#### Dual Voltmeter

#### Typ 2257

- With two moving iron instruments
- 2 x 500 V AC / DC
- Dimensions of casing: 266 x 297 x 90 mm (w x h x d)
- Dimensions of meter: 144 x 144 mm (w x h)

#### Dual Frequency Meter

#### Typ 2280.1

- Frequency: 46 ... 54 Hz
- Voltage: 230 V AC / 400 V AC
- Dimensions of casing: 266 x 297 x 90 mm (w x h x d)
- Dimensions of meter: 144 x 144 mm (w x h)

#### Phase-Sequence Indicator

#### Typ 2283

- 220 V ... 240 V AC / 380 V ... 415 V AC; 50 ... 60 Hz
- With lamp indication
- Dimensions: 96 x 297 x 90 mm (w x h x d)

#### Power Factor Meter

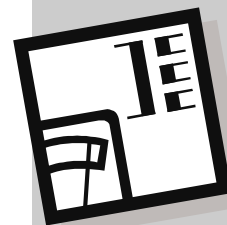
#### Typ 2284.1

- For symmetrical three-phase load
- 230 V AC / 400 V AC; 1 A; 50 ... 60 Hz
- Scale: 0,3 inductive; 0,7 capacitive
- Dimensions of casing: 266 x 297 x 90 mm (w x h x d)
- Dimensions of meter: 144 x 144 mm (w x h)

Subject to technical modification.

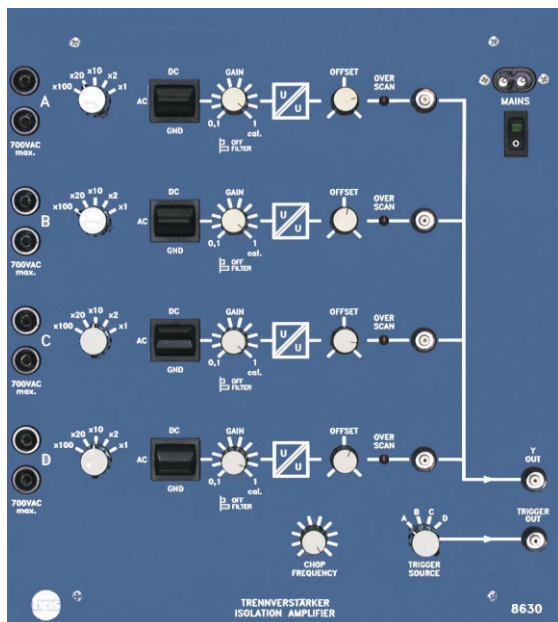






## Isolation Amplifier

Type 8630



Front view of the  
Isolation Amplifier

Type 8630

- 4 potential-free differential inputs
- Every input switchable to GND/DC/AC
- Switchable LF filter
- All measuring outputs through fully insulated BNC jacks
- Overload indicator for all channels
- Can be used directly as a benchtop unit or in a demonstration rack

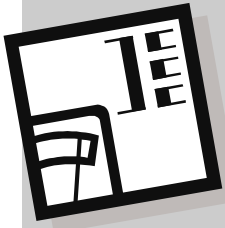
The Isolation Amplifier is used for safe, potential-free measuring of different voltages in connection with an oscilloscope.

Up to 4 signals, even with different reference points, can be displayed on one oscilloscope channel.

The Isolation Amplifier can be used universally from the fundamentals of electrical engineering right up to power electronics.

The inputs and outputs are electrically isolated by an isolation amplifier component with a linearity error of a mere 0.008% and a coupling capacity of 2 pF.

To conduct the experiments, the Isolation Amplifier is placed on a table or suspended in an hps rack for demonstration purposes.



## Type 8630

### Mechanical Data

The front panel of the Isolation Amplifier is made of 5 mm thick laminate, matt blue in colour with white engraving representing the built-in function groups.

The rear of the Board is protected with a grey plastic cover. Its shape allows the Board to be placed at an ergonomically favourable angle for example on a table.

### Accessories Recommended

- 2 Connecting Leads (Type 9102.14-1), Screened, 50 , 1 m long, with insulated connectors (BNC/BNC)

## Isolation Amplifier

### Technical Data

#### Mains connection

- Voltage: 230 V AC (standard version); 50 ... 60 Hz; 20 VA

If you require the special 110 V version, please state so when ordering as the unit can only be converted in the factory.

#### Inputs

- Differential inputs: 4 (potential-free and electrically isolated) Wiring takes place through 4 mm safety jacks.
- Input voltage: max. 1000 V DC / 700 V AC
- Selector switch: AC/DC/GND
- Measuring ranges: x 100; x 20; x 10; x 2; x 1
- Input attenuator: enables – additionally to the input divider – a continuous attenuation by factor 10 (x 0.1... x 1). An LF filter for suppression of high-frequency interferences is connected when pulling the rotary switch. Limit frequency of the LF filter: 500 Hz
- Input resistance: 1 M
- Input capacitance: 30 pF
- Limit frequency: 50 kHz (-3 dB)

#### Outputs

- Electrically isolated from the inputs
- Channels (A ... D) through 4 fully insulated BNC jacks
- Channels (A ... D) through one fully insulated BNC jack (multiplex mode)
- Variable chopper frequency for low interference signal transmission; frequency range: approx. 2 kHz ... 50 kHz
- Trigger signal through insulated BNC jack, switchable to channel A ... D
- Overload indicator: for every channel, LED indicator
- Output voltage: < -8 V, > +8 V
- Zero adjustor: +/- 8 V

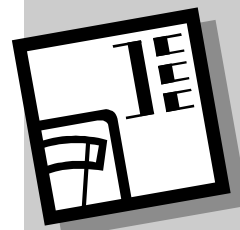
#### Dimensions

- 266 x 297 x 90 mm (w x h x d)

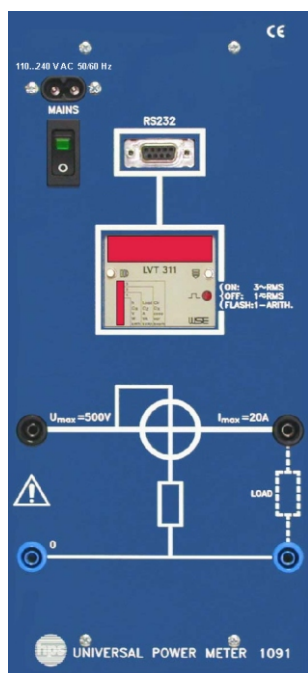
#### Weight

- 2.4 kg

Subject to technical modifications.



# Universal Power Meter



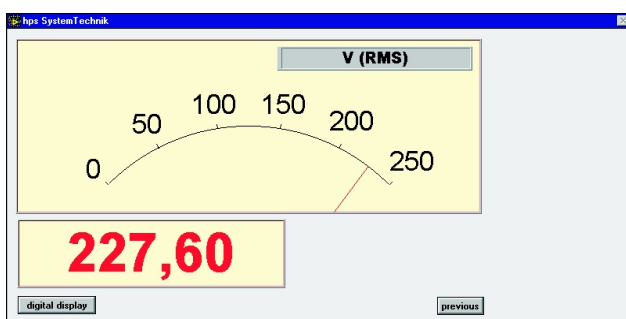
Type 1091

- Universal meter for measuring power,  $\cos \phi$ , energy, voltage and current
- Used in single-phase and three-phase networks
- Switchable between TRMS and arithmetic measurement
- With 6-digit, seven-segment display
- Additional Min and Max value measurement
- With RS 232 interface
- For use as a demonstration meter in combination with the visualisation software

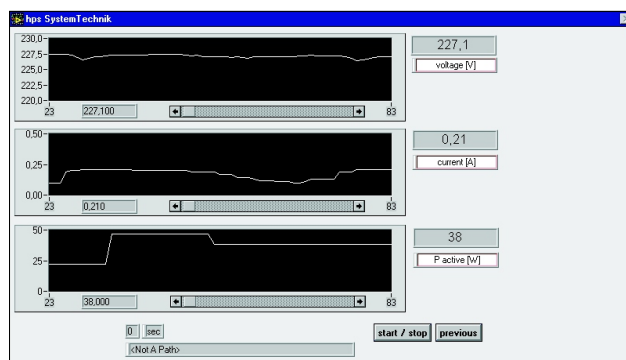
## Type 1091

With the Universal Power Meter, hps SystemTechnik offers a digital meter for a very wide range of applications.

The device has a 6-digit, seven-segment display and an RS 232 interface.



Large-size display of a measuring value (analog)



Data logger with three channels

## Available accessory:

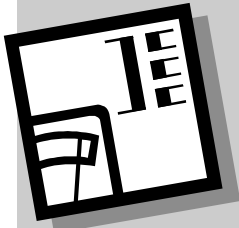
### Visualisation software (Type 1091.2)

- Simultaneous display of up to 4 analog and digital measuring values
- Large-size display of 1 measuring value (analog or digital)
- Switchable between arithmetic measurement and TRMS
- Data logger for long-time measurement
- Y/t recording of up to three data logger channels
- Measuring values can be saved in a file for later processing, e. g. in MS Excel

Power is supplied to the Universal Power Meter by a built-in power supply unit. In the event of a mains power failure the measuring values are saved in a non-volatile measuring value memory.

A fixed factor of 3.0 can be activated by the device parameter „Phase factor“ for calculating the power and energy values for single-phase measurements in the three-phase network on symmetrical load, e. g. in electric machines.

The Universal Power Meter also measures the Min and Max values of the operating modes W, VA, var, V, A and  $\cos \phi$ .



## Type 1091

### Accessories Recommended

- Visualisation software: Type 1091.2-EVGB  
Hardware requirements:  
IBM-compatible PC with CPU: 80386/40 MHz and higher,  
working memory: 8 MB RAM, 5 MB free hard disk  
space,  
operating system: Windows 3.x / 95 / 98, monitor and  
graphic card (VGA), mouse, free serial interface
- Additional requirements: connecting lead RS 232 between  
PC and Universal Power Meter, e. g. hps Type 9102.50  
(9-pin, length 2 m)

Subject to technical modification.

## Universal Power Meter

### Technical Data

#### Measuring ranges

- Voltage/Current: 0 ... 500 V/0 ... 20 A
- Power factor ( $\cos \varphi$ ): 0 ... 1
- Active power: 0 ... 10 kW (single-phase)  
0 ... 30 kW (three-phase)
- Apparent power: 0 ... 10 kVA (single-phase)  
0 ... 30 kVA (three-phase)
- Reactive power: 0 ... 10 kvar (single-phase)  
0 ... 30 kvar (three-phase)
- Active energy: 0 ... 999999 kWh
- Apparent energy: 0 ... 999999 kVAh
- Reactive energy: 0 ... 999999 kvarh
- Active resistance: 0 ... 999999
- Apparent resistance: 0 ... 999999
- Reactive resistance: 0 ... 999999
- Measuring time: 0 ... 999999 h

#### Measuring errors

- Voltage and current measuring:  $\pm 1.0\%$ ,  $\pm 1$  digit
- Power measuring:  $\pm 1.0\%$ ,  $\pm 5$  digits

#### Serial interface (RS 232)

- Electrically isolated, bi-directional,  
baud rate: 1200, 2400, 4800 or 9600 baud,  
1 start bit, 8 data bits, 1 stop bit, no parity

#### Mains connection

- 220 ... 240 V, 50 ... 60 Hz, approx. 4 VA

#### Mechanical Data

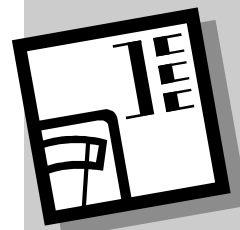
The front panel of the Universal Power Meter is made of 5 mm thick laminate, matt blue in colour with white engraving representing the built-in function groups.

The rear of the Board is protected with a grey plastic cover. Its shape allows the Board to be placed at an ergonomically favourable angle for example on a table.

To conduct the experiments, the Universal Power Meter can be placed on a table or suspended in an hps bench rack for demonstration purposes.

#### Dimensions / weight

- 133 x 297 x 95 mm (w x h x d) / weight: approx. 0.9 kg



Type 8701  
Type 8705  
Type 8706

## Table Meters

- Table meters for use on student desks
  - RMS Multimeter
  - Electronic Power Meter
  - Electronic Phase-Angle Meter
- With large analog dual scales for accurate reading
- All meters provided with built-in power supply
- All measuring ranges protected against overload by internal Circuits or fuses
- Connection of inputs via 4 mm safety jacks

## RMS Multimeter

Type 8701



Type 8701

### Measuring ranges

- DC and AC  
voltage: 0 ... 3 / 10 / 30 / 100 / 300 / 1000 V (rms)  
input impedance: 10 M
- DC and AC  
current: 0 ... 0,1 / 0,3 / 1 / 3 / 10 A (rms)  
internal resistance: 50 m  
fuse in the current path: 10 A, slow
- Resistance: 0 ... 100 / 300 / 1 / 3 / 10 / 30 / 100 / 300 k  
1 / 3 / 10 M

### Other

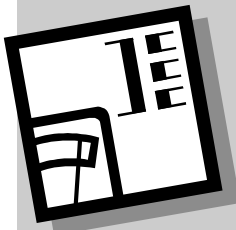
- Error limit: 2,5 %
- Crest factor: 10
- Frequency range: 0 ... 10 kHz
- Automatic polarity indication
- All inputs via 4 mm safety jacks

### Mains connection

- 230 V AC/115 V AC (110 V AC); 50 ... 60 Hz

### Dimensions/weight

- 130 x 90 x 215 mm (w x h x d)/ 0.95 kg



Type 8701  
Type 8705  
Type 8706

## Table Meters

### Electronic Power Meter

Type 8705



Type 8705

#### Measuring ranges

- Voltage (AC/DC): 0 ... 3 / 10 / 30 / 100 / 300 / 1000 V
- Current (AC/DC): 0 ... 0.1 / 0.3 / 1 / 3 / 10 A
- Active power: 0 ... 10 kW (crest factor 4)
- Reactive power: 0 ... 10 kVar (capacitive and inductive)
- Apparent power: 0 ... 10 kVA

#### Other

- Error limit:  $\pm 3\%$
- Overflow indication

#### Mains connection

- 230 V AC / 115 V AC (110 V AC); 50 ... 60 Hz

#### Dimensions/weight

- 130 x 90 x 215 mm (w x h x d) / 0.95 kg

### Electronic Phase-Angle Meter

Type 8706



Type 8706

#### Measuring ranges

- Voltage: 1 V ... 1000 V (rms)
- Current: 0.1 A ... 10 A (rms)
- Frequency: 10 Hz ... 100 kHz

#### Meter

- Phase angle:  $-90^\circ$  ... 0 ...  $+90^\circ$
- Power factor: 0 ... 1 (leading); 1 ... 0 (lagging)

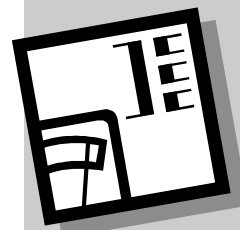
#### Mains connection

- 230 V AC / 115 V AC (110 V AC); 50 ... 60 Hz

#### Dimensions/weight

- 130 x 90 x 215 mm (w x h x d) / 0.95 kg

## Power Supplies



Universal power supply units for direct use on the benchtop or in the hps Demonstration Rack

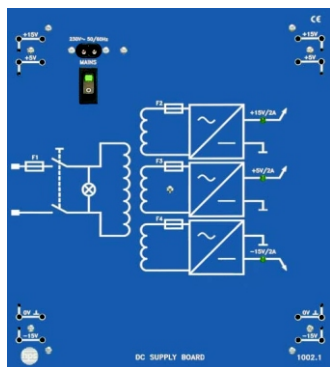
Type 1002.1

Type 1002.3

### DC SUPPLY BOARD

+15 V DC / +5 V DC / -15 V DC

Type 1002.1



Type 1002.1

#### Mains connection

- 230 V AC/115 V AC (110 V AC); 120 VA; 50 ... 60 Hz

#### Output voltages and currents

- DC voltage: +15 V/max. 2 A; residual ripple  $U_{pp} \leq 20$  mV
- DC voltage: +5 V/max. 2 A; residual ripple  $U_{pp} \leq 20$  mV
- DC voltage: -15 V/max. 2 A; residual ripple  $U_{pp} \leq 20$  mV

All voltage outputs are short-circuit-proof (indicated by LEDs), current-limited and electrically isolated from the mains.

The mains transformer of the DC SUPPLY BOARD is equipped with a thermo-switch on the primary side which cuts off the unit from the mains at temperatures above 125° C. The voltages are fed out through 4 mm jacks.

#### Dimensions/weight

- 266 x 297 x 95 mm (w x h x d)/3.3 kg

### 5 V SUPPLY BOARD

+5 V DC

Type 1002.3



Type 1002.3

#### Mains connection

- 230 V AC/115 V AC (110 V AC); 20 VA; 50 ... 60 Hz

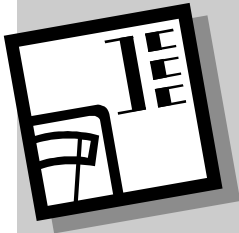
#### Output voltage and current

- DC voltage: +5 V/max. 1.5 A; residual ripple  $U_{pp} \leq 20$  mV

The voltage output is short-circuit-proof (indicated by LED), current-limited and electrically isolated from the mains;  
The voltage is fed out through 4 mm jacks.

#### Dimensions/weight

- 133 x 297 x 95 mm (w x h x d)/ 1.26 kg



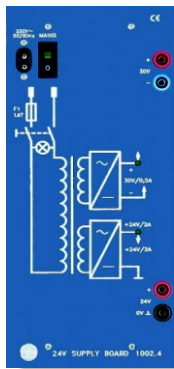
Type 1002.4  
Type 1005.2

## Power Supplies

### 24 V SUPPLY BOARD

+30 V DC / +24 V DC

Type 1002.4



Typ 1002.4

#### Mains connection

- 230 V AC / 115 V AC (110 V AC); 90 VA; 50 ... 60 Hz

#### Output voltages and currents

- DC voltage: +30 V/max. 0.5 A; residual ripple  $U_{SS} \leq 20$  mV
- DC voltage: +24 V/max. 2 A; residual ripple  $U_{SS} \leq 20$  mV

All voltage outputs are short-circuit-proof (indicated by LEDs), current-limited and electrically isolated from the mains.

The voltages are fed out through 4 mm safety jacks.

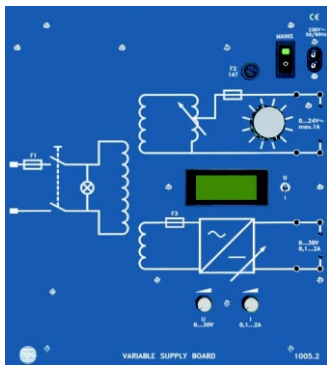
#### Dimensions/weight

- 133 x 297 x 95 mm (w x h x d) / weight: 1.85 kg

### VARIABLE SUPPLY BOARD

0 ... 30 V DC / 0 ... 24 V AC

Type 1005.2



Type 1005.2

#### Mains connection

- 230 V AC/115 V AC (110 V AC); 120 VA; 50 ... 60 Hz

#### Output voltages and currents (short-circuit-proof)

- DC voltage: 0 ... 30 V/0.1 ... 2 A; residual ripple  $U_{pp} \leq 20$  mV  
The DC voltage and current can be adjusted continuously with two separate potentiometers and tapped at four 4 mm jacks.
- AC voltage: 0 ... 24 V/max. 1 A. The variable sinewave AC voltage can be set with a regulating transformer and tapped at four 4 mm jacks.

#### DC current/voltage display

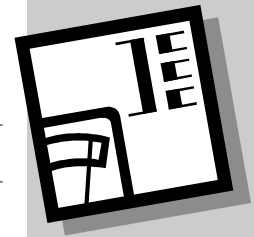
- LC display, switchable between current and voltage

#### Dimensions/weight

- 266 x 297 x 110 mm (w x h x d)/3.6 kg



## Power Supplies

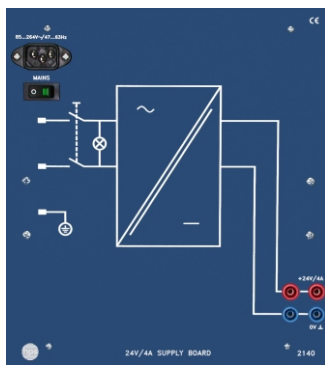


**Type 2140**  
**Type 1005.3**

### 24 V / 4 A SUPPLY BOARD

**+24 V DC**

**Type 2140**



**Type 2140**

#### Mains connection

- 85 ... 264 V AC / 47 ... 63 Hz; 100 VA; (switching power supply)

#### Output voltages and currents

- DC voltage: +24 V / max. 4 A; residual ripple  $U_{SS}$ :  $\leq 150$  mV

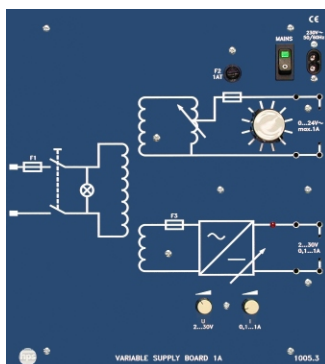
All voltage outputs are short-circuit-proof and electrically isolated from the mains. The voltages are fed out through 4 mm safety jacks.

#### Dimensions / weight

- 266 x 297 x 95 mm (w x h x d) / weight: 1.6 kg

### VARIABLE SUPPLY BOARD 1 A 2 ... 30 V DC / 0 ... 24 V AC

**Type 1005.3**



**Type 1005.3**

#### Mains connection

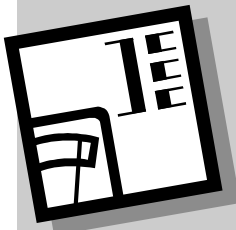
- 230 V AC/115 V AC (110 V AC); 60 VA; 50 ... 60 Hz

#### Output voltages and currents

- DC voltage: 2 ... 30 V/0.1 ... 1 A; residual ripple  $U_{pp}$ :  $\leq 20$  mV  
The short-circuit-proof DC voltage and current can be adjusted continuously with two separate potentiometers and tapped at four 4 mm jacks.
- AC voltage: 0 ... 24 V/max. 1 A;  
The variable sinewave AC voltage can be set with a regulating transformer and tapped at four 4 mm jacks.

#### Dimensions/weight

- 266 x 297 x 110 mm (w x h x d)/2.7 kg



Type 8625  
Type 2740.1

## Power Supplies

### DC POWER SUPPLY

0 ... 250 V DC

Type 8625



Type 8625

#### Mains connection

- 230 V AC; 470 VA; 50 ... 60 Hz

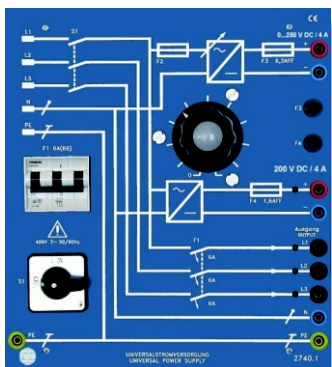
#### DC voltage and current

- 0 ... 250 V / max. 1.6 A; continuously adjustable

#### Dimensions / weight

- 210 x 200 x 300 mm (B x H x T) / ca. 10 kg

### UNIVERSAL POWER SUPPLY 230 V AC / 400 V AC / 200 V DC / 0 ... 250 V DC Type 2740.1



Type 2740.1

#### Mains connection

- 220 V ... 240 V AC/380 V ... 415 V AC; three-phase

#### Output voltage and current, three-phase

- 220 V... 240 V AC/380 V ... 415 V AC;  
with 3-phase pilot lamps and automatic cut-off switch, 3-pole (6 A)

#### Fixed DC

- 200 V (4 A); for field current supply of DC machines, with pilot lamp

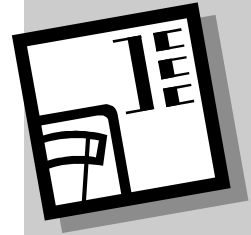
#### DC, continuously adjustable

- 0 ... 250 V (4 A); thyristor-controlled; with integrated DC choke

#### Dimensions/weight

- 266 x 297 x 195 mm (w x h x d)/approx. 4.6 kg

## Power Supplies

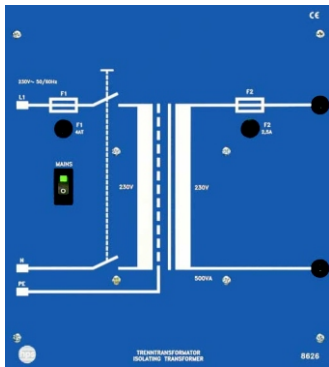


Type 8626

### ISOLATING TRANSFORMER

230 V AC

Type 8626



Type 8626

#### Mains connection

- 230 V AC; 500 VA; 50 ... 60 Hz

#### Output voltage and current (electrically isolated from the mains)

- 230 V AC; max. 2.5 A

#### Dimensions

- 266 x 297 x 133 mm (w x h x d)

#### Weight

- 7.9 kg

