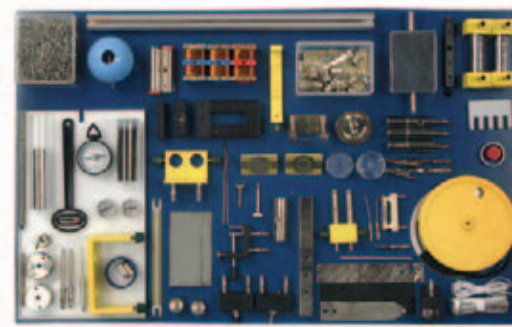
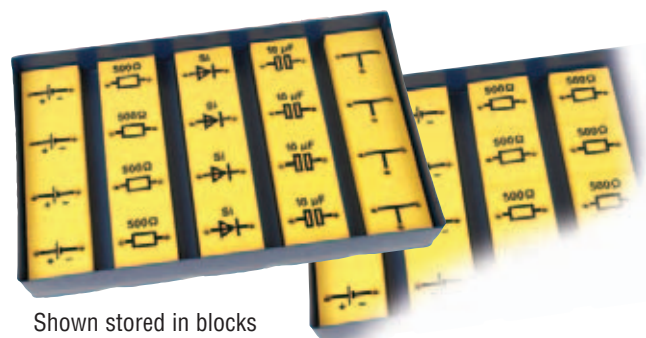




compact system student  
magnetostatics, electricity, electronics



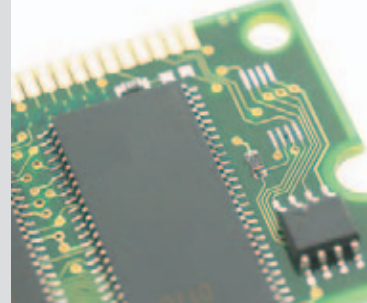
Shown stored in sets



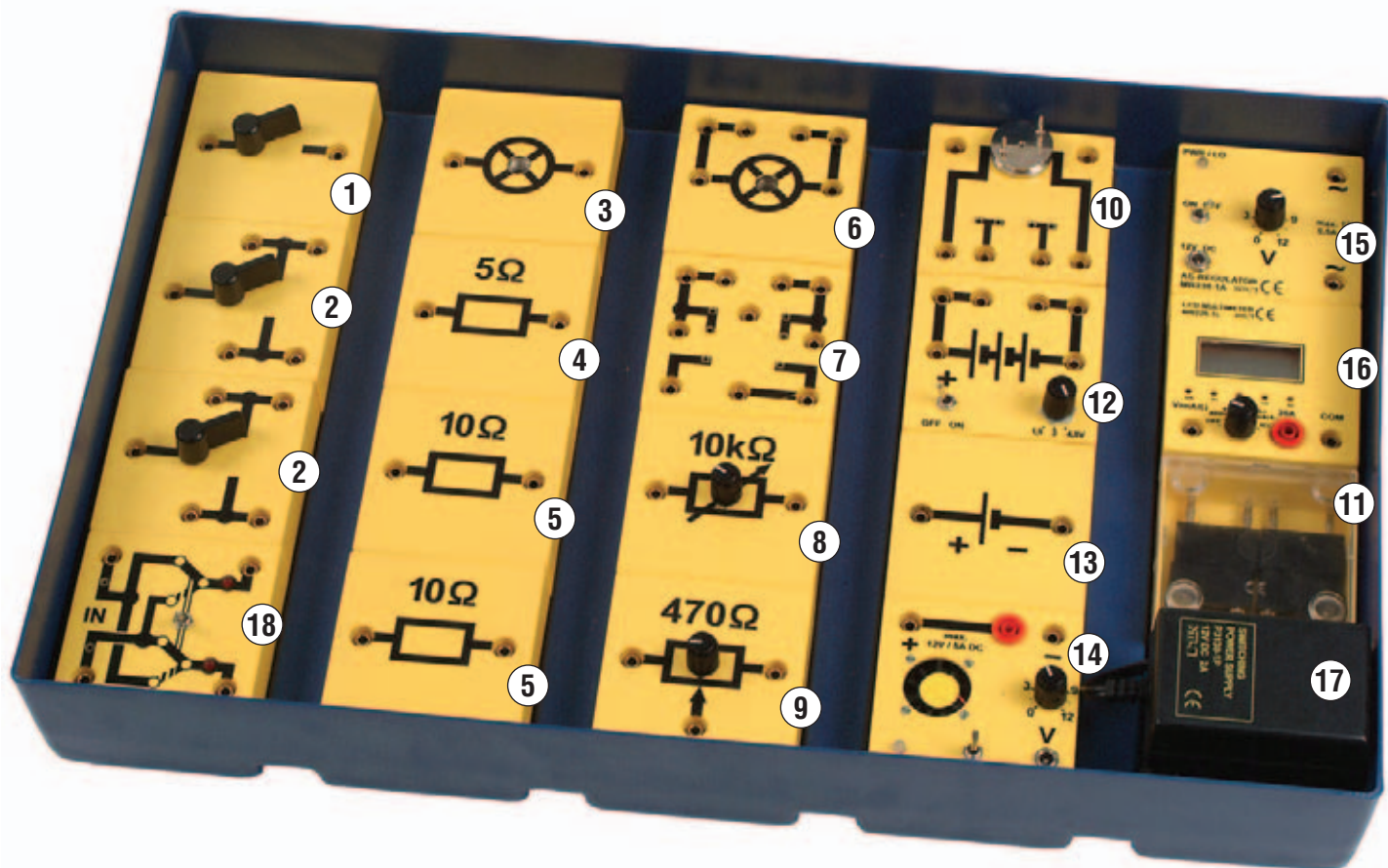
Shown stored in blocks

# student equipment system

# compact system student magnetostatics, electricity, electronics



## Electricity cs



### P3700-1A Electricity cs consisting of:

1	P3710-2R	1	MBC On-Off switch
2	P3710-2T	2	MBC Double-throw switches
3	P3710-2A	1	MBC Lamp socket E10, 2 jacks
4	MB200-1W	1	MBC Precision resistor, 5 ohms
5	MB200-2W	2	MBC Precision resistors, 10 ohms
6	P3710-2B	1	MBC Lamp socket E10, 6 jacks
7	P3710-1R	1	MBC Junction box with 10 + 4 sockets
8	P3710-5A	1	MBC Variable resistor 10 kOhms, 4 W
9	P3710-5F	1	MBC Potentiometer 470 ohms, 4 W
10	MB200-1M	1	MBC Motor
11	P3712-1S	2	Jumper plugs, "compact", black
11	P3712-2S	2	Jumper plugs with connector terminal, MBC, black
	P7806-1F	1	Storage box for MBCs, large, fitted for equipment

### Power supply and transformer supplement (not included in P3700-1A)

12	MB201-2B	1	MBC Variable battery, 4.5 V
13	MB201-4B	1	MBC Variable battery, 6 V
14	MB230-1D	1	DC regulator, "compact"
15	MB230-1A	1	AC regulator, "compact"
16	MB220-1L	1	Digital measurement device, "compact"
17	P3130-1P	1	Mains transformer 12V/2A

All of the parts fit into storage box P3700-1A.

### Recommended accessory:

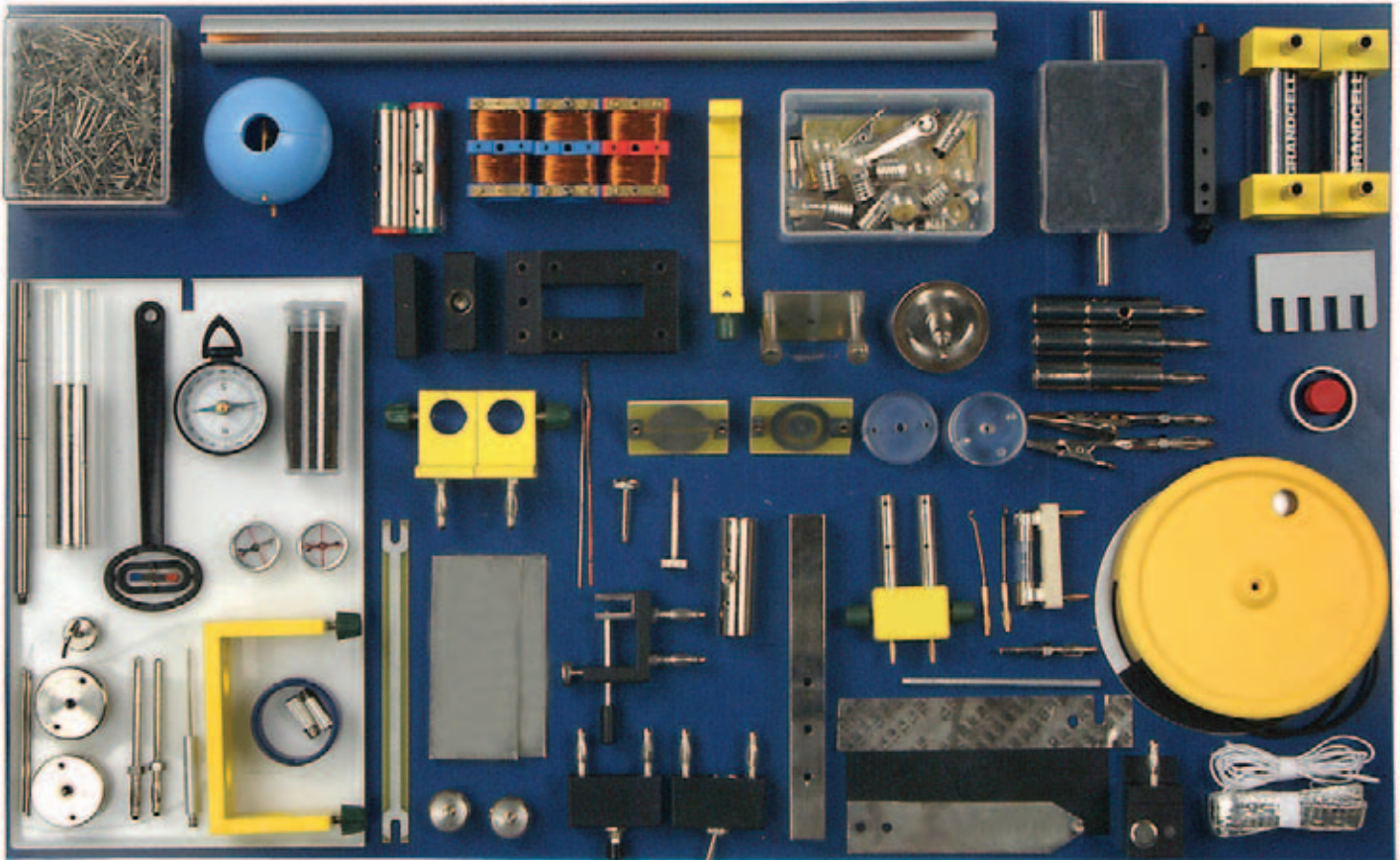
18	P3710-2X	1	MBC Four-way switch
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Fits into storage box P3700-1A.



# compact system student magnetostatics, electricity, electronics

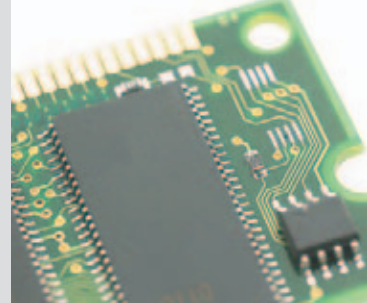
## Magnetostatics & electricity: compact system



### P3700-1B Magnetostatics & electricity cs consisting of:

P3410-4R	2	Threaded bases	P3711-1G	1	Bell gong with plug
P3410-3F	1	Aluminium support with needle	P3711-3E	1	Angular contact
P3410-5M	1	Pocket compass	P3711-2P	1	Conductor for Oersted's experiemnt
P3410-2C	1	Magnetic field sensor	P3711-2R	1	Coil with 800 turns, blue
P3410-1H	1	Geomagnetism model sphere	P3711-2S	1	Coil, 1600 turns, red "cs"
P3410-1R	1	Bar magnet, cylindrical, neodymium, for MB200-1M	P3711-1J	1	U-shaped iron core with clamp
P3410-2R	1	Bar magnet, cylindrical, neodymium, for P3710-1R	P3410-6F	1	Iron core, solid, cylindrical, short
P3410-2B	2	Bearing sleeves	P3711-1L	2	Pole plates
P3410-3D	2	Double pin plug	P3711-3K	2	Fixing screws, M4
P3410-3R	1	Magnet holders, pair	P3711-1F	1	Fixing screw, M3, short
P3410-4L	2	Bearing supports, long	P3711-2F	1	Fixing screw, M3, long
P3410-2G	1	Threaded rods, set of 4	P3450-3B	1	Aluminium rod
P3711-1Z	1	Iron cylinder with hook	P3410-4S	1	Spacing disc
P3410-6E	1	Iron core, solid, cylindrical, long	P3711-1N	1	Brush holder
P3410-1N	1	Iron nails, box	P3711-1P	2	Wire brushes
P3325-2C	1	Electrolysis tank	P3911-1O	1	Commutator disc
P3325-2A	1	Electrodes, set	P3911-1R	1	Slip ring disc
P3711-4K	3	Clamping sockets with plug	P3410-4A	1	Drive pulley, "compact"
P3911-3D	2	Crocodile clips with plug	P3410-5A	1	Drive belt, "compact"
P3310-1A	2	Crocodile clips, plain metal	P3410-3L	1	Bearing support, short
P3325-1A	1	Conductors and non-conductors, set of 7	P3320-9B	1	Tubular fluorescent lamp
P3711-1H	1	Heating element	P3712-1E	1	Light bulb socket, E10
P3711-3F	1	Flat spring	P7812-1B	1	Box insert for magnetostatics & electromagnetism, MBC, fitted to equipment
P3711-4F	1	Flat spring holder	P7806-1B	1	Storage box, large
P3711-2M	1	Bimetallic strip			

# compact system student magnetostatics, electricity, electronics



## P3700-2B MAG/EL cs supplement to P3700-1B

consisting of:

DE420-1Z	2	Plotting compass
P3410-2P	1	Tube for floating magnets
P3410-5D	1	Iron rods, set of 2
P3410-1M	1	Clamp for bar magnets
P3410-2L	1	Magnetic field plate
P3410-1W	1	Soft iron ring
P3410-2F	1	Box with iron filings
P3911-2H	4	Connector terminal for AA batteries
P3122-2B	2	Rechargeable batteries, 1.5 V/1500 mAh, AA-size
P3713-3P	1	Toggle switch, "cs"
P3713-4P	1	Push button, "cs"
P3711-5A	1	Carbon granule microphone, "compact" model
P3711-5B	1	Loudspeaker membrane, model

P3711-2R	1	Coil with 800 turns, blue
P3410-6G	1	Iron core, solid, square
P3410-5S	1	Spacer disc
P3711-1X	1	Pendulum rod
P3711-1A	1	Aluminium ring
P3711-1W	1	Eddy current (Waltenhofen) plate
P3711-3B	1	Colour disc, "compact", D=100 mm
P3711-2L	1	Tube for demonstrating Lenz's law
DE407-1A	1	Button magnets, pair, 13x5 mm, neodymium
P3712-1L	1	Fluorescent lamp holder
P3712-2M	1	Micro-lamp, block
P3711-4R	1	Reed relay
P3711-5T	1	Thermocouple

All of the parts fit into storage box P3700-1B.

## Additionally required:

P3410-1A 1 Assembly platform for MBCs (see page 395)

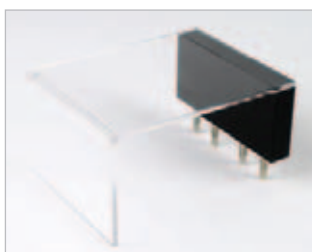
### Connecting leads (not shown)

P3711-1V 1 Safety leads, set of 6, black  
P3310-7S 2 Connecting leads, 4-mm plug / 2-mm jack

## Accessories required for P3700-1B

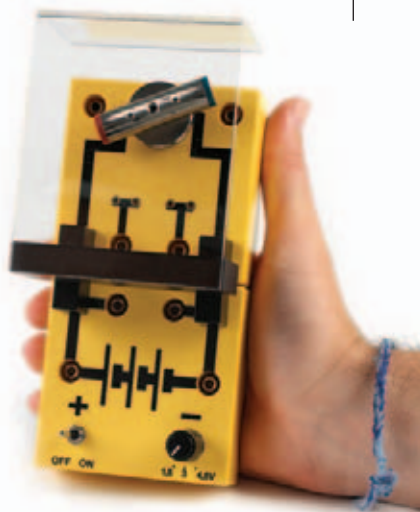
### Supply items (see page 399)

P3314-1A	1	Fuse wire, D=0.1 mm, L=50 m
P3316-1B	1	Copper wire, D = 0.2 mm, roll, black
P3316-1C	1	Constantan wire, D = 0.2 mm, roll, blue
P3316-1E	1	Iron wire, D = 0.2 mm, roll, green
DE309-1S	1	Light bulbs, 4 V/40 mA, E10, set of 5
DE309-4S	1	Light bulbs, 6 V/1 A, E10, set of 5
P3316-1Z	2	Wire meshes, I-shaped
P1810-3B	1	Elastic string, white, L = 1 m
P3316-1M	1	Metal band, L = 1.6 m



## MB209-1S Safety cover for Motor/Generator „compact“

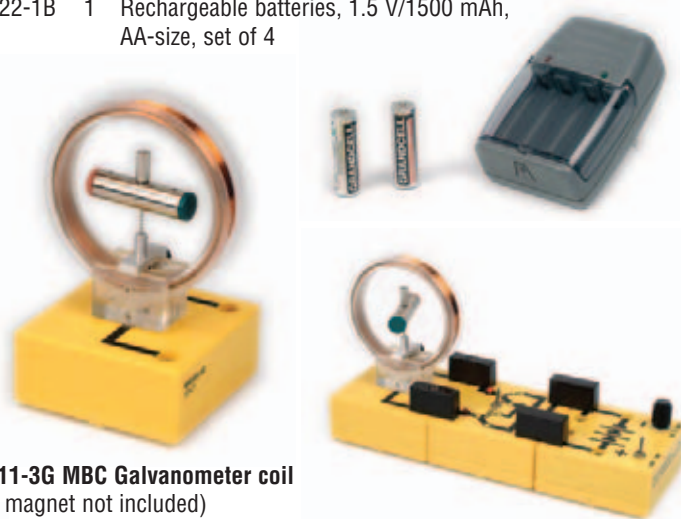
Acrylic cover with four 4-mm-plugs to be mounted on jumper plugs with connector terminal, preventive to unintentional contact with rotating coil or magnet.



Use: Safety cover

## Recommended accessories:

P3210-1C	1	Multimeter, analogue (see page 546)
P3911-3G	1	MBC Galvanometer coil
P3122-2L	1	Charger for P3122-1B batteries
P3122-1B	1	Rechargeable batteries, 1.5 V/1500 mAh, AA-size, set of 4



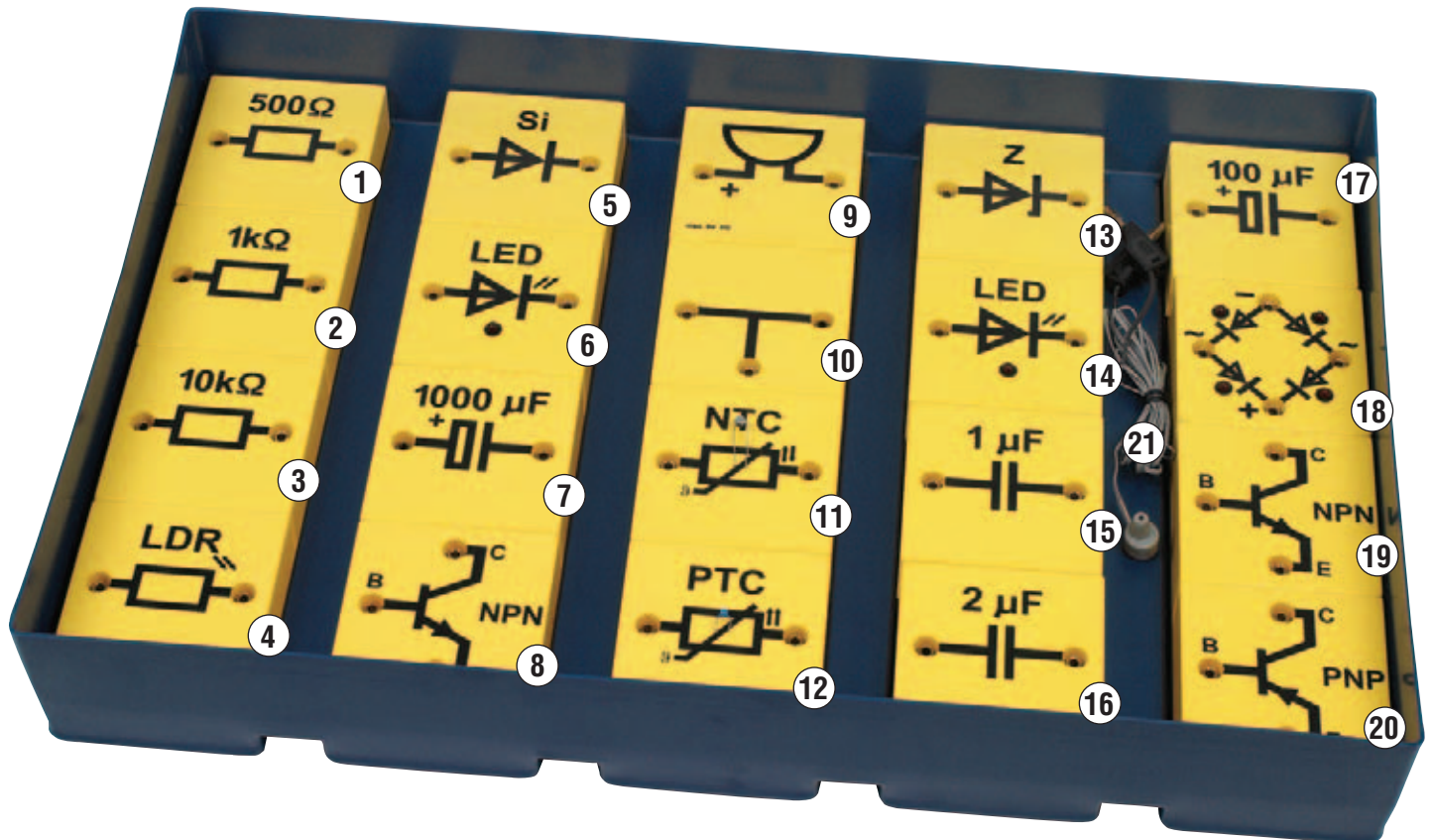
P3911-3G MBC Galvanometer coil  
(bar magnet not included)





# compact system student magnetostatics, electricity, electronics

## Electronics: compact system



### P3700-1C Electronics cs

consisting of:

1	P3710-3M	1	MBC Resistor 500 ohms
2	P3710-3O	1	MBC Resistor 1 kOhm
3	P3710-3R	1	MBC Resistor 10 kOhms
4	P3710-4J	1	MBC Photo resistor (LDR)
5	P3710-7A	1	MBC Si diode
6	P3710-7K	1	MBC LED, red
7	P3710-6R	1	MBC Capacitor 1000 μF
8	P3710-8A	1	MBC Transistor NPN, base left
9	P3711-2A	1	MBC Buzzer module
10	P3710-1T	1	MBC lead, t-shaped
	P7806-1F	1	Storage box for MBCs, large, fitted to equipment

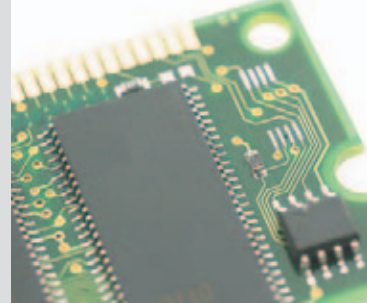
### P3700-2C Electronics cs supplement 1

consisting of:

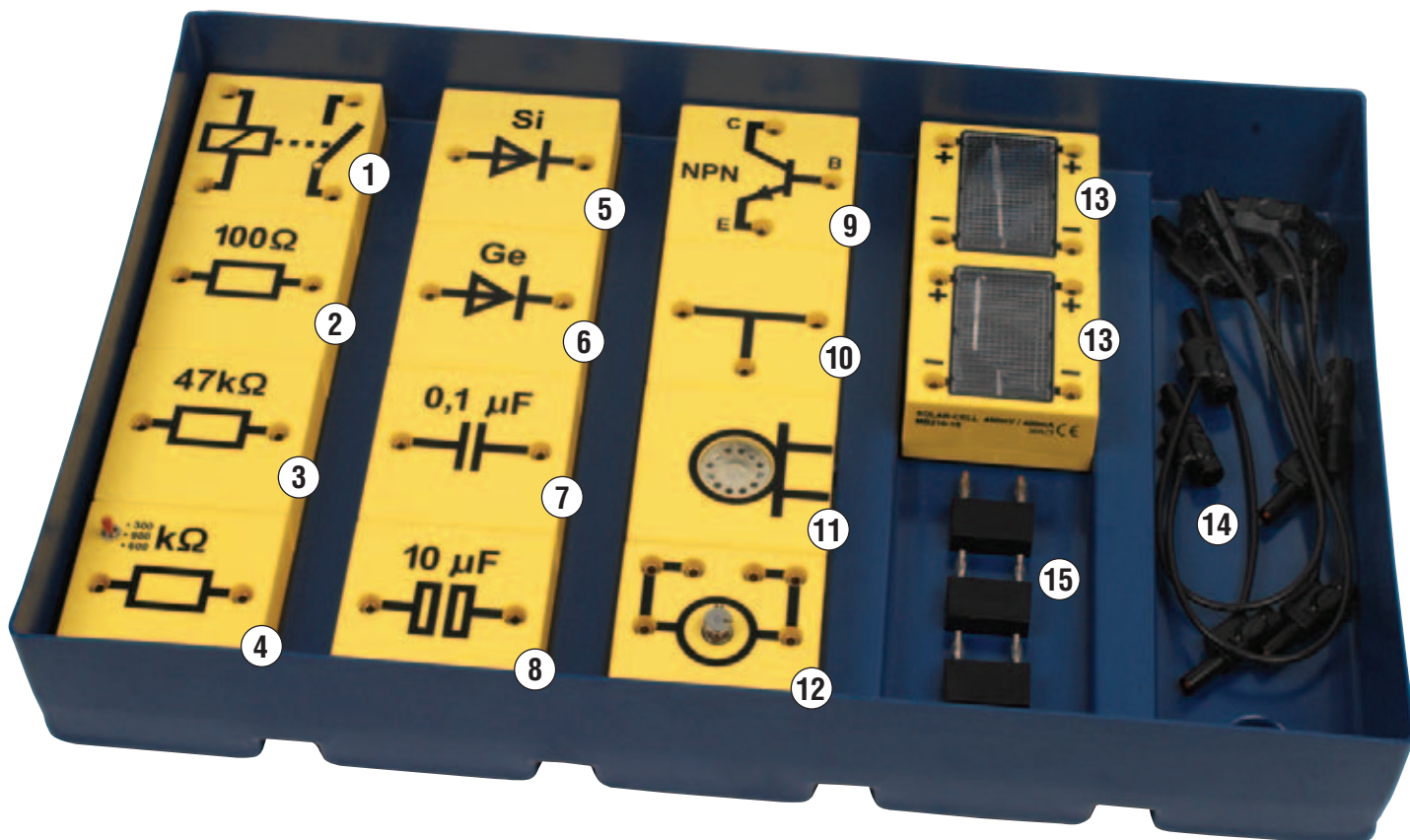
11	P3710-4A	1	MBC NTC thermistor
12	P3710-4E	1	MBC PTC thermistor
13	P3710-7E	1	MBC Zener diode
14	P3710-7K	1	MBC LED, red
15	P3710-6G	1	MBC Capacitor 1 μF
16	P3710-6H	1	MBC Capacitor 2 μF
17	P3710-6N	1	MBC Capacitor 100 μF
18	P3710-7T	1	MBC Bridge rectifier
19	P3710-8A	1	MBC Transistor NPN, base left
20	P3710-8C	1	MBC Transistor PNP
	P3712-2B	1	Earphone

All of the parts fit into storage box P3700-1C.

# compact system student magnetostatics, electricity, electronics



## Electronics supplement 2: compact system



### P3700-3C Electronics cs supplement 2

consisting of:

- |    |          |   |   |
|----|----------|---|---|
| 1  | P3710-4R | 1 | MBC Relay                                 |
| 2  | P3710-3G | 1 | MBC Resistor 100 ohms                     |
| 3  | P3710-3S | 1 | MBC Resistor 47 kOhms                     |
| 4  | P3710-3K | 1 | MBC Resistance decade 300, 600, 900 kOhms |
| 5  | P3710-7A | 1 | MBC Si diode                              |
| 6  | P3710-8G | 1 | MBC Ge diode                              |
| 7  | P3710-6D | 1 | MBC Capacitor 0.1 $\mu$ F                 |
| 8  | P3710-6J | 1 | MBC Capacitor 10 $\mu$ F                  |
| 9  | P3710-8B | 1 | MBC Transistor NPN, base right            |
| 10 | P3710-1T | 1 | MBC lead, t-shaped                        |
| 11 | P3721-2C | 1 | MBC Microphone                            |
| 12 | MB200-1G | 1 | MBC Geared motor                          |
| 13 | MB210-1S | 2 | Solar cells, "compact"                    |

- |          |   |   |
|----------|---|---|
| P3711-1V | 1 | Safety leads, set of 6, black                     |
| P3712-1S | 3 | Jumper plugs, "compact", black                    |
| P7806-1F | 1 | Storage box for MBCs, large, fitted for equipment |



**Recommended accessory:**  
MB250-3F  
Function generator  
"compact"

### MB250-3F Function generator "compact"

Output signals: sine, triangle and square  
Frequency range: 0.1 Hz ... 50 kHz, continuously variable  
Output voltage: 4 V<sub>eff</sub>/1 A<sub>eff</sub> (4 watts at 4 ohms) from two 4-mm safety jacks  
Input voltage: 12 V DC through hollow jack, supplied by mains transformer P3130-1P (12V/2A) or 12 V DC/5.8 A fixed-voltage transformer P3130-2P  
Dimensions: 84x84x39 mm