

Electrotechnical benches



Range of stand-alone, complete and reliable bench. This equipment complies with laboratory international safety standards. It is made up of 1 or 2 electrical cabinets locked by key, connected by a foot rest. The top of dimensions 2000 x 750 mm in standard is stratified. All outputs are equipped with safety terminals 4mm (Supplies & Loads).

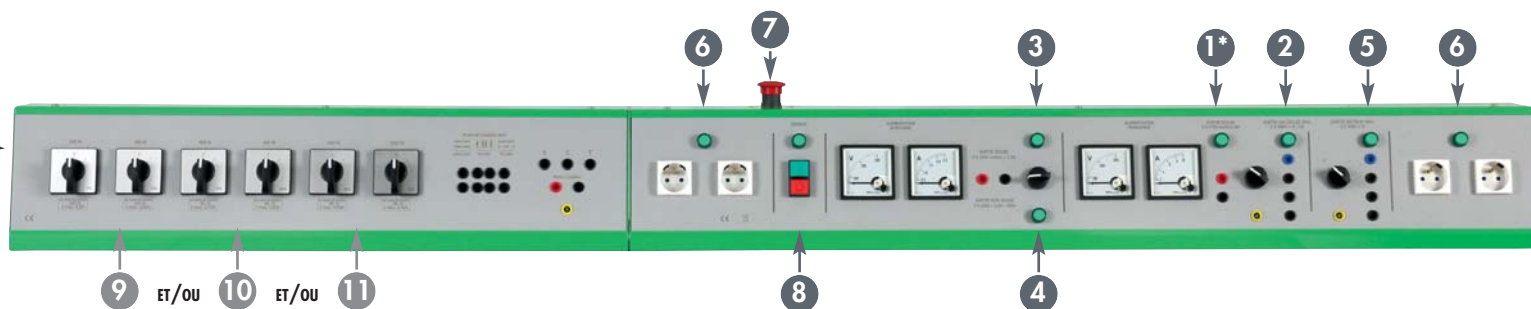
LOCKABLE COVER FOR CIRCUIT BREAKERS
Circuit breakers are placed behind a lockable transparent cover
Restricted access IP2X protection



4000VA		ELECTROTECHNICAL BENCHES OF 4KVA RATING								
Réf.	Réf.	DC SUPPLY 0-270V 16A	3-PHASE 0-450V 8A	AUXILIARY 0-250VDC 2,5A	AUXILIARY 0-250VAC 2,5A	3-PHASE 3x400VAC 4 TERMINALS	4 POWER SOCKETS 230V 2P + E	RESISTIVE LOAD 4000W	INDUCTIVE LOAD 4000VAR	CAPACITIVE LOAD 4000VAR
BZO-40A	BZV-40A	x	x	x	x	x	x	x	x	x
BZO-40B	BZV-40B	x	x	x	x	x	x	x	x	
BZO-40C	BZV-40C	x	x	x	x	x	x	x		
BZO-40D	BZV-40D	x	x	x	x	x	x			
BXO-40A	BXV-40A		x	x	x	x	x	x	x	x
BXO-40B	BXV-40B		x	x	x	x	x	x	x	
BXO-40C	BXV-40C		x	x	x	x	x	x		
BXO-40D	BXV-40D		x	x	x	x	x			

2000VA		ELECTROTECHNICAL BENCHES OF 2KVA RATING								
Réf.	Réf.	DC SUPPLY 0-270V 8A	3-PHASE 0-430V 5A	AUXILIARY 0-250VDC 2,5A	AUXILIARY 0-250VAC 2,5A	3-PHASE 3x400VAC 4 BORNES	4 POWER SOCKETS 230V 2P + E	RESISTIVE LOAD 2000W	INDUCTIVE LOAD 2000VAR	CAPACITIVE LOAD 2000VAR
BZO-20A	BZV-20A	x	x	x	x	x	x	x	x	x
BZO-20B	BZV-20B	x	x	x	x	x	x	x	x	
BZO-20C	BZV-20C	x	x	x	x	x	x	x		
BZO-20D	BZV-20D	x	x	x	x	x	x			
BXO-20A	BXV-20A		x	x	x	x	x	x	x	x
BXO-20B	BXV-20B		x	x	x	x	x	x	x	
BXO-20C	BXV-20C		x	x	x	x	x	x		
BXO-20D	BXV-20D		x	x	x	x	x			

■ HARD-WEARING LAMP WITHOUT MAINTENANCE ■ INSULATED OUTPUT ■ LOADS INSIDE THE LEFT-HAND CABINET



1* MAIN DC SUPPLY*

0-270V variable and insulated from the mains by insulated transformer as specified by safety standards for the use of direct currents. The whole unit is protected against overloads and short circuits. Rectification is provided by a generously over-specified Graetz bridge (ripple rate 4%). Voltmeter and ammeter displays. A magneto-thermal circuit breaker protects this output. A contactor with a control button gives start/stop functions command, on condition that this the autotransformer output is at 0V. An indicator light shows that the unit is powered up. * except BXo & BXV

2 VARIABLE 3-PHASE SUPPLY

Variable by autotransformer and protected against overloading and short circuits. The voltage range on offer is 0-430V between phases (450V for the 4000VA model). A thermal magnetic circuit breaker protects this output. A push button contact performs start/stop switching as long as the autotransformer is at 0 voltage. An indicator light shows that the unit is powered up

Main supplies 1 and 2 can't work simultaneously

3 DC AUXILIARY SUPPLY

0-250V variable by single phase autotransformer protected against overloading and short circuits. Voltmeter and ammeter displays. An On/Off button control. An indicator light shows that the unit is powered up. Double alternating rectification, the ripple factor varies with the loads.

4 SINGLE-PHASE AUXILIARY SUPPLY

0-250V variable by single phase autotransformer protected against overloading and short circuits. Voltmeter and ammeter displays. An On/Off button control.

Main supplies 3 and 4 can't work simultaneously

5 3-PHASE SUPPLY (3X400VAC FIXED)

On four terminals, protected, with switch and On/Off button control. An indicator light shows that the unit is powered up

6 4 POWER SOCKETS 230V (2P + E)

230V sockets (2 on either side), protected, with indicator lights.

7 EMERGENCY STOP BUTTON

Key controlled in the centre of the console (can be mounted in alternative positions on request). It cuts out a single bank without affecting the others. Positive security stop.

8 PUSH BUTTON

Start/Stop with indicator providing start-up with "memory" function. An indicator light shows that the unit is powered up

9 RESISTIVE LOAD

Consisting of a resistive wire wound on ceramic cores (protected against oxydation). The 6 switches (rapid breaking type for inductive loads) can be varied in 5% steps.

The switches are placed on the bank next to the input connectors and selector links for single-phase and DC 240V, 3-phase 240VAC or 3-phase 400VAC.

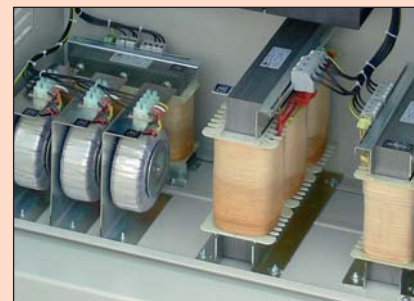
10 CAPACITIVE LOAD

Consisting of capacitors which can operate at 450VAC. The switches, selector links and input connectors are on the bank and easy to access. The load can be varied in 5% steps. It may be used in single-phase on DC 240V, 3-phase 240VAC or 3-phase 400VAC. (A, B and C versions only)

11 INDUCTIVE LOAD

3 moveable cores moved by a control wheel and an endless screw, altering the inductance of the 3 windings allows regulation of power factor from 0.9 to 0.1 in single- or 3-phase. The links and input connectors are mounted on the console and easily accessible. It may be used in single-phase DC 240V, 3-phase 240V or 3-phase 400V. The coils are all protected by fuses (A and B versions only).

FOR YOUR SAFETY THE DC OUTPUTS ARE SEPARATED FROM THE MAINS BY SAFETY ISOLATING TRANSFORMER



CUSTOM-MADE PRODUCTS

Examples of manufacturing carried out according to customers' needs



Options for electrotechnical benches

BENCH TOP IN 1000mm DEPTH

Dimensions 2000 x 1000 mm
Usable space 2000 x 850 mm

ref. AUG1000-ST

SHELF

Lowered shelf (400mm high)
Depth: 400mm

ref. TBG-200



DC SUPPLY



Unit of 2 fixed DC
power supplies
+15V/3.4A -15V/3.4A

ref. AD151

3-PHASE 24VAC SUPPLY



3-phase insulated from the
mains, 3 x 24 VAC/250VA
and protected by a circuit
breaker. Output controlled
by On/Off contactor and
indicated by a LAMP.

ref. TRI24

DC VARIABLE SUPPLY



DC power supply with
adjustable voltage
0-30V DC/3A

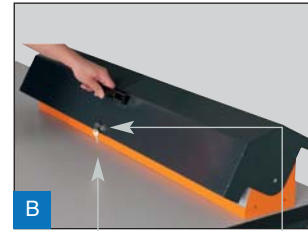
ref. R3030I

ANTI-VANDALISM COVER WITH KEY

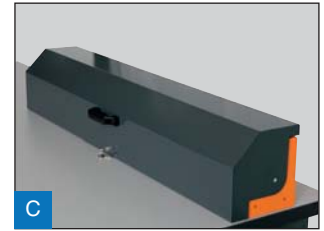
This pull-down cover in front of the electrical equipment in the console prevents students from scribbling on or vandalising the front and its equipment. Standard dimensions: 1200mm. **Other dimensions upon request.**



A



B



C

ref. VSG-12
(1200mm)

ref. VSG-20
(2000mm)



System of lock with hook
taken in the plate.
Compatibility with a shelf,
contact us.

360° LIGHT SIGNAL TOWERS



Beacon with 3 light indicators:
red, yellow and green Ø60mm

ref. VOY181

Beacon with 2 light indicators:
red and green Ø60mm

ref. VOY121

Beacon with a red light indicator (voltage
presence) Ø60mm

ref. VOY61

COLOURS AVAILABLE UPON REQUEST
white - orange - red - green - blue



HARD-WEARING LED LAMPS

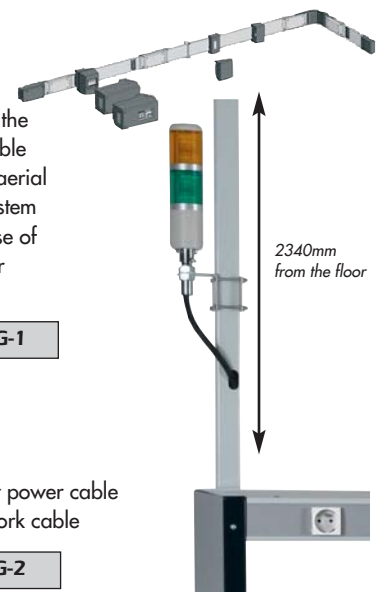
VERTICAL CABLE RACEWAY

For the
wiring of the
power cable
from the aerial
wiring system
to the base of
the power
supply

ref. DEG-1

Model for power cable
and network cable

ref. DEG-2

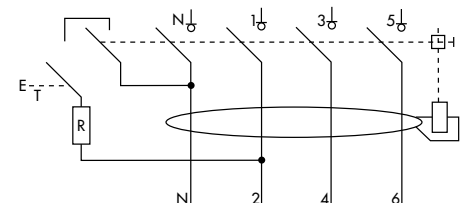


OPTION RESIDUAL CURRENT CIRCUIT BREAKER

30mA protection at the front. Useful only if the room
is not equipped with this device.

ref. DIF30-4L A Type

ref. DIF30-4LAC AC Type

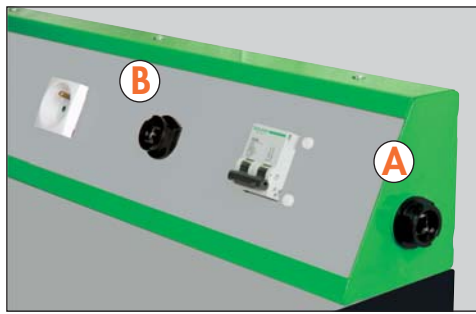


CANALIS CONNECTER

Connector for descent of KNA Canalis,
with space for modular protections.
(Protections and cable not supplied).

ref. KNB25CF5



RJ45 WIRED PLUG

ref. CARJ45

Combination of 2 RJ45 connectors connected together in the console. The side connector **A** is used to connect the network input, the front connector **B** is for the user's connection.

RJ45 PLUG (NOT WIRED)

ref. SERJ45

RJ45 socket installed but not connected.

INVERTER SOCKET

Not wired.
For U.P.S.

Réf. SE-UPS

3-PHASE HYPRA SOCKET (400VAC)

Fitted in parallel on the
three-phase mains output
terminals

ref. HP4

OVERSPEED MONITORING

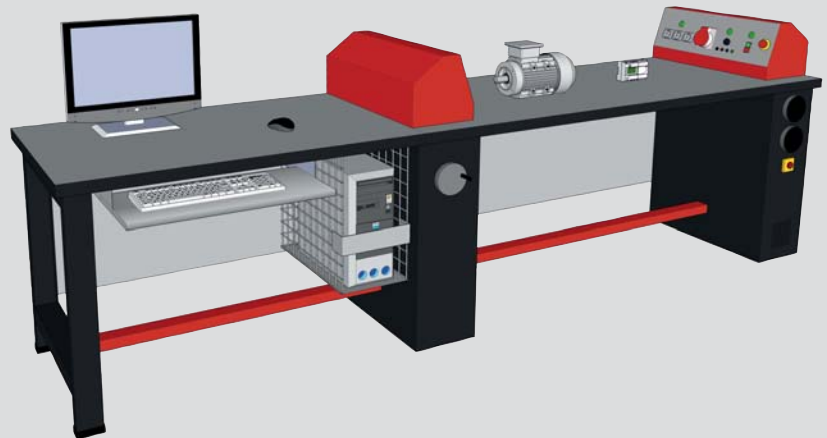
Overspeed monitoring option for DC motors. This system, which can be overridden, enables the operator to monitor the minimum auxiliary power supply current in the event of cutting off the main DC power supply.



ref. CTRL-E

CUSTOM-MADE PRODUCTS

Examples of manufacturing carried out according to customers' needs



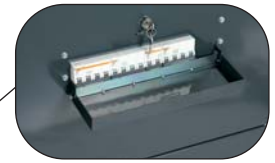
Tailor-made autonomous electro-technical workstations

These tailor-made solutions allow you to create specific workstations and remain within market standards. **Enjoy the unlimited manufacturing flexibility of our workshops to create your ideal workstations!**

First, select the base mechanical solution from 8 possible choices:

- choice of 2 top depths (fixed width).
- choice of 2 colour combinations.
- choice of 2 console sizes.

A 1200mm console is better for computer installation.



All circuit breakers are placed behind a lockable transparent cover. Restricted access IP2X protection.

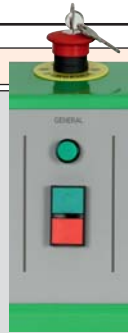
MANDATORY MAIN MODULE

This module provides for the positive safety of all the additional modules. It consists of:

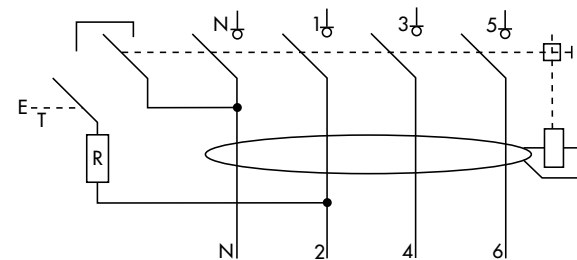
- start/stop button.
- emergency stop button with key.
- main switch (positioned on the front of the technical leg)

This module provides overall protection and switching up to 11kW.

ref. BCMA



OPTION RESIDUAL CURRENT CIRCUIT BREAKER



30mA protection at the front. Useful only if the room is not equipped with this device.

ref. DIF30-4L A Type

ref. DIF30-4LAC AC Type

VARIABLE THREE-PHASE MODULE

The variable autotransformer accessible on the front of the technical leg means this variable three-phase module is available with a choice of 2 powers.

Signalling of the 'on' position by LEDs with protection and control separated from the other sources.

Starting only possible with zero voltage.



A voltmeter displays one of the single voltages, an ammeter displays the current in a phase.

This module is compatible with the DC module BCDC2 or 4 but the two sources do not operate at the same time.

ref. BC37VA for one output 0-430V / 5A (3,7kW)

ref. BC62VA for one output 0-450V / 8A (6,2 kW)

VARIABLE DC POWER MODULE

The variable autotransformer accessible on the front of the technical leg means this variable three-phase module is available with a choice of 2 powers.

Signalling of the 'on' position by LEDs with protection and control separated from the other sources.

Starting only possible with zero voltage.

Output insulated from the mains, in compliance with the standards, with transformer NFC 61558.

A voltmeter and an ammeter display the electrical values.

This module requires the presence of the variable three-phase module.

The two sources do not operate at the same time.

ref. BCDC2 for one output 0-270V / 8A (2kW)

ref. BCDC4 for one output 0-270V / 16A (4 kW)



MAINS SOCKETS MODULE (2 X 2)



ref. BC4PC

FIX THREE-PHASE MODULE ON TERMINALS

Mains distribution with protection and control separated from the other sources. Signalling of the 'on' position by LEDs.

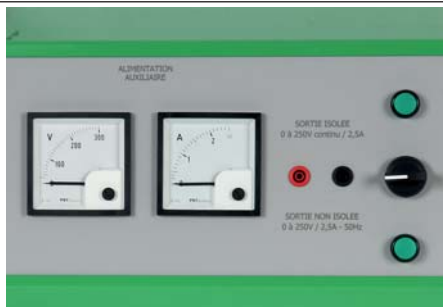
ref. BC5TR





Reference ●		BCO-7512		BCO-1012		BCO-7520		BCO-1020
Reference ●	BCV-7512		BCV-1012		BCV-7520		BCV-1020	
Top 2000 x 750mm	X	X			X	X		
Top 2000 x 1000mm			X	X			X	X
Grey & Green	X		X		X		X	
Grey & orange		X		X		X		X
1200mm Console	X	X	X	X				
2000mm Console					X	X	X	X

AUXILIARY SOURCES MODULE 2.5A



0-250VAC or VDC variable by single-phase autotransformer, with isolating transformer, to standard NFC 61558 for DC insulation. The assembly is protected against overloads and short circuits. Viewing by voltmeter and ammeter.

A button provides Start/Stop switching. An LED indicator signals powering up. Double alternating rectification, the ripple factor of which varies with the load.

The two sources do not operate at the same time.

ref. BC600

CONNECTEUR CANALIS



Connector for descent of KNA Canalis, with space for modular protections. (Protections and cable not supplied).

ref. KNB25CF5

ANTI-VANDALISM COVER WITH KEY

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ref. VSG-12
(1200mm)

ref. VSG-20
(2000mm)



System of lock with hook taken in the plate. Compatibility with a shelf, contact us.

360° LIGHT SIGNAL TOWERS



Beacon with 3 light indicators: red, yellow and green Ø60mm

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Beacon with 2 light indicators: red and green Ø60mm

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Beacon with a red light indicator (voltage presence) Ø60mm

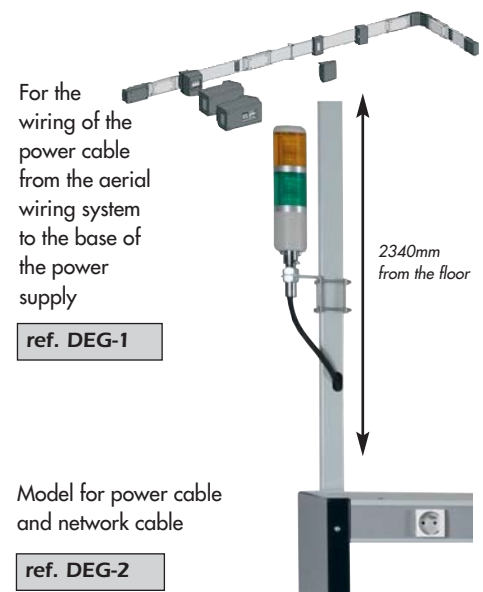
ref. VOY61

COLOURS AVAILABLE UPON REQUEST
white - orange - red - green - blue



HARD-WEARING LED LAMPS

VERTICAL CABLE RACEWAY



For the wiring of the power cable from the aerial wiring system to the base of the power supply

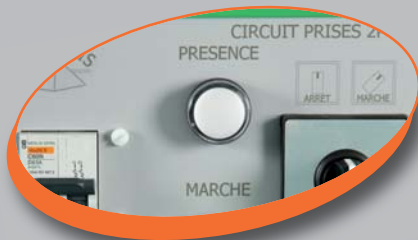
ref. DEG-1

Model for power cable and network cable

ref. DEG-2

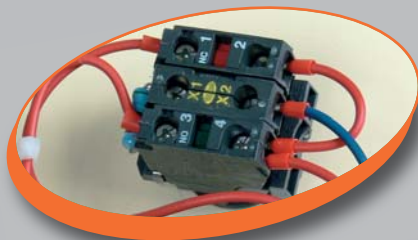
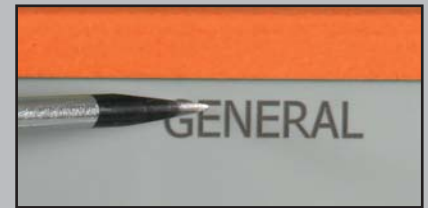


Electrotechnical workstations our quality commitment



Engraving on the front in the part

Potential for symbols, icons, logos or personalisations engraved on the front. The engraving in the part is impervious to abrasion and cannot be removed.



Crimped cable conduit sleeves for optimal contact

The crimped sleeves limit risk of fire or electrocution during maintenance.



Resistant LED indicator lights

*Cannot be removed by the student (no ability to unscrew the front cap)
No risk of accidental contact for the maintenance operator*



Control console free of metal components

All our components are free of accessible metal pieces (except for the ground). The PVC front face is entirely free of metal elements, even of screws, which provides a high degree of safety against indirect contact.



Epoxy paint & electrogalvanized steel

All of our leg assemblies are manufactured from electrogalvanised steel sheet, and makes the sheet extremely resistant to corrosion. This protection is strengthened further by two layers of furnace-baked epoxy paint, which means that it is suitable for use even in tropical settings.

