

Touchscreen-controlled station

NEW

A reliable station, compliant with laboratory safety standards (checked by APAVE and SOCOTEC). It consists of one or two lockable electrical cabinets (depending on the model), connected by 3 cross members including a foot rest, a 2000 x 750mm bench-top with stratified coating as standard and a source distribution console fitted with safety terminals for all loads and sources.

This autonomous bench is fitted with voltage sources controlled by a touch screen. The 5.7-inch colour screen selects the voltage sources and displays information and safety messages such as Pb emergency stop activated or autotransformer not set to zero. A PLC with its Ethernet card manages the station and the connection to the computer network if several stations are used. A room equipped with several touchscreen-controlled stations has the advantage of being network wired from an Ethernet switch or a patch panel. In this way, the teacher can, from a single PC, lock and/or observe the controls on each bench.

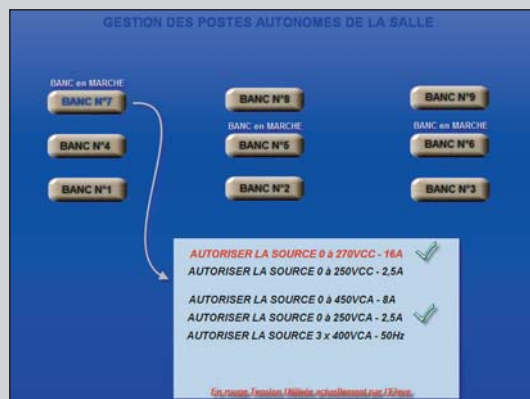


LOCKABLE COVER FOR CIRCUIT BREAKERS
Circuit breakers are placed behind a lockable transparent cover Restricted access IP2X protection

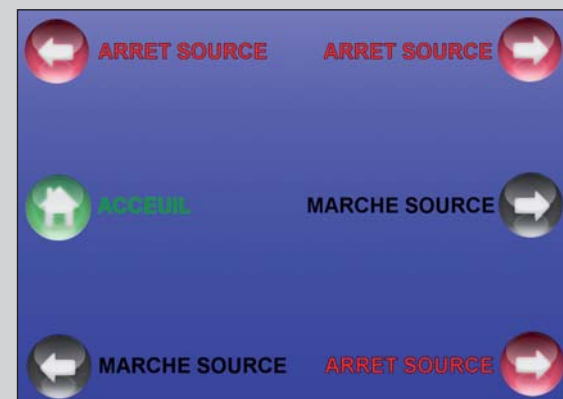


FEATURES OF THE PLC/CONTROL SECTION

- 5.7-inch colour touch screen flush with the front of the console
- TWIDO PLC
- Ethernet interface



The teacher's PC screen supervising the benches in the room



The console touch screen managing the power sources

4000VA*		TOUCHSCREEN CONTROLLED OF 4KVA RATING								
Ref.	Ref.	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
BTO-40A	BTV-40A	x	x	x	x	x	x	x	x	x
BTO-40B	BTV-40B	x	x	x	x	x	x	x	x	
BTO-40C	BTV-40C	x	x	x	x	x	x	x		
BTO-40D	BTV-40D	x	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.

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 & 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.

Auxillary supplies 3 & 4 can't work simultaneously

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.

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)

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.

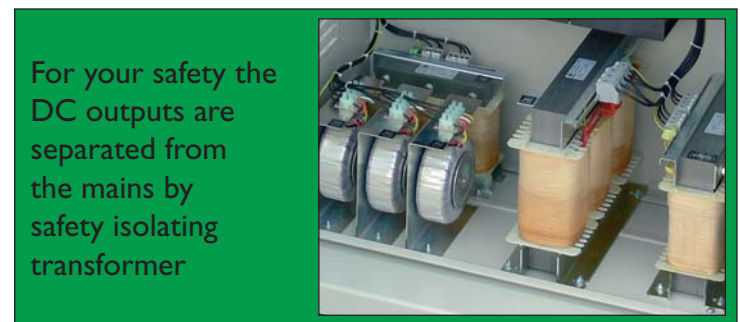
The switches are placed on the bank next to the input connectors and selector links for single-phase and DC 240V, 3-phase 240VAC or 3-phase 400VAC.

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 version only)**

11 INDUCTIVE LOAD

3 moveable cores moved by a control wheel and a 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)**.



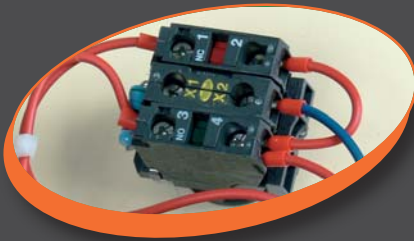


WORKSTATIONS

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.

