Technical furniture

- P. 004 017 Heavy -duty workbenches P. 018 - 019 - Light technical benches
- P. 020 023 Multi purpose benches P. 024 - 031 - Electrotechnical benches
- P. 032 041 Wiring benches
- P. 042 044 Storage units



P. 45 - 69

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Ω.



Kits & Components

- P. 045 053 Kits for housing units
- P. 054 057 Components for housing units
- P. 058 063 Industrial components
- P. 064 065 Industrial kits
- P. 066 069 Quick-Elec concept



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Motors & Electrotechnic

- P. 071 082 90W to 3kW rotary machines
- P. 083 085 Displays Acquisition
- P. 086 094 Complete kit of rotary machines
- P. 095 099 Variators
- P. 100 107 Power supplies & Loads
- P. 108 109 Dismontable motors
- P. 110 117 Rheostats & Transformers & Autotransformers



P. 118 - 150



Renewable energy

- P. 119 141 Solar energy
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Training systems & Models

- P. 152 159 Didactical panels & Fieldbus
- P. 160 161 Electrical authorization & Security
- P. 162 179 Simulators Models with PLC
- P. 180 190 Regulation
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Measuring apparatus

- P. 211 218 Oscilloscopes & Probes
- P. 219 221 Power supplies
- P. 222 223 Generators
- P. 224 231 Multimeters & Clamps
- P. 232 237 Wattmeter Ammeter Voltmeter
- P. 238 243 Various measuring apparatus
- P. 244 245 Decade boxes



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Accessories

P. 247 P.P.E.

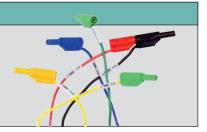
P. 248 - 249 Electrician tools

P. 250 - 251 Various accessories

P. 252 Sockets

P. 253 Coaxial accessories

P. 254 - 255 Leads & Racks



TECHNICAL FURNITURE

Heavy-duty workbenches

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Light technical benches

PAGES 18 - 19





Multi-purpose benches

PAGES 20 - 23





Electrotechnical benches

PAGES 24 - 31





Wiring benches

PAGES 32 - 41









Storage units

PAGES 42 - 44



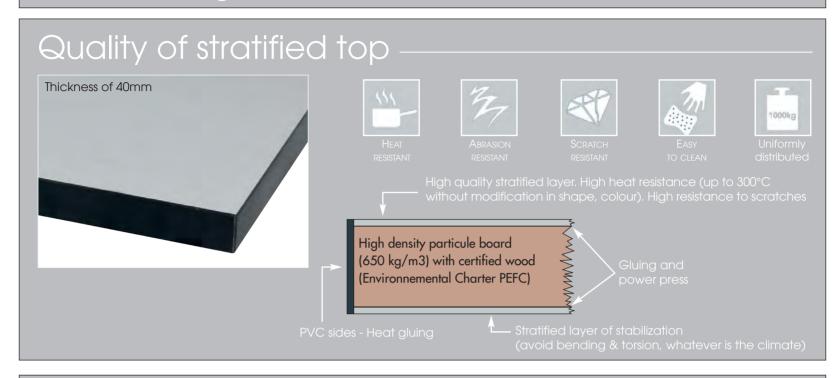




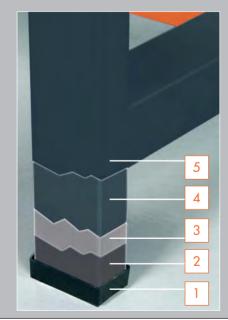


EQUILIBRIUM RANGE

New generation of technical furniture



Quality of steel & finishes



All parts of the metal frame are manufactured from electrogalvanised steel sheet, which is widely used in the car manufacturing industry and makes the sheet extremely resistant to corrosion. The iron/zinc combination forms a natural cell with moisture in the air that prevents the iron from corroding, even if shearing or scratching occurs. This protection is strengthened further by two layers of furnace-baked epoxy paint, which means that it is suitable for use even in tropical or coastal areas.

EPOXY PAINT LAYER 2

EPOXV PAINT LAVED 1

FLECTROGALVANIZED LAYER

LINIOXVDISED STEEL

PVC BAS

Colors

RAL 7016



In standard, metal parts of the Equilibrium range are available in one of the two color combinations above.



Other RAL colors are possible on request (additional lead time). More than 300 colors are available.

Power sockets available for technical furniture



F TYPE SCHUKO GERMANY



E TYPE FRANCE



J TYPE SWITZERLAND



G TYPE UNITED KINGDOM



B TYPE USA

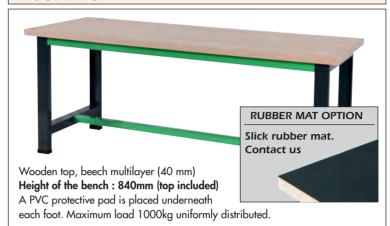
Basic benches

STRATIFIED TOP



Dim. (mm)	Reference •	Reference •
1200 x 750	ASV-127	ASO-127
1200 x 1000	ASV-1210	ASO-1210
1500 x 750	ASV-157	ASO-157
1500 x 1000	ASV-1510	ASO-1510
1800 x 750	ASV-187	ASO-187
1800 x 1000	ASV-1810	ASO-1810
2000 x 750	ASV-207	ASO-207
2000 x 1000	ASV-2010	ASO-2010
2500 x 750	ASV-257	ASO-257

WOODEN TOP



Dim. (mm)	Reference •	Reference •
1200 x 750	ABV-127	ABO-127
1200 x 1000	ABV-1210	ABO-1210
1500 x 750	ABV-157	ABO-157
1500 x 1000	ABV-1510	ABO-1510
1800 x 750	ABV-187	ABO-187
1800 x 1000	ABV-1810	ABO-1810
2000 x 750	ABV-207	ABO-207
2000 x 1000	ABV-2010	ABO-2010

ADJUSTABLE HEIGHT BENCHES



High temperature stratified top (40 mm) Adjustable height: 700 ~ 960mm (top included)

System with sliding foot components, adjustable continuously, tightened by screws and bolts. Each foot can be adjusted separately (if the floor is not completely flat). The strength of these adjustable benches is equal to standard benches.

A PVC protective pad is placed underneath each foot.

Maximum load 1000kg uniformly distributed.

Dim. (mm)	Reference •	Reference •
1200 x 750	LSV-127	LSO-127
1200 x 1000	LSV-1210	LSO-1210
1500 x 750	LSV-157	LSO-157
1500 x 1000	LSV-1510	LSO-1510
1800 x 750	LSV-187	LSO-187
1800 x 1000	LSV-1810	LSO-1810
2000 x 750	LSV-207	LSO-207
2000 x 1000	LSV-2010	LSO-2010

BENCHES WITH WHEELS



High temperature stratified top (40 mm) Height of the bench: 965mm (top and wheels included) 4 wheels 100 mm diameter with rubber rolling band.

2 wheels have a brake.

Maximum load 500kg uniformly distributed.

Other heights on request.

Dim. (mm)	Reference •	Reference •
1200 x 750	RSV-127	RSO-127
1200 x 1000	RSV-1210	RSO-1210
1500 x 750	RSV-157	RSO-157
1500 x 1000	RSV-1510	RSO-1510
1800 x 750	RSV-187	RSO-187
1800 x 1000	RSV-1810	RSO-1810
2000 x 750	RSV-207	RSO-207
2000 x 1000	RSV-2010	RSO-2010

BENCHES WITH STRATIFIED TOP AND SHELF



High temperature stratified top (40 mm). Stratified shelf depth 340 mm.

Height of the bench: 840mm (top included)

A PVC protective pad is placed underneath each foot. Max load 1000kg uniformly distributed

Dim. (mm)	Reference •	Reference •
1500 x 750	DSV-157	DSO-157
1500 x 1000	DSV-1510	DSO-1510
1800 x 750	DSV-187	DSO-187
1800 x 1000	DSV-1810	DSO-1810
2000 x 750	DSV-207	DSO-207
2000 x 1000	DSV-2010	DSO-2010

BENCH WITH SINK (TOP DAMP-PROOF)



HIGH-TEMPERATURE LAMINATED BENCH-TOP 40mm Workbench height: 840 mm (top included)

PVC protective pads under each foot

Maximum load 1000 kg uniformly distributed.

- 1 bench-top 1500 x 750 mm
- 1 sink 400 x 500 mm, depth 325 mm, single piece injection-moulded corrosion-resistant polypropylene.
- 1 double cold water outlet with two taps.
- With connection accessories for waste water and cold water inlet.

The sink is built-in and fully protected by a front opening cabinet. 100% watertight assembly.

ref. PEG-157

BENCHES WITH POWER CONSOLE & EMERGENCY STOP



BENCHES WITH POWER CONSOLE



Information: All power sockets are wired. (Power cable of the console notre supplied)

Benches with a shelf

BENCHES WITH A SIMPLE SHELF

- High temperature stratified top
- Shelf with: 4x power sockets + 1x circuit breaker + 1x indicator light
- Shelf adjustable in height: maximum 400mm (depth: 400mm)
- Height of the bench: 1240mm (shelf included). Maximum load 1000kg uniformly distributed

	Thermal magnet	ic circuit breaker	30mA residual ci	urrent circuit breaker
Dims. (mm)	Reference •	Reference •	Reference •	Reference •
1800 x 750	GSV-187	GSO-187	GSV-187D	GSO-187D
1800 x 1000	GSV-1810	GSO-1810	GSV-1810D	GSO-1810D
2000 x 750	GSV-207	GSO-207	GSV-207D	GSO-207D
2000 x 1000	GSV-2010	GSO-2010	GSV-2010D	GSO-2010D



BENCH WITH A SHELF & A POWER CONSOLE

- Stratified top. Power console with: 6x power sockets + 1x circuit breaker + 1x indicator light
- Shelf with: 4x power sockets + 1x circuit breaker + 1x indicator light
- Shelf adjustable in height: maximum 400mm (depth: 400mm)
- Height of the bench: 1240 mm (shelf included). Maximum load 1000kg uniformly distributed (*) for these references, only the circuit breaker of the console is a 30mA residual current type. The circuit breaker of the shelf remains a thermal magnetic one.

	Thermal magne	tic circuit breaker	30mA residual c	urrent circuit breaker
Dims. (mm)	Reference •	Reference •	Reference •	Reference •
1800 x 750	JSV-187	JSO-187	JSV-187D	JSO-187D
1800 x 1000	JSV-1810	JSO-1810	JSV-1810D	JSO-1810D
2000 x 750	JSV-207	JSO-207	JSV-207D	JSO-207D
2000 x 1000	JSV-2010	JSO-2010	JSV-2010D	JSO-2010D



BENCH WITH A HIGH SHELF & A POWER CONSOLE

- Stratified top. Power console with: 6x power sockets + 1x circuit breaker + 1x indicator light
- Shelf with: 4x power sockets + 1x circuit breaker + 1x indicator light
- Shelf adjustable in height: maximum 400mm (depth: 400mm)
- Height of the bench: 1240 mm (shelf included). Maximum load 1000kg uniformly distributed (*) for these references, only the circuit breaker of the console is a 30mA residual current type. The circuit breaker of the shelf remains a thermal magnetic one.

	Thermal magnet	ic circuit breaker	30mA residual ci	urrent circuit breaker
Dims. (mm)	Reference	Reference •	Reference	Reference •
1800 x 750	KSV-187	KSO-187	KSV-187D	KSO-187D
1800 x 1000	KSV-1810	KSO-1810	KSV-1810D	KSO-1810D
2000 x 750	KSV-207	KSO-207	KSV-207D	KSO-207D
2000 x 1000	KSV-2010	KSO-2010	KSV-2010D	KSO-2010D



Information: All power sockets are wired. (Power cable of the console not supplied)

RJ45 WIRED PLUG OPTION B C A

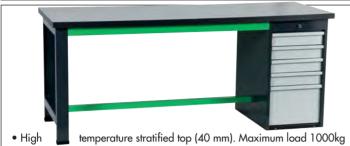
Combination of 2 RJ45 connectors connected together in the console. The side connector **A** is used to connect the network input, the front connector **B** is for the user's connection.

ref. CARJ45

RJ45 PLUG (NOT WIRED) For a cable coming from your patch panel. ref. SERJ45

Benches with leg-mounted cabinet and drawers

CABINET WITH 5 DRAWERS



- Height of the bench: 840mm (top included)
- Cabinet with 5 drawers (4 drawers H100mm + 1 drawer H300mm)

Dim. (mm)	Reference •	Reference •
1800 x 750	50TV-187S	50TO-187S
1800 x 1000	50TV-1810S	50TO-1810S
2000 x 750	50TV-207S	50TO-207S
2000 x 1000	50TV-2010S	50TO-2010S

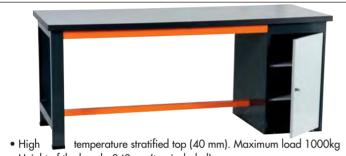
CABINET WITH 4 DRAWERS



- temperature stratified top (40 mm). Maximum load 1000kg
- Height of the bench: 840mm (top included)
- Cabinet with 4 drawers (1 drawer H100mm + 3 drawers H200mm)

Dim. (mm)	Reference •	Reference •
1800 x 750	43TV-187S	43TO-187S
1800 x 1000	43TV-1810S	43TO-1810S
2000 x 750	43TV-207S	43TO-207S
2000 x 1000	43TV-2010S	43TO-2010S

CABINET WITH LOCKING SWING DOOR



- Height of the bench: 840mm (top included)
- Cabinet with locking swing door and 2 shelves

Dim. (mm)	Reference •	Reference •
1800 x 750	80TV-187S	80TO-187S
1800 x 1000	80TV-1810S	80TO-1810S
2000 x 750	80TV-207S	80TO-207S
2000 x 1000	80TV-2010S	80TO-2010S

CABINET WITH 3 DRAWERS



- Height of the bench: 840mm (top included)
- Cabinet with 3 drawers (2 drawers H200mm + 1 drawer H300mm)

Dim. (mm)	Reference •	Reference •
1800 x 750	31TV-187S	31TO-187S
1800 x 1000	31TV-1810S	31TO-1810S
2000 x 750	31TV-207S	31TO-207S
2000 x 1000	31TV-2010S	31TO-2010S

BENCHES WITH 3 HANGING DRAWERS



- Cabinet with 2 drawers H100mm / 1 drawer H200mm

Hanging drawers with lock (can be placed anywhere under the bench top) For adjustable height bench with hanging drawers, contact us

Dim. (mm)	Reference •	Reference •
1800 x 750	YSV-187	YSO-187
1800 x 1000	YSV-1810	YSO-1810
2000 x 750	YSV-207	YSO-207
2000 x 1000	YSV-2010	YSO-2010

BENCHES WITH 1 HANGING DRAWER



- temperature stratified top (40 mm). Maximum load 1000kg
- Height of the bench: 840mm (top included)
- Cabinet with 1 drawer H100mm

Hanging drawers with lock (can be placed anywhere under the bench top) For adjustable height bench with hanging drawers, contact us

Dim. (mm)	Reference •	Reference •
1800 x 750	XSV-187	XSO-187
1800 x 1000	XSV-1810	XSO-1810
2000 x 750	XSV-207	XSO-207
2000 x 1000	XSV-2010	XSO-2010

STANDARD HEAVY-DUTY BENCHES

Tool holder benches



Reference BPV-1522

Reference BPO-1522

Examples of manufacturing carried out according to customers' needs

Bench with tool holder vertical panels and tray rests.

High temperature stratified top (40mm). Height of the bench: 840mm (top included).

Top: 1500 x 750mm

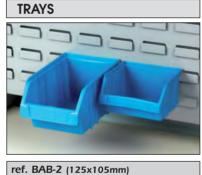
Height of the vertical panels: 830mm Total height of the bench: 1670mm

A PVC protective pad is placed underneath each foot

Description of the delivered components	Oty
1500x750mm stratified bench 1	1
Perforated panel	2
Tool holder hook	24
Screwdriver holder	1
Trays panels	2
125 x 105mm trays	6
125 x 175mm trays	6
Adjustable shelf (in height)	1

Others configurations available upon request. Contact us.

Accesories sold separately



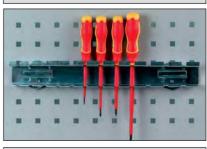
ref. BAB-2 (125x105mm)

TOOL HOLDER HOOK



ref. CPT lenght 75mm

SCREWDRIVERS HOLDER



ref. PTVIS screwdrivers not supplied

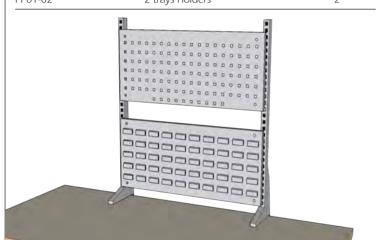
Vertical panels for workbenches

These panels are fixed to the rear of any benchtop with a thickness between 20 and 60mm. The bench-top most overhang by at least 45mm to offer good grip. The bench-top attachment requires no tools, each vertical post is fitted with a screw tightening knob. The vertical panels for tool and tray holders can be easily and quickly hooked onto the posts using hooks in steps of 25mm. Total height with respect to the benchtop: 830mm. The shelves and overhang shelves hook-on in the same way and can be attached between or in front of the panels as an additional thickness.



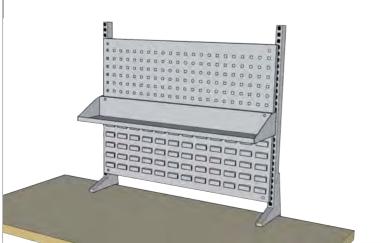
SET N°1: LENGTH 750MM

Ref.	Panels	Post
PP01-11	1 tool holder + 1 trays holder	2
PP01-20	2 tool holders	2
PP01-02	2 trays holders	2



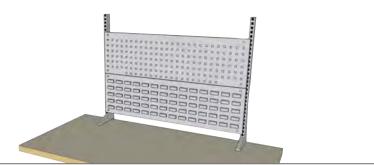
SET N°2: LENGTH 890MM

Ref.	Panels	Post
PP02-11	1 tool holder + 1 trays holder	2
PP02-20	2 tool holders	2
PP02-02	2 trays holders	2
ETS-800	Optional shelf	



SET N°3: LENGTH 1050MM

Ref.	Panels	Post
PP03-11	1 tool holder + 1 trays holder	2
PP03-20	2 tool holders	2
PP03-02	2 trays holders	2



SET N°4: LENGTH 1470MM

Ref.	Panels	Post
PP04-22	2 tool holder + 1 trays holder	3
PP04-40	4 tool holders	3
PP04-04	4 trays holders	3
ETS-1400	Optional shelf	
ETD-1400	Optional cap	
CONTACT US	Optional light	



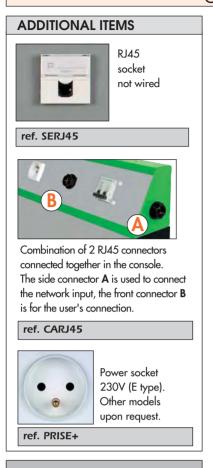
SET N°5: LENGTH 1750MM

Ref.	Panels	Post
PP05-22	2 tool holder + 1 trays holder	3
PP05-40	4 tool holders	3
PP05-04	4 trays holders	3
ETD-1700	Optional shelf	
CONTACT US	Optional light	



STANDARD HEAVY-DUTY BENCHES

Choose and configure your own workbench



COMPUTER ITEMS

SEE PAGES 16-17





HIGH TEMPERATURE STRATIFIED* TOP AND WOODEN TOP



WIDTH (mm)	DEPTH 750mm	DEPTH 1000mm	
1200 STRAT	Ref. GP127 Ref. GP1210		
1200 WOOD	Ref. PL-PL-120x75	Ref. PL-PL-120x100	
1500 STRAT	Ref. GP157	Ref. GP1510	
1500 WOOD	Ref. PL-PL-150x75	Ref. PL-PL-150x100	
1800 STRAT	Ref. GP187	Ref. GP1810	
1800 WOOD	Ref. PL-PL-180x75	Ref. PL-PL-180x100	
2000 STRAT	Ref. GP207	Ref. GP2010	
2000 WOOD	Ref. PL-PL-200x75	Ref. PL-PL-200x100	

MAIN FEATURES
OF HIGH TEMPERATURE
STRATIFIED TOP

Uniformly distributed









MAIN FEATURES OF WOODEN TOP





Uniformly

VERTICAL CABLE RACEWAY & 360° LAMP

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

Beacon with 3 light indicators

ref. VOY181

Beacon with 2 light indicators

ref. VOY121

Beacon with 1 light indicator

ref. VOY61



Model for top in 750mm depth ref. PHG-75 Model for top in 1000mm depth ref. PHG-100 Special angle model to join 2 tops at 90°. Consult us.

POWER CONSOLES

Available in length: 1120 - 1430 - 1730 - 1920 mm PVC front panel can be fitted with electrical components and outputs of your choice See page 14 for standard models available 6 6 6 8 0 0 . . 💆 💆 🖯 6 0 0 0 C H 6 61 [e] **(%)** [e] 8 0 (iiii

LEG-MOUNTED CABINETS WITH LOCK

Available with drawers or swing door
 For top in depth 750 mm or 1000 mm
 SEE PAGE 12 FOR MORE INFORMATION



HANGING DRAWERS

- Hanging drawers, 1 to 4 drawers
- For top in depth 750 mm or 1000 mm SEE PAGE 13 FOR MORE INFORMATION



LAYOUT OF DRAWERS

- 3 different types of compartments
- Suitable for drawers of leg-mounted cabinets or hanging drawers

SEE PAGE 13 FOR MORE INFORMATION



Leg mounted cabinet for benches (with lock)



There are two depths available for cabinets with swing doors and drawers: 750 and 1000mm For this latter, the reference is followed by the extension 100. Example: 30G-100

- The drawers are mounted on ball bearings so they slide easily and silently. They are removable so drawers can be switched around or sorted.
- The lock secures all the drawers at the same time. In standard, all keys are identical. Different keys can be available upon request.
- Drawers with a height of 300 mm are suitable for standard hanging folders.



ref. 30G-75

ref. 30G-100



ref. 31G-75

ref. 31G-100



ref. 40G-100



ref. 41G-75

ref. 41G-100



ref. 42G-75

ref. 42G-100



ref. 43G-75

ref. 43G-100



ref. 50G-75

ref. 50G-100



ref. 51G-75

ref. 51G-100



ref. 52G-75

ref. 52G-100



ref. 53G-75

ref. 53G-100



ref. 60G-75

ref. 60G-100



ref. 61G-75

ref. 61G-100



ref. 70G-75

ref. 70G-100



Hanging drawers

HANGING DRAWERS (300 SERIES) WITH LOCK AND KEY

For top in depth 750 mm or 1000 mm -Height: 400 mm - Width: 450 mm. As standard, all keys are identical. Different keys are available upon request.

3 drawers H100mm

ref. TIG-30



1 drawer H100mm 1 drawer H200mm

ref. TIG-32



1 drawer H300mm. Drawers with a height of 300 mm are suitable for standard hanging folders.

ref. TIG-33



For top in depth 750 and 1000mm. Height: 100mm / Width: 400mm. With lock and key.

ref. TIG-10



For top in depth 750 mm or 1000 mm -Height: 490 mm - Width: 450 mm. As standard, all keys are identical. Different keys are available upon request.

4 drawers H100mm

ref. TIG-40



2 drawers H100mm 1 drawer H200mm

ref. TIG-41



2 drawers H200mm



1 drawer H100mm 1 drawer H300mm Drawers with a height of 300 mm are suitable for standard hanging folders.

ref. TIG-43

ref. TIG-42



Layout of drawers in cabinet or hanging drawers

The drawers can be removed easily by lifting them out, so you can take parts to a construction site, sort the drawers without having to bend over, or simply reverse two drawers. The drawers are mounted on ball bearings.

They slide easily and silently.

You can place moulded drawer tidies in these drawers.

3 types of compartment are available:

• Small: 75x75 H55mm • Medium: 285x75 H55mm fitted with a removable divider • Large: 415x75 H55mm

fitted with three removable dividers



4 fixed & 16 modular spaces

4 large (4 to 16 compartments)



12 fixed & 8 modular spaces 12 small 4 medium (4 to 8 compartiments)



18 fixed & 4 modular spaces 18 small 2 medium (2 to 4 compartiments)



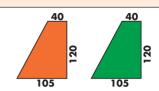
24 fixed spaces 24 small

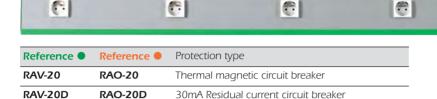
Power consoles on the bench top

HARD-WEARING LAMP (without maintenance)

Power console with a PVC front panel. Available in a range of lengths 1120 – 1430 – 1730 – 1920 mm. 1920mm in standard. Please confirm the length at order.

Information: All power sockets are wired. (Power cable of the console not supplied)





• 6 power sockets 230V (2P+E)

- A circuit breaker (two possible choices)
- A hardwearing Ø30 LED lamp indicating that sockets are switched on

-



Reference •	Reference •	Protection type	
PAV-20	PAO-20	Thermal magnetic circuit breaker	
PAV-20D PAO-20D 30mA Residual current circuit breaker		30mA Residual current circuit breaker	

- 6 power sockets 230V (2P+E)
- A circuit breaker (two possible choices)
- A hardwearing Ø30 LED lamp indicating that sockets are switched on
- A key-operated emergency stop button which activates an undervoltage trigger, thereby ensuring positive safety



Reference Protection type		Protection type	
MAV-20	MAO-20	MAO-20 Thermal magnetic circuit breaker	
MAV-20D	MAO-20D	30mA Residual current circuit breaker	

- 6 power sockets 230V (2P+E)
- A circuit breaker (two possible choices)
- A hardwearing Ø30 LED lamp indicating that sockets are switched on
- A key-operated emergency stop button which activates an undervoltage trigger, thereby ensuring positive safety
- An On/Off button (positive safety)

RJ45 wired plug

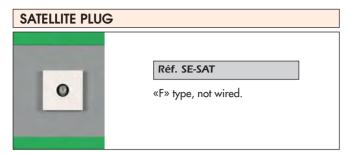


Combination of 2 RJ45 connectors connected together in the console. The side connector ${\bf A}$ is used to connect the network input, the front connector ${\bf B}$ is for the user's connection.

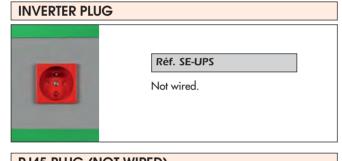
ref. CARJ45

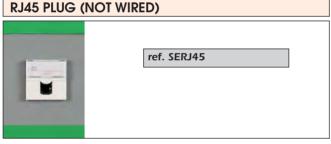


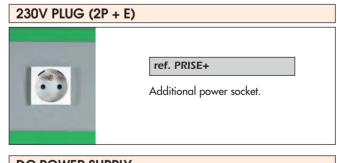
All these elements can be added to the power consoles.

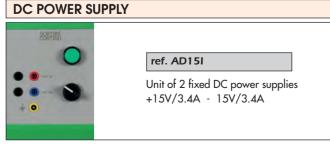


Réf. SE-TEL Ø9,52mm male, not wired.









230V multi sockets unit



Can only be fixed with plastic screws (plastic housing)

ref. LGS-8

Unit of 8 power sockets 230V (2P+E) - 3860W. Dim: 495 x 85 x 55mm

ref. LGS-41

Unit of 4 power sockets 230V (2P+E) - 3860W. Dim: 295 x 85 x 55mm

Short power console 500mm







Reference VXV-2
Reference VXO-2
30mA residual current circuit breaker

- 4 power sockets 230V
- 1 circuit breaker
- Power gland (in standby)
- Sockets are wired but the power cable is not supplied.
 Recommendation: use a supple power cable in 3 strands of 2.5mm²

Computer items for workbenches



Make your own computer workbench by choosing additional items in this page. Computer hardware not supplied.



SLIDING KEYBOARD/MOUSE SHELF UNDER THE BENCH-TOP



ref. IFG-TAB

The sliding shelf can be locked in the extended position. Dim: 620 x 320mm. Stratified top. Supplied pre-assembled.

SUPPORT KEYBOARD/MOUSE



Instantly clings to the side of our CPU holders references IFG and IFG-ECO-MINI.

Installation without tools or screws.

ref. IFG-CLA

SHELF



CPU TOWER HOLDER



Holder is screwed under the bench. Users have easy access to cable connections and drives. Sturdy and economical, this device ensures that the CPU tower is stored tidily and protected against theft.

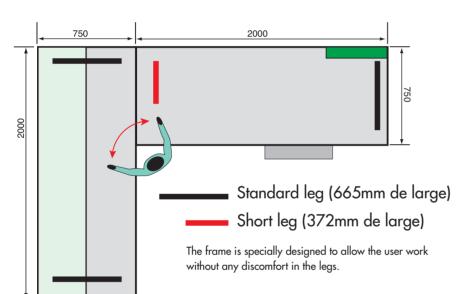
- 45 x 45mm wire mesh
- 50mm front locking bar
- Attached with lag screws (supplied)
- EPOXY paintwork. Steel sheet base plate.



Ref.	Total height interior	Width interior	Depth interior
IFG-ECO	500mm	245mm	500mm
IFG-MINI	400mm	195mm	400mm

Workstation for practical work

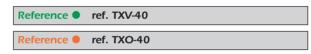




This bench is a comfortable and spacious unit for tutorials which require the use of computers and measuring equipment.

With a side shelf, a mini-console and special equipment to accomodate all the computer elements.

The TXL40 is very convenient to use.



Computer hardware not supplied

COMPONENTS AND FEATURES OF THE STATION

- Two 40mm high-temperature stratified tops with PVC edges
- 1 "cage"-type CPU tower holder with anti-theft bar at the front.
- 1 sliding keyboard/mouse holder
- 1 base with furnace-baked epoxy paint, vertical support leg and footrest bar. Base suitable for rotation.
- 1 mini-console fitted with 4 power sockets 230V
- + circuit breaker + LED lamp
- 1 shelf fitted with 4 power sockets 230V + circuit breaker at the back + LED lamp
- Height of the working surface: 840mm (top included)
- A very large work surface



Adjustable work tops, Seated / Standing

SINGLE AND TWO-SIDED TOOL-HOLDER WORKSTATIONS

Laminated top 22mm thick. Top position adjustable.

Max height 920mm (top included) Independent adjustment of each top in the two-sided versions.

Max load 200kg uniformly distributed. Matt anodized aluminium stand and structure. Lasting protection against scratching and corrosion.

Tool-holder frame equipped with:

- 20 plastic hooks for screwdrivers
- 2 tool-holder hooks
- 1 tool-holder support 240 x 80mm
- 1 magnetic support
- 1 universal support Ø80mm
- 1 document holder (A4 size) 8 double-sided places
- 1 strip with 5 2P+E outlets and switch



SINGLE MODELS

Width / Depth / Height	Ref.
1200 x 910 x 2000mm	PTE1-1200
1500 x 910 x 2000mm	PTE1-1500
2000 x 910 x 2000mm	PTE1-1800



TWO-SIDED MODELS

Width / Depth / Height	Ref.
1200 x 1660 x 2000mm	PTE2-1200
1500 x 1660 x 2000mm	PTE2-1500
2000 x 1660 x 2000mm	PTE2-1800

SINGLE WORKSTATIONS



Laminated top 22mm thick.

Workbench height: Adjustable. Maximum height 920mm (top included). Matt anodized aluminium stand.

Lasting protection against scratching and corrosion. Maximum load 200 kg uniformly distributed.

 Dimensions (mm)
 Ref.

 1200 x 750
 PTE3-1200

 1500 x 750
 PTE3-1500

 1800 x 750
 PTE3-1800

TWO-SIDED WORKSTATIONS



Laminated top 22mm thick.

Workbench height: Adjustable. Maximum height 920mm (top included).
Independent adjustment of each top.

Matt anodized aluminium stand.

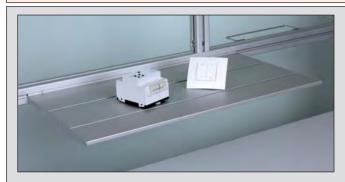
Lasting protection against scratching and corrosion.

Maximum load 200 kg uniformly distributed.

Dimensions (mm)	Ref.
1200 x 1660	PTE4-1200
1500 x 1660	PTE4-1500
1800 x 1660	PTE4-1800



SHELF OPTION



Sliding metal shelf for full support width. Dimensions 600 x 320mm.

ref. PTE-TAB

KEYBOARD/MOUSE SUPPORT OPTION



Sliding metal shelf lockable in pulled out position.

Folding support for mouse.

Width: 520mm.

Depth: 300mm (wrist rest included).

ref. PTE-CLAV

CENTRAL PROCESSING UNIT SUPPORT OPTION



Support screws under the table. Sliding system for taking central processing units of all sizes.

Rotary system for pivoting the central processing unit.

ref. PTE-UC

Workbenches

SINGLE WORKBENCHES



Innovative composite material stand (70% wood fibre). It is neutral to magnetic fields and electrically insulating. High-temperature laminated top, 22mm thick.

Overall height (top included): 742mm.

Colour: 2 shades of grey. Max load: 200kg.

Dimensions (mm)	Ref.
1500 x 750	TLG-1500
1800 x 750	TLG-1800
2000 x 750	TLG-2000

SINGLE WORKBENCHES WITH ELECTRIC STRIP



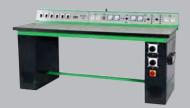
Innovative composite material stand (70% wood fibre). It is neutral to magnetic fields and electrically insulating. High-temperature laminated bench-top 22mm thick.

Overall height (top included): 742mm

Colour: 2 shades of grey Max load: 200 kg

Electric strip equipped with 4 2P+E outlets with indicator light and circuit-breaker.

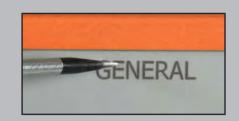
Dimensions (mm)	Reference •	Reference •
1500 x 750	TLV-1500	TLO-1500
1800 x 750	TLV-1800	TLO-1800
2000 x 750	TLV-2000	TLO-2000



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

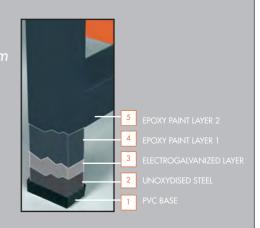
All our components are free of accessible metal pieces (except for the ground). The PVC front face is entirely free of metal elements, even of screws, which provides a high degree of safety against indirect contact.



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.



Standards multi purpose workstations

hard-wearing led indicator light



It is a single, fully-equipped electric-powered station which complies with current standards and is ready to be connected to the electric network. The start-up systems and connection terminals are installed on an electrotechnical console. There are many standard configurations, and these can be modified easily on simple application. All workbenches have a key-operated "EMERGENCY STOP" button for autonomous positive safety and an On/Off push-button with a lamp and "memory" function.

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



								C: .:C !	C	
		Thermal	3-phase	4 power	3-phase	Fixed	Fixed	Stratified	Stratified	Technical
Ref.	Ref.	magnetic	mains on	sockets 230V	0-430V	240VDC/2A	24VAC/5A	bench-top	bench-top	leg
ACI.	iteli.	circuit breaker	4 safety	2P+E	3.5kVA	insulated	with circuit	2000x750	2000x1000	
		(D type)	terminals		variable		breaker			
SYO-1	SYV-1	Х	Х	Х	Х	Х	Х	Х		Х
SYO-2	SYV-2	Х	Х	Х	Х	Х	Х		Х	Х
SYO-3	SYV-3	Х	Х	Х		Х	Х	Х		
SYO-4	SYV-4	Х	Х	Х		Х	Х		Х	
SYO-5	SYV-5	Х	Х	Х			Х	Х		
SYO-6	SYV-6	Х	Х	Х			Х		Х	
SYO-7	SYV-7	Х	Х	Х				Х		
SYO-8	SYV-8	Х	Х	Х					Х	

■ HARD-WEARING LAMP WITHOUT MAINTENANCE

ANTI-VANDALISM COVER WITH KEY





Configure your own power console

Select first the bare power console, then select the obligatory main module (see opposite) and finally select the electrical modules and options.

Dimensions available: 1200 - 1500 - 1800 - 2000mm.

Ref. PUV-32

Ref. PUO-32



3-PHASE MODULE ON TERMINALS



3-phase supply module 11kW – fixed 3x400V+N On-Off key control

ref. SE5TR

3-PHASE MODULE ON SOCKET



3-phase supply module on hypra socket 16A 3P+N+T. On-Off key control

ref. SE5PCTR

3-PHASE HYPRA SOCKET MODULE



Mounted in parallel on 3-phase supply with output terminals or socket (only available with option SE5TR & SE5PCTR)

ref. HP4

DC MODULE -15VDC +15VDC 3A



DC fixed supply with 2 outputs +15V/3.4A -15V/3.4A

ref. AD15I

3-PHASE MODULE 0-430V



3-phase 0-430
VAC variable –
3.5kVA
Module with
technical leg.
On-Off key control.

ref. SE6VA

AC SUPPLY MODULE 24V / 5A



Module 24V/5A insulated from mains

ref. SE3BT

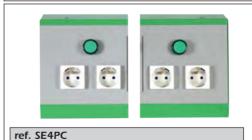
DC VARIABLE SUPPLY



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

ref. R3030I

MAINS SOCKETS MODULE (2 X 2)



.....

Module with 2 x 2 power sockets 230V + lamp.

MAINS SOCKETS MODULE (2 X 3)





ref. SE6PC

Module with 2 x 3 power sockets 230V + lamp.

MEASURED POWER SOCKET MODULE



Output on power socket 2P+E with wattmeter direct

display of consumed power.

Measuring apparatus: 10000 pts

Maximum power: 3500W

Protection by circuit breaker on the front panel

ref. SEPCW

INVERTER SOCKET



Not wired. For U.P.S.

Réf. SE-UPS

hard-wearing led indicator light



OBLIGATORY MAIN MODULES

Choose one of these main modules with or without on/off key control.

SE1MA without on/off key control

ref. SE1MA

for 3-phase mains supply

ref. SE1MA-MONO

for single-phase mains supply

SEMC with on/off key control

ref. SEMC

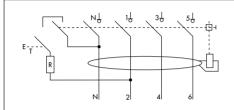
for 3-phase mains supply

ref. SEMC-MONO

for single-phase mains supply



RESIDUAL CURRENT CIRCUIT BREAKER



ref. DIF30-4S A type (3-phase workstation)

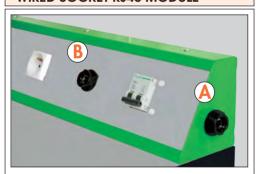
ref. DIF30-2C A type (single-phase workstation)

ref. DIF30-2SAC AC type (3-phase workstation)

ref. DIF30-4SAC AC type (single-phase workstation)

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

WIRED SOCKET RJ45 MODULE



ref. CARJ45

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

RJ45 SOCKET MODULE



ref. SERJ45

RJ45 socket installed but not connected.

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.**







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

Be re

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

ref. VOY181

Beacon with 2 light indicators: red and green Ø60mm

ref. VOY121

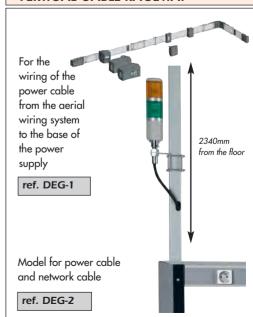
Beacon with a red light indicator (voltage presence) Ø60mm

ref. VOY61

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



VERTICAL CABLE RACEWAY



Stand alone DC & AC power supply

hard-wearing led indicator light





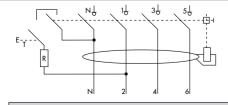
LOCKABLE COVER FOR CIRCUIT BREAKERS ON THE REAR DOOR Circuit breakers are placed behind a lockable transparent cover. Restricted access IP2X protection.



Ref	AXG-40	AXG-20	AXG-10
Rating	4000VA	2000VA	1000VA
■ DC SUPPLY 0-270V	16A	8A	7A
■ 3-PHASE variable	0-450V/8A	0-430V/5A	0-430V/5A
■ AUXILIARY 0-250VDC	2.5A	2.5A	2.5A
AUXILIARY 0-250VAC	2.5A	2.5A	2.5A
■ 3-PHASE MAINS	4 terminals 3x400VAC	4 terminals 3x400VAC	4 terminals 3x400VAC
4 SOCKETS MAINS	230V 2P+E	230V 2P+E	230V 2P+E

■ with hard-wearing lamp without maintenance ■ insulated from mains

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

This new technical leg design offers you the option to create a new station or to renovate existing tables. Thanks to its compactness it can act both as a table leg and as an item next to a table. This AXG** (* represents power) product is completely autonomous. With a simple three-phase mains input + neutral + earth, it can provide all the power supply combinations provided in the table below. Supplied assembled and ready to be connected to 3-phase 400V from mains.

Height of attachment under bench-top: 720 to 830mm

Length: 665mm

Total height: 1050mm (including console).

Maximum width: 250mm

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.

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.

Auxillary supplies 3 & 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 loghts.

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

Complete resistive load unit



This new design enables you to create a new station or to renovate existing benches. Thanks to its compactness it can act both as a table leg and as an item next to a table. This ARG** (**represents power) reference product requires no power supply. Thanks to its smart design, this charging unit does not require forced ventilation. It contains resistors on ceramic tubes (protected from oxidation by a coating).

The 6 switches (snap switches) vary the charge in steps of 5%. These controls are placed on the console with inputs terminals and coupling jumpers (for a use in 240VAC single phase and 240VDC, 3-phase 240VAC or 3-phase 400VAC).

Available option: charge in steps of 2.5% in the 4kW version.

Height of attachment under bench-top: adjustable from 720 to 830mm

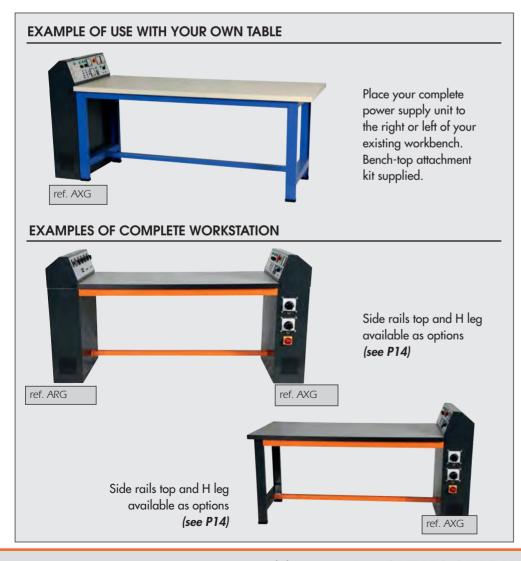
Length: 665mm

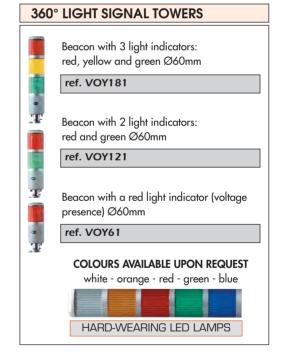
Total height: 1050mm (including console).

Maximum width: 250mm

Ref	ARG-40	ARG-20	ARG-10
Rating	4000VA	2000VA	500VA

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 BENCHES

Electrotechnical benches



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

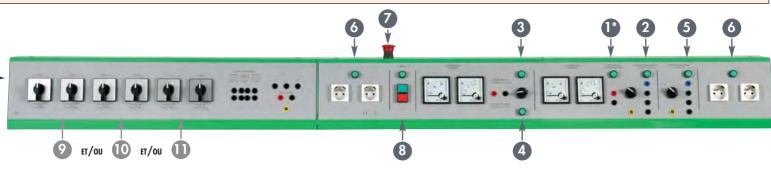
2000VA		ELECTROTECHNICAL BENCHES OF 2KVA RATING								
		DC SUPPLY	3-PHASE	AUXILIARY	AUXILIARY	3-PHASE	4 POWER	RESISTIVE	INDUCTIVE	CAPACITIVE
Ref.	Ref.	0-270V	0-430V	0-250VDC	0-250VAC	3x400VAC	SOCKETS	LOAD	LOAD	LOAD
		8A	5A	2,5A	2,5A	4 BORNES	230V 2P + E	2000W	2000VAR	2000VAR
				.	•		•		•	
BZO-20A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

■ HARD-WEARING LAMP WITHOUT MAINTENANCE

■ INSULATED OUTPUT

■ LOADS INSIDE THE LEFT-HAND CABINET

hard-wearing led indicator light



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 overspecified 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 OV. 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 ligts.

MERGENCY 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

PESISTIVE 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.

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)

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 accessable. 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





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. AD15I

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.**







ref. VSG-12 (1200mm)

ref. VSG-20 (2000mm)





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

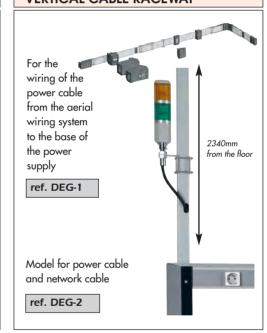
ref. VOY61

COLOURS AVAILABLE UPON REQUEST

white - orange - red - green - blue



VERTICAL CABLE RACEWAY

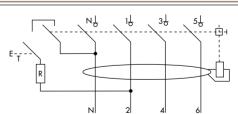


OPTION RESIDUAL CURRENT CIRCUIT BREAKER

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



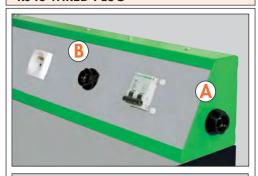
CANALIS CONNECTOR

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 $\bf A$ is used to connect the network input, the front connector $\bf B$ 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.

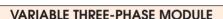
MANDATORY MAIN MODULE

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



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.

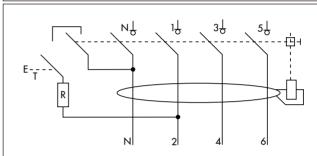
This module requires the presence of the variable three-phase module.

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)

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

MAINS SOCKETS MODULE (2 X 2)





ref. BC4PC

FIX THREE-PHASE MODULE ON TERMINALS

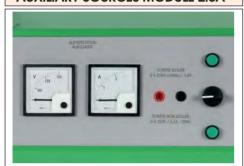
Mains distribution with protection and control separated from the other sources. Signalling of the 'on' position by LEDs.

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

CANALIS CONNECTOR



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

ref. KNB25CF5

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.







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

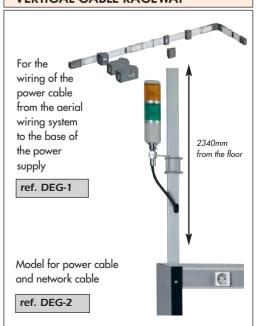
Beacon with a red light indicator (voltage presence) Ø60mm

ref. VOY61

COLOURS AVAILABLE UPON REQUEST

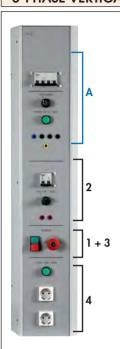


VERTICAL CABLE RACEWAY



Choose and configure your own wiring bench (for 2 students)

3-PHASE VERTICAL CONSOLE



A. "THREE-PHASE SUPPLY"

A lamp indicating that the power is on. Output via 4 safety terminals.

Protection by thermal magnetic circuit breaker (30mA residual circuit breaker available as an option). Key-operated power-on switch

1. "EMERGENCY STOP"

This push button cuts off the power in the case of an emergency. Key-resettable (positive safety).

2. 24VAC / 5A INSULATED SUPPLY.

Output via 2 safety terminals. Primary winding of transformer protected by auto-protection and secondary wiring by circuit breaker and switch.

3. GENERAL "START/STOP".

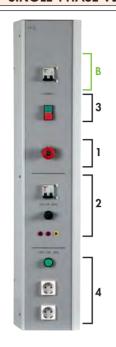
- A lamp indicating that the power is on.
- Start/stop operated using a double push-button.

4. 230VAC MAINS DISTRIBUTION

Two power sockets 230V with lamp.

ref. LAG-PT

SINGLE-PHASE VERTICAL CONSOLE



B. GENERAL PROTECTION

Protection by magneto-thermal circuit breaker (30mA residual current circuit breaker available as an option - See Page 36)

1. "EMERGENCY STOP".

This push button cuts off the power in the case of an emergency. Key-resettable (positive safety).

2. 24VAC / 5A INSULATED SUPPLY.

Output via 2 safety terminals. Primary winding of transformer protected by auto-protection and secondary wiring by circuit breaker and switch.

3. "START/STOP".

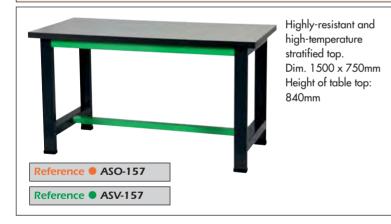
- A lamp indicating that the power is on.
- Start/stop operated using a double push-button.

4. 230VAC MAINS DISTRIBUTION.

Two power sockets 230V with lamp.

ref. LAG-PM

BENCH WITH STRATIFIED TOP



ECONOMICAL SINGLE-PHASE CONSOLE

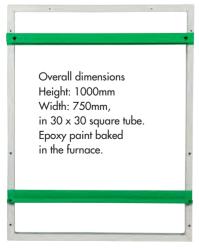


Horizontal console (wired), ready to be connected to the mains with:

- A 24VAC output insulated from the mains with LED indicator lamp, 100VA, protected by its own circuit breaker and start/stop button
- Two power sockets 230V with LED indicator lamp
- An emergency stop with key + an On/Off button
- Total length 750mm
- Drilling on the back side for fastening on grid holder frame (ref. CSO/CSV)
- Only available in grey colour
- Steel sheet case, PVC front panel

ref. PUG-1

GRID HOLDER FRAME (BARE WITHOUT GRID)



This frame can accommodate any type of grid up to a size of 800 x 750mm.

It is fitted with a lower rail, which can be adjusted in steps, and an upper rail, which slides up and down the vertical shafts.

The system has been designed in such a way that you can remove the wired grids without moving the rails.



REMOVABLE GRIDS

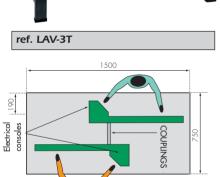


REF	PA6040	PA6050	PA7050
Height	660	660	750
Width	434	534	550

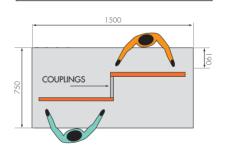
HARD-WEARING LAMP (without maintenance)

EXAMPLES OF WIRING BENCHES					
CHARACTERISTICS	REF.	OTY	OTY	OTY	QTY
Bench	ASO-157 or ASV-157	1	1	1	1
Vertical 3-phase console	LAG-PT	2			
Vertical single-phase console	LAG-PM		2		
Horizontal single-phase console	PUG-1			2	
Universal bare frame	CSO-10 or CSV-10	2	2	2	2
EXAMPLES OF COMPOSITION		LAO-3T	LAO-2M	LAO-ECO	LAO-N
EXAMPLES OF COMPOSITION		LAV-3T	LAV-2M	LAV-ECO	LAV-N

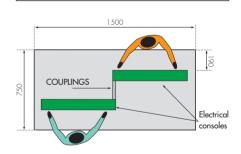








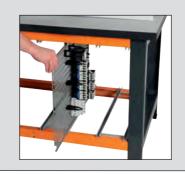




Options for wiring benches See Pages 36-37









Workstations for 4 users

WIRING BENCH WITH GRIDS



Workstation for 4 users. It is delivered with:

- 2 vertical electrical consoles with various outputs (see below)
- 4 grid frames
- 4 fixed grids 800 x 150mm
- 4 removable grids 600 x 500mm (usefull area)
- 1 stratified bench of dimensions 2000 x 750mm
- 2 storage areas for 4 removable grids each

WIRING BENCH WITHOUT GRIDS



Workstation for 4 users (see below drawing):

- 2 vertical electrical consoles with various outputs (see below)
- 4 frames (1000 x 750mm) for 800 x 750mm grids (maximum size).
 These grid frames have horizontal and adjustable rails to receive all grids up to 800mm height and 750mm width (maximum).
- 1 stratified bench of dimensions 1800 x 750mm
- Delivered without grid.

Reference LAO-22C Reference LAV-22C Same as LA*-22T but with 4 3-phase consoles

ELECTRICAL FEATURES OF THE VERTICAL CONSOLES (2 sides)



EMERGENCY STOP

• The push-button cuts off the power in the case of an emergency. Key-resettable (positive safety).

24VAC SUPPLY (insulated from mains)

Used via 2 safety terminals. Primary winding of transformer protected by auto-protection and secondary wiring by circuit breaker.

GENERAL START/STOP

- A lamp indicating that the power is on.
- Start/stop operated using a double push-button.

230V MAINS DISTRIBUTION

• Two mains sockets 230V with lamp.

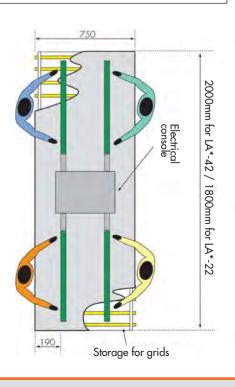
GENERAL PROTECTION

 Protection by thermal magnetic circuit breaker (30mA residual circuit breaker available as an option).

3-PHASE SUPPLY (3 X 400V + N+ E)

(only for LA*-42T / LA*-22T / LA*-22C / LA*-4C)

- A lamp indicating that the power is on.
- Output via 4 safety terminals.
- Key-operated power-on switch.



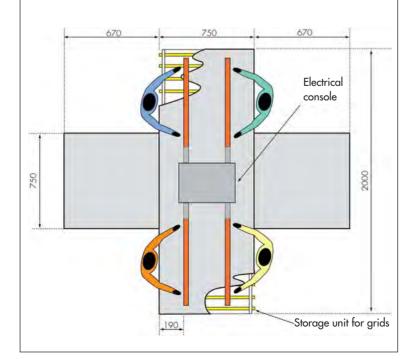
HARD-WEARING LAMP (without maintenance)

CROSS-SHAPED WIRING BENCH



Workstation for 4 users. Supplied with:

- 4 vertical electrical consoles with various outputs (see previous page).
- 4 grid frames
- 4 fixed grids 800 x 150mm
- 4 removable grids 600 x 500mm (useful area)
- 1 stratified bench 2000 x 750mm and 2 small ones 750 x 670mm.
- 2 storage areas for 4 removable grids each.



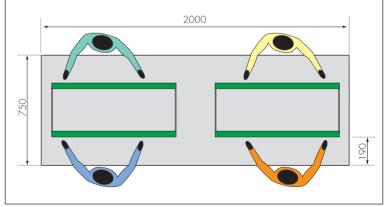
WIRING BENCH WITHOUT ELECTRICAL CONSOLE



Reference LAO-44N Reference LAV-44N

This bench enables users to wire up movable grids without testing possibility (bench without power supply). Wiring bench for 4 users.

- Dim. 2000 x 750mm.
- High temperature stratified top.
- \bullet The 4 frames (ref CSO-10 or CSV-10) can accommodate grids up to 800 x 750mm max.





Options for wiring benches

STORAGE UNIT FOR 2 GRIDS

Standard model



Vertical with upper and lower guide. Made for grids 660 x 534mm. For storing 2 grids.

Foresee an area of 330mm by GLS-2 $\,$



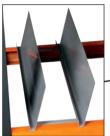
to calculate the number of possible options by bench.

ref. GLS-2

Economical model

Compatible with grids of dimensions $580 \times 750 \text{mm}$ max. (tilted by $15\,^\circ$ relative to the vertical). For storing 2 grids. Foresee an area of 380 mm by RAILECO to calculate the number of possible options by

bench.





ref. RAILECO

PNEUMATICS KIT FOR 4mm OUTPUT



A pneumatic distribution can be fitted on the wiring benches. This option is delivered complete with air entry pipe, stop valve, regulator with filter and manometer, feeder tank with 4 quick-fit junctions, means of fixing and screws.

ref. DISLAB

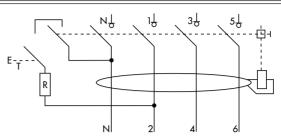
24VDC - 2.2A OUTPUT



Electronic auto-protection. Safety terminals 4mm On/off switch LED indicator light.

ref. CC24L

30mA RESIDUAL CURRENT CIRCUIT BREAKER



30mA residual current circuit-breaker. Single-phase bench.

ref. DIF30-2L A Type

ref. DIF30-2LAC AC Type

30mA residual current circuit-breaker. 3-phase bench.

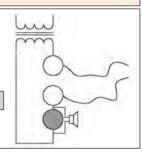
ref. DIF30-4L A Type

ref. DIF30-4LAC AC Type

CIRCUIT CONTINUITY TEST

An optional circuit "Continuity test" is available. This option allows to do some acoustic and visual tests under 24VAC.

ref. CAV



360° LED LAMP

REPLACE YOUR OLD LAMPS BY SOME NEW HARD-WEARING LED LAMPS

- LED lamp with ten electroluminescent LED diodes without maintenance.
- Bulb with a bayonet fitting (B15D type), 2 contact terminals
- Available in 2 voltages: 230VAC and 24VAC

ref. T15-230 230V ref. T15-24 24V

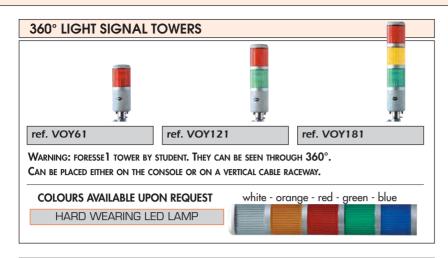


VERTICAL CABLE RACEWAY

For the wiring of the power cable from the aerial wiring system to the top of upright supply console

ref. LABO-CANNE





HANGING DRAWERS (300 SERIES) WITH LOCK AND KEY

For top in depth 750mm or 1000mm - Height: 400mm - Width: 450mm

REF	Drawer H=100mm	Drawer H=200mm	Drawer H=300mm
TIG-30	3	/	/
TIG-32	1	1	/
TIG-33	/	/	1





HANGING DRAWERS (400 SERIES) WITH LOCK AND KEY

For top in depth 750mm or 1000mm - Height: 490mm - Width: 450mm

REF	Drawer H=100mm	Drawer H=200mm	Drawer H=300mm
TIG-40	4	/	/
TIG-41	2	1	/
TIG-42	/	2	/
TIG-43	1	/	1





HANGING DRAWER WITH LOCK AND KEY

For top in depth 750mm or 1000mm Height: 100mm - Width: 400mm

With lock & key



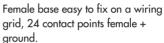


FAST CONNECTIONS HARTING®

These items are sold separately.

They allow the quick connection/disconnection of 24 contact points. The female base is fixed, the male connector is movable.





ref. HA-24S



Simple connector, without protection, 24 points male + ground.

ref. HA-M24

CUSTOM-MADE PRODUCTS

Examples of manufacturing carried out according to customers' needs



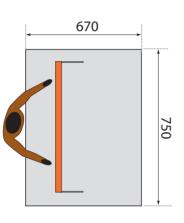
Mobile wiring benches

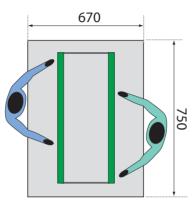
MBO-1 & MBV-1 enables you to wire up detachable grids without a testing option. It can be moved around thanks to its 4 wheels, 2 of them are fitted with brakes. The frame can accommodate grids or any other items with dimensions of up to 800×750 mm maximum.

750 x 670mm high-temperature laminated top Height of wiring unit = 1970mm.

MBO-2 & MBV-2 as the same features as MBO-1 & MBV-1.
except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames and therefore enables two users to work at the same except that it has two frames except that it has two frames except that it has two frames except the except that it has two frames except the except that it has two frames except the except that the except that









Reference MBO-2

Reference MBV-2

Reference • MBO-1

SUPPLIED WITHOUT GRID

Storage unit for grids

Simple and economical solution for storage of 16 or 24 grids.

16 compartiments model:

Dimensions 1890 x 665mm - Height 850mm without grid.

24 compartiments model:

Dimensions 1890 x 665mm - Height 1630mm without grid.

Compartment	Reference •	Reference •
16	V-MILABO16	O-MILABO16
24	V-MILABO24	O-MILABO24





Pneumatic and electrical benches

HARD-WEARING LAMP (without maintenance)



These workstations have a dual function, pneumatic on the right, electrical on the left. The quick grids frame are adjustable to different grids up to maximum dimensions of 800 x 750mm. Workstation for 2 users. Delivered with:

- One stratified table-top 2000 x 750mm
- Two vertical power consoles
- Two complete pneumatic distributions with air input connector, stopping valve, regulator with filter and manometer, air feeder equipped with 4 quick auto obturating 4mm connection, mechanics and fastenings, in compliance with working rules and regulation.

Power supplies column distributions

0

0

EMERGENCY STOP

• This push button cuts off the power in the case of an emergency. Key-resettable (positive safety).

24VAC / 5A INSULATED SUPPLY

• Output via 2 safety terminals. Primary winding of transformer protected by auto-protection and secondary wiring by circuit breaker and switch.

START/STOP

- A lamp indicating that the power is on.
- Start/stop operated using a double push-button.

230VAC MAINS DISTRIBUTION

Two power sockets 230V with lamp.

GENERAL PROTECTION

• Protection by magneto-thermal circuit breaker (30mA residual current circuit breaker available as an option - See Page 36)

THREE-PHASE SUPPLY (only LAO-PNT & LAV-PNT)

- A lamp indicating that the power is on.
- Output via 4 safety terminals.
- Key-operated power-on switch

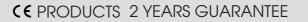
Storage unit for 6 grids



ref. G-MILABO6

- Storage cabinet for 6 grids.
- Sliding lockable doors .
- Rubber fluted carpet glued on top.
- Maximum dimensions of the grids: Width: 550mm / Height: 900mm / 200mm of installed equipments.
- Dimensions: 1000 x 1200 x 600mm.

CUSTOM-MADE PRODUCTS Examples of manufacturing carried out according to customers' needs



Grids supports

WALL MODEL



Reference MURECO-O

Reference MURECO-V

- Cabling grid support, with wall fixing. (Supplied without grid)
- Adjustable horizontal rails for using several grid sizes.
- This system also takes wood panels 12mm thick or BA13 plaster panel.
- Overall dimensions of the main frame: 1000 x 750mm
- Maximum dimensions of the work area: 800 x 750mm (panels or grid)
- The bottom bracket extends 150mm to hold hand tools. (Angled corners)
- Screws supplied (except for wall fixing).



MOBILE MODEL







Reference FREE-SUP-O

Reference • FREE-SUP-V

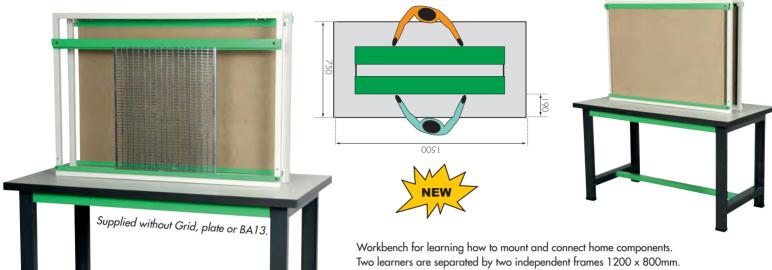
- Mobile easy-to-store cabling support. (Supplied without grid)
- On a bench, the work area (grids or panels) can be angled by the cabler simply by using the screw handles on the sides.
- The ball joints in contact with the table adjust automatically according to the work angle.
- The holding bars make the assembly very rigid for comfortable working.
- Adjustable horizontal rails for using grids with varied dimensions.
- This system also takes wood panels 12mm thick and BA13 plaster panel.
- Overall dimensions of the main frame: 1000 x 750mm
- Maximum dimensions of the work area: 800 x 750mm (panels or grids)
- Footprint on table in maximum open position: 750 x 530 mm



The console ref. PUG-1 can be fixed on the top of the references MURECO.

Features: see next page

Multifunction home learning workstation



Workbench for learning how to mount and connect home components.

Two learners are separated by two independent frames 1200 x 800mm.

These frames can take wood plates, industrial frames or the BA13 plaster panel.

Speedy installation and replacement of work supports (plate, frame, BA13 plaster panel).

- \bullet High-temperature laminated top 40mm thick, dimensions 1500 x 750mm.
- Maximum dimensions of wood plate or BA13 or wiring frame: 1150 x 785 x 15mm thick.

Reference P1O-2P-N

Reference P1V-2P-N

There are other solutions as opposite with a workbench 2400 x 750mm with 3 feet, for accommodating 4 learners at the same time.

Please contact us to give us your ideas.

We can prepare a free estimate for you with 3D illustrations.



ECONOMICAL SINGLE-PHASE CONSOLE



Horizontal console (wired), ready to be connected to the mains with:

- A 24VAC output insulated from the mains with LED indicator lamp, 100VA, protected by its own circuit breaker and start/stop button
- Two power sockets 230V with LED indicator lamp
- An emergency stop with key + an On/Off button
- Total length 750mm
- Drilling on the back side for fastening on grid holder frame (ref. CSO/CSV)
- Only available in grey colour
- Steel sheet case, PVC front panel

ref. PUG-1

REMOVABLE GRIDS



REF	PA6040	PA6050	PA7050
Height	660	660	750
Width	434	534	550

Drawer cabinet



MAIN FEATURES

- Sturdy drawer cabinets in steel for an intensive use.
- Furnace-baked epoxy paint : grey housing, pearl grey drawers
- Width: 720mm / Depth: 645mm / Height: 1000mm
- Maximum load by drawer : 100 kg
- Total weight: between 150 and 160 kg according the model
- Handles with label holder

DESCRIPTION OF THE DRAWERS

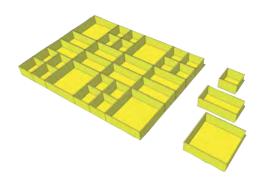
- Drawers with ball bearing slides. A safety device allows the
 opening of only one drawer at one time. This device prevents the risk of knocking over on
 the user. The lock jams all the drawers at one time. All the drawers are delivered already
 equipped.
- Inside dimensions of a drawer : 630 x 450 mm

STANDARD EQUIPMENT OF DRAWERS

Height	Drawer fittings	
75 mm	28 plastic boxes among 3 sizes 16 boxes 75 x 75mm 8 boxes 75 x 150mm 4 boxes 150 x 150mm	
100 mm	4 metallic storages including - 28 removable dividers	
150 mm	4 metallic storages including - 20 removable dividers	
200 mm	4 metallic storages including - 12 removable dividers	



metallic storage + dividers layout



plastic boxes layout 75 x 75mm

plastic boxes layout 150 x 75mm

plastic boxes layout 150 x 150mm

Ref.	AAG-70	AAG-80	AAG-90
Weight	133kg	136kg	157kg
			-
	75	100	75
	75	100	75
	100	100	100
	100	100	100
	100	100	100
	100	100	100
	150	100	100
		100	100
	200	200	150
Drawer 75mm	2	/	2
Drawer 100mm	4	7	6
Drawer 150mm	1	/	1
Drawer 200mm	1	1	/

Trolleys & Servants

TROLLEYS



ref. DES-16

- Trolley
- Tubular steel frame
- Removable upper shelf
- Melaminated shelves (beech surface)
- 2 swivelling wheels (diameter 125mm) with a brake
- 2 fixed wheels (diameter 125mm)
- Delivered unmounted. Easy to assemble.
- Length: 1030mmWidth: 500mmHeight: 1010mm
- Useful dimensions: 850x500mm
 Height of the shelf: 185/810mm
- Max load of the upper shelf: 80kgTotal max load (on both shelves): 200kg
- Net weight: 31kg



ref. DES-18

- Trolley
- Tubular steel frame
- The 2 upper shelves are removable
- Melaminated shelves (beech surface)
- 2 swivelling wheels (ø 125mm) with brake
- 2 fixed wheels (diameter 125mm)
- Delivered unmounted. Easy to assemble.
- Length: 1030mmWidth: 500mm
- Height: 1010mm
- Useful dimensions: 850x500mm
- Height of the shelf: 185/500/810mm
- Max load of the upper shelf: 80kg
- Max load of the middle shelf: 80kg
- Total max load (the whole trolley): 200kg
- Net weight: 37kg



ref. DDG-90

- Trolley
- Electrogalvanised steel frame
- 3 fixed shelves with 30mm edge
- Protective grooved rubber mat on the upper shelf
- Handle
- 4 80mm diameter wheels. 2 of them have a brake
- Space between the shelves : 330mm
- Height: 850mm (wheels included)
- Width : 615mm
- Length: 900mm (handle included)
- Max load by shelf: 30 kg
- Net weight : 33 kg

WORKSHOP TROLLEYS



ref. DES-24

- 2 swivelling wheels Ø200mm with brakes, 2 fixed wheels.
- Carrying handle
- 1 cabinet lockable by key (1 fixed shelf and 2 moveable).
- Lenght 1200mm.
- Width 700mm.
- Height 915mm.
- Useful dimensions 1050 x 700mm.
- Max load of the upper shelf: 200kg.
- Max load of the shelves inside the cabinet: 30kg.
- Total max load: 500kg.
- Net weight: 79kg.



ref. DES-58

- Worktop reinforced melamine 19mm.
- 4 swivelling wheels Ø125mm, 2 with brakes.
- 2 cabinets lockable by key (1 fixed shelf and 2 moveable in each cabinet).
- lenght 1120mm.
- Width 650mm.
- Height 910mm.
- Useful dimensions 1120 x 650mm.
- Max load of the shelves inside the cabinet: 30kg.
- Total max load 150kg.
- Weight 76kg.

Chairs & Stools

5-pronged swivel stools and chairs for workbenches. Swivels, height can be adjusted by using a pneumatic gas lift. Height adjustable from 470 to 670mm maxi.











5-pronged comfortable chair in polyurethane for workbench. Seat and back in compact foam. With footrest. Swivel model.

Height adjustable from 470mm to 670mm



Ergonomic polyurethane sit-stand chair. Height can be adjusted by using the pneumatic gas lift. Height adjustable from 620 to 870mm

> ref. ASS-D without footrest





Trolley with trays



2-sides trolley

ref. CH-C84R

- 4 swivel wheels for an easy moving. 2 wheels have a brake
- Steel frame with beige epoxy paint
- height: 1120mm / width: 500mm / length: 1040mm

84 blue plastic trays

- 42 trays of dims 105 x 115 x 70mm (21 front / 21 back)
- 42 trays of dims 175 x 105 x 95mm (21 front / 21 back)

Workshop cupboard



Steel cupboard with swing doors, very sturdy, delivered dismantled.

- Equipped with 4 height adjustable shelves (5 storage levels in total)
- Maximum load by level: 100 kg
- Rotating handle with lock on the right door
- Single colour : pearl grey (furnace-baked epoxy paint)
- Width: 900mm • Depth : 450mm
- Height: 1800mm



Cupboard delivered dismantled

ref. HB58