

# WIRING SOLUTIONS



info@langlois-france.com | www.langlois-france.com

phone: 0033 5 56 75 13 33

## WORKSTATIONS FOR 4 USERS

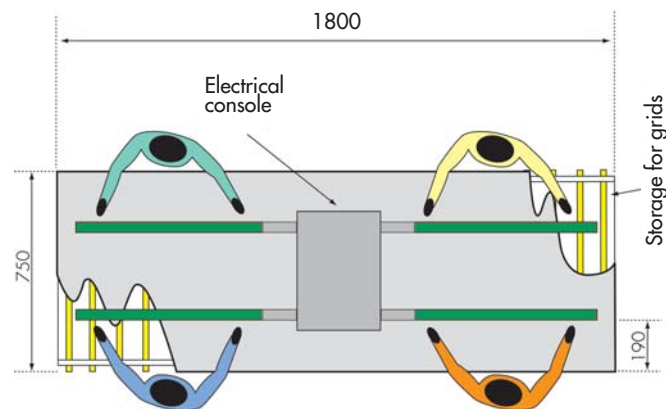
### WIRING BENCH WITHOUT GRIDS



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.

ref. ● LAO-22T	ref. ● LAV-22T	3-phase
ref. ● LAO-22M	ref. ● LAV-22M	single-phase
ref. ● LAO-22C	ref. ● LAV-22C	3-phase
Same as LA*-22T but with 4 3-phase consoles		



High top included 840mm.  
Overall dimensions 1840 x 1800 x 750mm.

### 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.

## WIRING BENCH WITH GRIDS



SUPPLIED WITH  
4 fixed grids and  
4 removable grids

ref. ● LAO-42T ref. ● LAV-42T

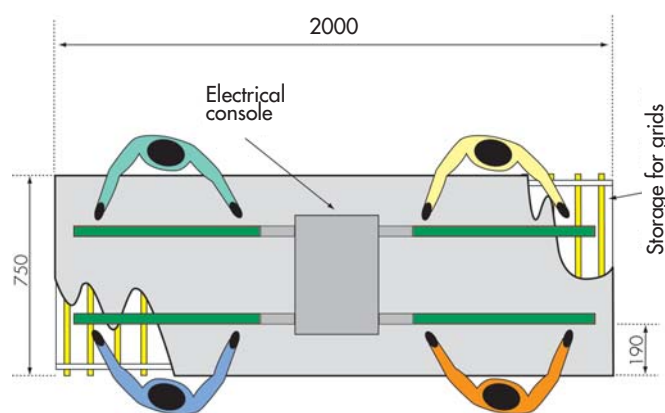
3-phase

ref. ● LAO-42M ref. ● LAV-42M

single-phase

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



High top included 840mm. Overall dimensions 1840 x 2000 x 750mm.

## COLOR CHART

RAL 2008

RAL 6018

RAL 7016

RAL 7035

All others RAL  
available upon  
request



## CROSS-SHAPED WIRING BENCH



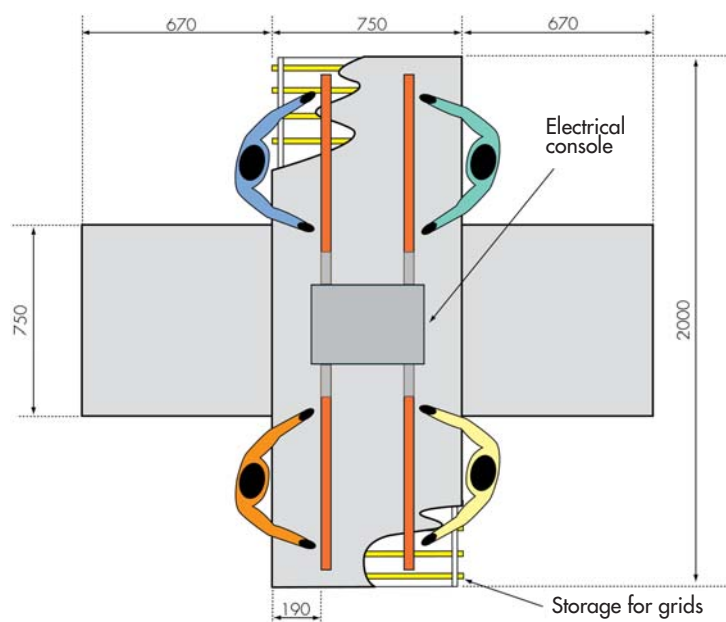
SUPPLIED WITH  
4 fixed grids and  
4 removable grids

ref. ● LAO-4C ref. ● LAV-4C

3-phase

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.



High top included 840mm. Overall dimensions 1840 x 2090 x 2000mm.



## OPTIONS FOR WIRING BENCHES

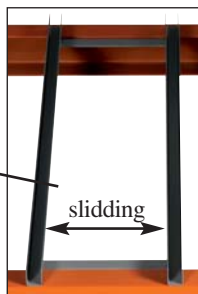
### STORAGE UNIT FOR 2 GRIDS

#### Standard model



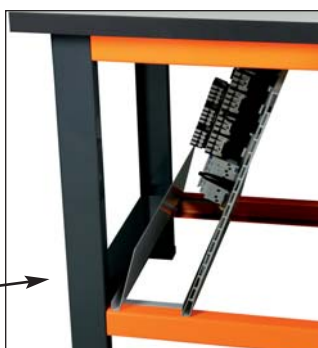
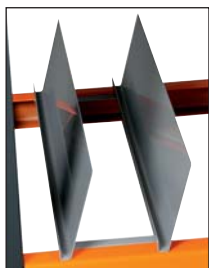
ref. GLS-2

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.



#### Economical model

Compatible with grids of dimensions 580 x 750mm max. (tilted by 15 ° relative to the vertical). For storing 2 grids. Foresee an area of 380mm 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

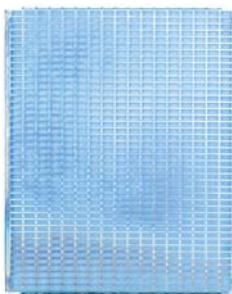
### 24VDC - 2.2A OUTPUT



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

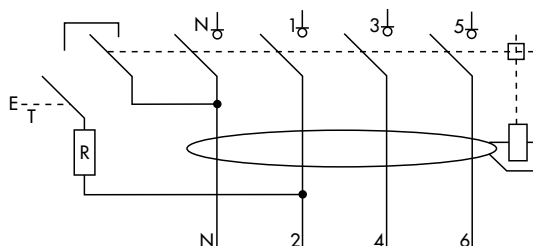
ref. CC24L

### REMOVABLE GRIDS



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

### 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.

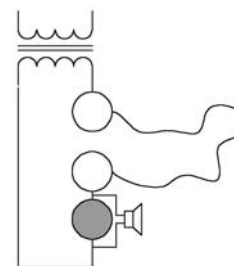
ref. DIF30-4L A Type

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 (BA15D type), 2 contact terminals
- Available in 2 voltages:  
230VAC and 24VAC

COMPATIBLE WITH ALL THE BULBS WITH  
A BAYONET BA15D FITTING TYPE

ref. T15-230 230V

ref. T15-24 24V



### 360° LIGHT SIGNAL TOWERS



ref. VOY61



ref. VOY121



ref. VOY181

**WARNING: FORESEE 1 TOWER BY STUDENT. THEY CAN BE SEEN THROUGH 360°.**  
CAN BE PLACED EITHER ON THE CONSOLE OR ON A VERTICAL CABLE RACEWAY.

#### COLOURS AVAILABLE UPON REQUEST

HARD WEARING LED LAMP

white - orange - red - green - blue



### 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



Réf. TIG-30



Réf. TIG-32

### 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



Réf. TIG-41



Réf. TIG-42

### HANGING DRAWER WITH LOCK AND KEY

For top in depth 750mm or 1000mm  
Height: 100mm - Width: 400mm  
With lock & key

ref. TIG-10



### 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.



Female base easy to fix on a wiring grid, 24 contact points female + ground.

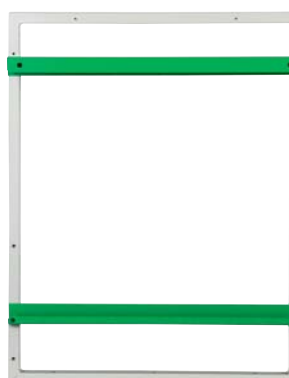
ref. HA-24S



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

ref. HA-M24

### BARE GRID FRAME HOLDER FOR GRIDS



This frame supports any type of grids up to 800 x 750mm.

It is equipped with a lower rail which is adjustable in steps and an upper rail which slides continuously on the vertical uprights.

The system is study to remove instantly the wired grids without moving the rails.

OVERALL DIMENSIONS:

Height: 1000mm,  
Width: 750mm,  
in square tubes of 30x30.  
Epoxy paint baked in an oven.

ref. ● CSO-10

ref. ● CSV-10

WIRING AREAS AND/OR FITTING AREAS FOR 2 TO 8 OPERATORS



SUPPLIED WITHOUT GRID AND MATERIAL

REF. ●	REF. ●	Dimensions (mm)	Number of operator	Shelf
PCA-V10T	PCA-O10T	1340 x 1970	from 2 to 4	2
PCA-V10	PCA-O10	1340 x 1970	from 2 to 4	no
PCA-V20T	PCA-O20T	2750 x 1970	from 4 to 8	4
PCA-V20	PCA-O20	2750 x 1970	from 4 to 8	no

Features of the unit

- Structure made of anodized aluminium profile for two sided working.
- Mounted on adjustable pads for ideal and very stable adjustment.
- At the frame centre, 2 vertical profiles prevent the plates from bending.
- Accepts all types of supports (Wiring frames, plaster panel, wood board, melamine).
- Very easy placing of supports thanks to two height-adjustable slides.
- Melamine shelves (T version only) height-adjustable.  
Dimensions 1400 x 400mm - Thickness 19mm.
- Useful surface area of the supports 1200 x 1175mm x 14mm max.

ALL DIMENSIONS POSSIBLE  
CONSULT US

OPTION – MOBILE POWER SUPPLY UNIT

- 1 Emergency Push Button
- 1 360° light signal tower, 2 colors (voltage presence and ON)
- 1 16A thermal magnetic circuit breaker
- 1 ON / OFF push button with indicator light
- 1 key switch
- 1 ON indicator light (for active 230V output)
- 1 230VAC output on safety terminals 4mm
- 3 230V electrical sockets (2P+E)

Dimensions : 420 x 400 x 900mm.  
Power cord of 10 meters (plug 2P+E).  
For custom-made outputs, please contact us.

ref. ALM-PCA



POWER CONSOLE OPTION



- Power console double sides.
- Equipment of each side :
  - 1 16A thermal magnetic circuit breaker
  - 1 Emergency stop button
  - 1 Pushbutton + ON indicator light
  - 1 Mains output 230V+E on 4-mm safety terminals
  - 2 Mains sockets 2P+E 230VAC
- Dimensions : 500 x130 x100mm

ref. PUP-PCA



## MOBILE WIRING AREAS FOR 4 OPERATORS

### MOBILE WIRING AREA FOR 4 OPERATORS

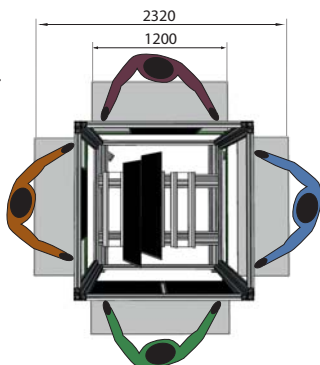


REF. ● CUB-GO12ET

REF. ● CUB-GV12ET

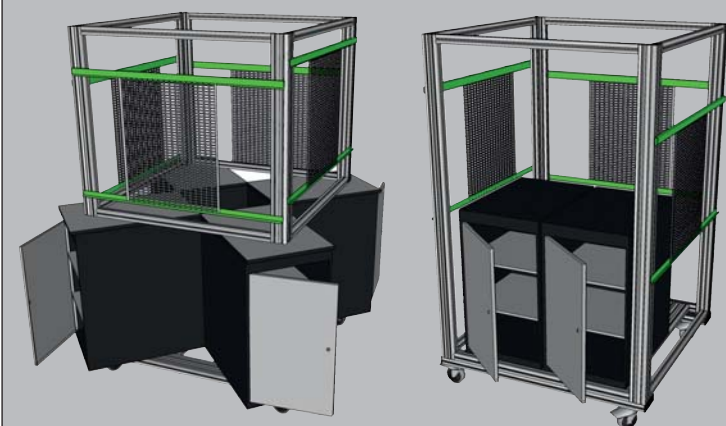
Unit for 4 users for wiring on frames with no testing option.

- Structure made of matt anodized aluminium sections.
- Mounted on casters, two with brakes.
- Very easy placing of wiring frames thanks to height-adjustable slides.
- 4 melamine height-adjustable shelves (1200 x 280mm thk. 19mm)
- Takes wiring frames 1200 x 1000mm max.
- Arrangement of wiring frames in the frame centre.
- 6 locations for wiring frames with max dimensions 1000 x 900mm.
- Overall dimensions: 1850 x 2320 x 2320mm.



SUPPLIED WITHOUT GRID

### MULTIPLE VARIATIONS POSSIBLE



### MOBILE WIRING AREA FOR 4 OPERATORS



SUPPLIED WITHOUT GRID

REF. ● PCA-CUB-O

REF. ● PCA-CUB-V

Area for 4 users comprised of:

- 4 horizontal power supply consoles equipped with:
  - 1 emergency stop button
  - 1 On/Off button with indicator light
  - 1 thermal-magnetic residual current circuit-breaker 16A two-pole
  - 1 output 24VAC on terminals 4mm
  - 2 mains sockets 230VAC
- 1 frame made of matt anodized aluminium with casters, two with brakes.
- 4 areas equipped with 2 adjustable horizontal supports for taking any wiring frame not exceeding 1200mm high and 750mm wide.

Overall dimensions 2000 x 750 x 750mm.

### COLOR CHART

RAL 2008

RAL 6018

RAL 7016

RAL 7035

All others RAL  
available  
upon request



# Wiring areas

## MOBILE WIRING AREAS AND/OR FITTING AREAS FOR 6 OPERATORS



Solution having the advantage of folding up for storage in minimum space.  
Mobility / stability: The nine large-diameter casters make the assembly easy to move, and it is very stable when the six brakes are locked.

mobile version with casters supplied mounted

REF. ● PCA-V40

REF. ● PCA-O40

No casters version for floor fixing once unfolded

REF. ● PCA-V40-FIXE

REF. ● PCA-O40-FIXE



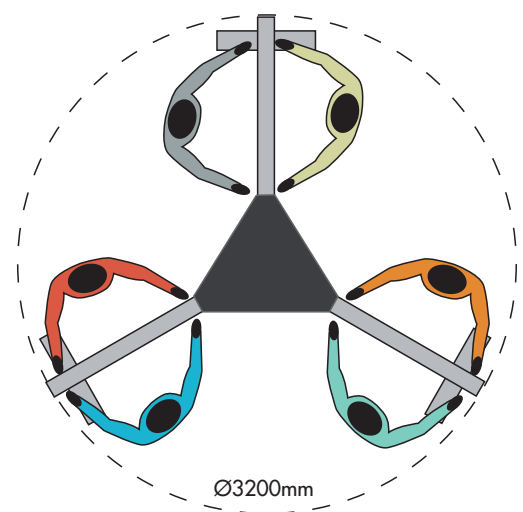
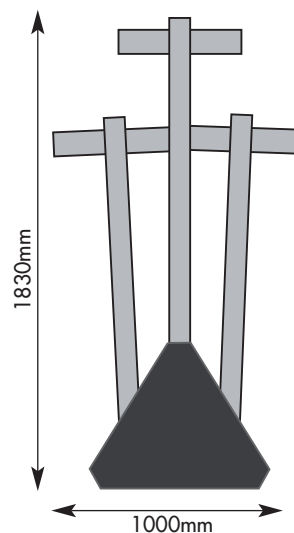
Quick fixing system supports.

### Characteristic of the structure

- Structure made of anodized aluminium sections.
- Mounted on nine casters with brakes.
- Width of grids 750mm max.
- Easy to fold after use.
- Dimensions:  
Unfolded: Ø 3200mm Height 1850mm  
Footprint when folded: 1790 x 1000mm

### Characteristics of each panel

- Takes different supports (plaster panel, wooden board, melamine, etc.).
- Max. useful dims of supports 1770 x 1200 mm.
- Fixing of supports with vertical brackets.



Effortless folding. Easy to store against a wall once folded.



## MOBILE WIRING BENCHES FOR 1 OR 2 OPERATORS



Model for 1 operator

REF. ● MBO-1

REF. ● MBV-1



Model for 2 operators

REF. ● MBO-2

REF. ● MBV-2

All these wiring benches mobile thanks to 4 casters two of them with brakes, allow making wiring on removable supports with no testing option.

### Features of the -1 and -2 versions:

- Take grids or any other support of maximum dimensions 800 x 750mm.
- High temperature stratified top of 750 x 670 mm.
- Dimensions of the bench: 750 x 670 x 1965mm

### Features of the -3 versions:

- Take grids or any other support of maximum dimensions 1000 x 750mm.
- Matt anodized aluminium profile structure
- Dimensions: 810 x 600 x 1750mm.

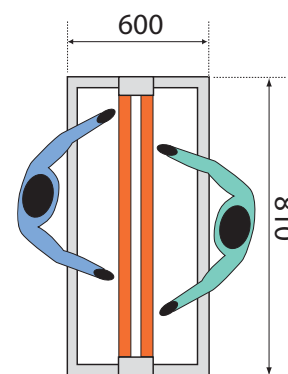
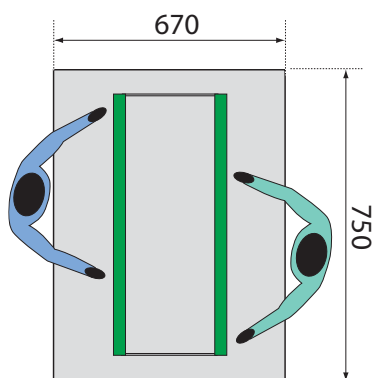
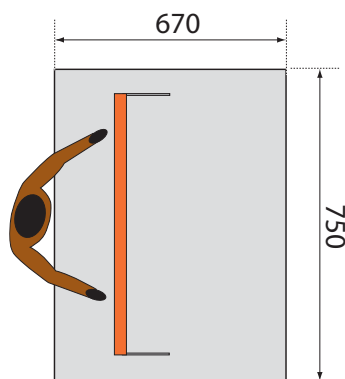
SUPPLIED WITHOUT GRID



Model for 2 operators

REF. ● MBO-3

REF. ● MBV-3



### COLOR CHART

RAL 2008

RAL 6018

RAL 7016

RAL 7035

All others RAL  
available  
upon request



### POWER SUPPLIES - SEE PAGE 37



## GRIDS SUPPORTS

### WALL GRID SUPPORT



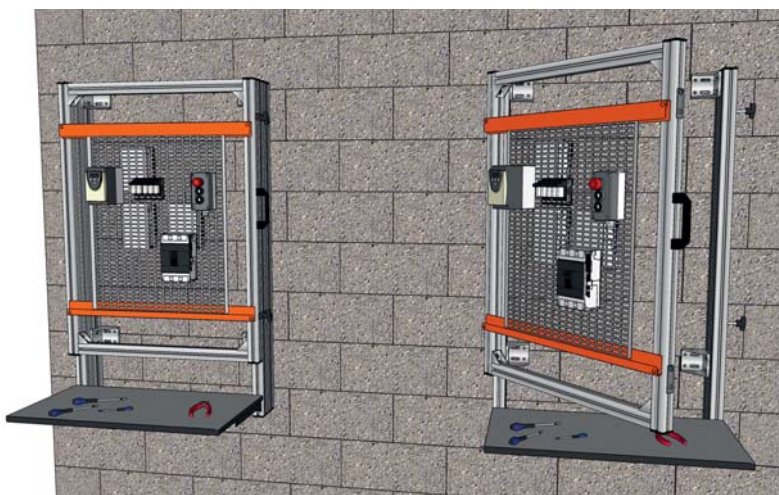
- Cabling grid support, with wall fixing. (Supplied without grid)
- Adjustable horizontal rails for using several grid sizes.
- This system also takes wood panels 12mm thick or BA13 plaster panel.
- Overall dimensions of the main frame: 1000 x 750mm
- Maximum dimensions of the work area: 800 x 750mm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

### MOBILE GRID SUPPORT



- 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

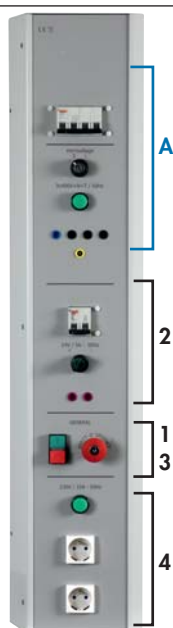
### OPENING WALL MODEL



- Cabling grid support with wall fixation (delivered without grid)
- Opening system at 180° for total access to the back of the grid
- The support frame for grid is fixed on rails by 2 hinges. Locking by hook for a perfect stability when closed. Total space between the wall and the rear of the grid: 160mm.
- Adjustable horizontal rails to allow the use of multiple grids dimensions.
- Takes also the wood plates of thick 12mm or the BA13
- Overall dimensions of the pivoting frame: 1000 x 750mm.
- Maxi. Dimensions of the work area: 800 x 750mm (plates or grids).
- Melamine shelf 750 x 280 mm for putting tools
- Delivered with screws (except for wall fixation)

# POWER CONSOLE FOR WIRING SOLUTIONS

## 3-PHASE OR SINGLE-PHASE VERTICAL CONSOLE



ref. LAG-PT 3-phase

### 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

### B. GENERAL PROTECTION

Protection by thermal magnetic circuit breaker (option 30mA residual current circuit breaker)

### 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



ref. LAG-PM single-phase

## INDUSTRIAL POWER UNIT



ref. DK3

This 460 x 480 x 120mm plastic electrical unit is placed on the ground. It delivers various voltage sources, protected by thermal magnetic circuit breakers. Connection to the 3x400V+N+E electric network via a 5 meters cable and P+E connector. Supplied with plugs for connection to the mains.

Voltage	Sockets
3-phase 3 x 400V+N+E	1 x 16A 3P+N+E IP44
Single-phase 230V+E	1 x 16A 2P+E IP44
Single-phase 230V+E	3 x 10/16A 2P+E IP55

## 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

## ECONOMICAL SINGLE-PHASE VERTICAL CONSOLE

- Power console double sides.
- Equipment of each side :
  - 1 16A thermal magnetic circuit breaker
  - 1 Emergency stop button
  - 1 Pushbutton + ON indicator light
  - 1 Mains output 230V+E on 4-mm safety terminals
  - 2 Mains sockets 2P+E 230VAC
- Dimensions : 500 x 130 x 100mm

ref. PUP-PCA



## BASIC MAINS CONNECTION BOX



- 3 sockets 230V
- Emergency stop
- Circuit breaker
- Delivered with 10 meters of wire 3 x 2.5 mm<sup>2</sup>

ref. HT-3PC

## MOBILE POWER SUPPLY UNIT

- 1 Emergency Push Button
- 1 360° light signal tower, 2 colors (voltage presence and ON)
- 1 16A thermal magnetic circuit breaker
- 1 ON / OFF push button with indicator light
- 1 key switch
- 1 ON indicator light (for active 230V output)
- 1 230VAC output on safety terminals 4mm
- 3 230V electrical sockets (2P+E)

Dimensions : 420 x 400 x 900mm.  
Power cord of 10 meters (plug 2P+E).  
For custom-made outputs, please contact us.

ref. ALM-PCA





## PANEL FOR FITTING SURFACE-MOUNTING ELECTRICAL EQUIPMENT



SUPPLIED WITHOUT MATERIAL

Working area composed of 8 separate locations.

Mounted on casters, 4 with brakes, the assembly can be moved very easily and is very stable when the brakes are locked.

The top frame with surface area 1m<sup>2</sup> enables a BA13 plaster ceiling to be made.

The central console with 4 sides ensures distribution of electrical energy for each student.

### Features of the structure

- Structure made of matt anodized aluminium sections
- Mounted on 8 casters, 4 with brakes
- Dimensions: 1900 x 1900 x H1950mm

### Features of each location

- Accept all types of supports (BA13 plaster panel, wood, melamine, etc.)  
max thickness of supports: 14mm  
max. dimensions of supports: H 1600 x 730mm useful  
Tool-free fixing of supports thanks to 2 height-adjustable slides

### Features of the ceiling

- Square frame made of matt anodized aluminium profile 1m
- Take different supports (BA13 plaster panel, wood board, melamine, etc.)

### Features of the console

4 surfaces equipped for each person:

- 1 emergency stop button
- 1 thermal-magnetic circuit-breaker 16A
- 1 main On/Off pushbutton
- 1 output 24V-AC on safety terminal 4mm
- 4 mains sockets 230V with indicator light

REF. ● BXO-ZDR

REF. ● BXV-ZDR

## CUBE WORKING AREA



SUPPLIED WITHOUT MATERIAL



- Matt anodized aluminium profile structure
- Mounted on casters, 2 with brakes
- Very easy positioning of the materials thanks to adjustable height guides
- Accepts any type of material with thick of max. 14mm and dimensions max. 1500 x 1200mm
- Dimensions: H 1850 x 1250 x 1250mm

REF. ● CUB-V1212

REF. ● CUB-O1212

## PANEL FOR FITTING SURFACE-MOUNTING ELECTRICAL EQUIPMENT



Two-sided wheeled frame, equipped with two blank panels, of white melamine board with useful area 1.5m<sup>2</sup> each side, for fitting surface-mounting electrical equipment.

The panels can be changed easily by means of a side clamp system. The wheeled frame is easy to move with two side handles. Two of the four wheels have brakes for goods frame stability when fitting equipment.

Dimensions of the frame:

- Panel: L.940 x H.1600 x 13mm (thick)
- Frame : L.1020 x W.610 x H.1750mm

ref. ZDP13A

SUPPLIED WITHOUT MATERIAL

## PANEL FOR FITTING MULTI-MATERIALS



ref. ZDP-PP

### GYPSUM BLOCKS, CELLULAR CONCRETE AND BLOCKS

- Matt anodized aluminium profile structure allowing the double-face work.
  - Mounted on adjustable pads for an ideal and very stable adjustment.
  - Very easy positioning of the materials thanks to the different clamps.
  - Two different columns accepting:
    - Hollow or full gypsum blocks of dimensions 66 x h25 x thick 7cm
    - Cellular concrete blocks of dimensions 62.5 x h25 x thick 7cm
    - Blocks of dimensions: 50 x h20 x thick 7cm
  - Dimensions: H.1610 x L.1500 x W.1100mm
- Delivered without material.



REF ● ZDP-MM-V

REF ● ZDP-MM-O

### GYPSUM BLOCKS, CELLULAR CONCRETE, BLOCKS, BA13, WOOD

- Matt anodized aluminium profile structure allowing the double-face work.
- Mounted on adjustable pads for an ideal and very stable adjustment.

#### Face 1 for Gypsum blocks, cellular concrete and blocks

- Very easy positioning of the materials thanks to the different clamps.
- Two different columns accepting:
  - Hollow or full gypsum blocks of dimensions 66 x h25 x thick 7cm
  - Cellular concrete blocks of dimensions 62.5 x h25 x thick 7cm
  - Blocks of dimensions: 50 x h20 x thick 7cm

#### Face 2 for BA13 and wood

- Very easy positioning of the materials thanks to adjustable height guides
  - Accepts any type of material of dimensions 1500 x h1500 x thick 14mm
  - Dimensions: H.1610 x L.1500 x W.1100mm
- Delivered without material.



## STORAGE FOR GRIDS AND MATERIALS

### STORAGE FOR 16 TO 24 GRIDS

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

**16 compartments model :**

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

**24 compartments model :**

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

compartments	REF. ●	REF. ●
16	V-MILABO16	O-MILABO16
24	V-MILABO24	O-MILABO24



### STORAGE FOR MATERIALS



ref. RANG-BO

- Structure made of anodized aluminium profile.
- 20 locations from 1350 x 950mm each one, on 2 levels
- Dimensions : H 2100 x W 1900 x D 1350mm

### STORAGE FOR GRIDS AND MATERIALS



ref. RANG-MIX

- Structure made of anodized aluminium profile
- 6 locations for materials
- 24 locations for grids
- Dimensions : H 1880 x W 2130 x D 1320mm