

# STCS - PHD Datasheet

## DESCRIPTION

The “Shrinking Tube Control System – Portable Hand Device” (STCS -PHD) consists in a shrinking system for wiring harness thermoplastic protections (sleeves), with control and monitoring, based on hot air devices especially designed for line panels applications.

The system has several working/setup configurations:

- It can work vertically or horizontally towards the line panel;
- It can work parallel (best suited for end-splices) or perpendicular towards the line panel (best suited for normal splices). This change can be done during work due to a rotating holder;
- It can use a vacuum pump or a blade for the holding system into the line panel.

The system is made by 2 separate parts: a control module and a shrinking system.

The control module is fixed outside the line and its connected to the shrinking system by a corrugated tube with 9 meters length (other lengths can be supplied on demand), that contains all wire and air connections.

It is possible to select from 2 different shrinking chambers: a standard size, with 80 mm length and 30 mm Ø; and a large size, with 80 mm length and 50 mm Ø. The chambers can be easily removed, for easy cleaning or replacement (other sizes can also be supplied on demand).

The shrinking chamber has 2 side clamps to hold the cable during the shrinking process. In this way, the operator can perform other tasks during the shrinking operation. The system also allows to use a retractable end-splices tool.

The system allows to configure several parameters, such as: the process temperature, the cooling temperature, the shrinking time, etc.

The machine has 2 operating modes: M1 with time/temperature monitoring/control; M2 similar to M1 but with references: sequences of pre-programmed shrinking times (each reference can have from 1 to 20 shrinking times).

In M2 mode during execution, the references can be selected manually: using the keyboard or the rotating knob or automatically: using barcode readers.

## SOME FEATURES

- Several working configurations to accommodate all panel's applications;
- 2 different operating modes: M1 with temperature control and shrinking time; and M2 mode with references;
- Fast removable shrinking chamber for easy cleaning;
- Software can be modified to work with several communication systems (KSK for example);
- Automatic calibration (single cycle);
- Partial and global cycle counter;
- Special maintenance mode for hardware debug;
- Programming mode password protected;
- Several configurable languages, including: English, Portuguese, French and Spanish (or others on demand);
- Reference's programming manually or through a PC application (that reads Excel™ files).

**New Model 2.1:**  
Lighter, several working configurations, more ergonomic, easier maintenance, etc

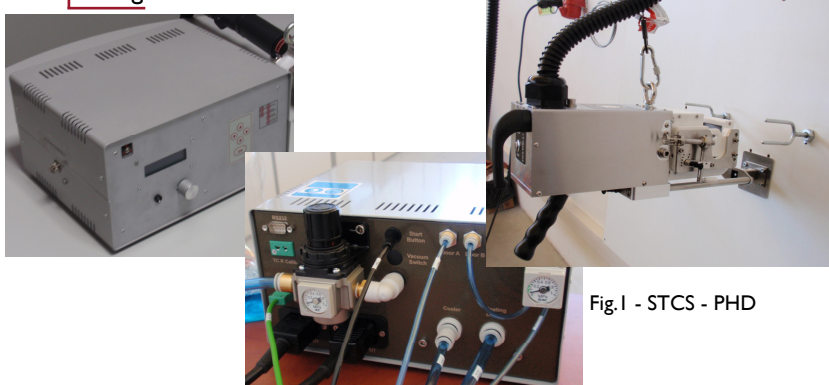
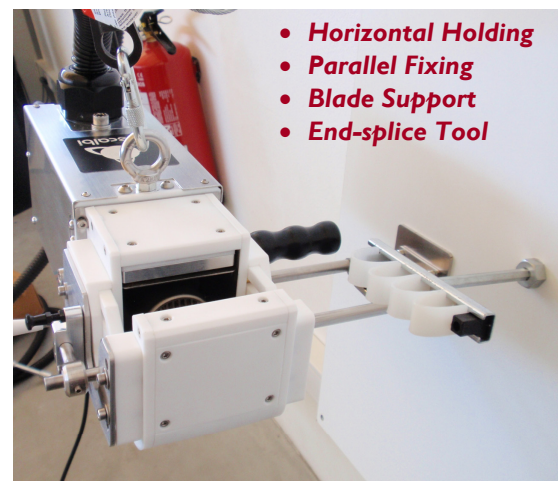


Fig.1 - STCS - PHD



UNIÃO EUROPEIA  
Fundo Europeu de Desenvolvimento Regional

Mecalbi  
Atividades de Engenharia, Unipessoal, Lda  
Headquarters: Rua Dr. Alfredo da Silva, Lt 92 A/C,  
6000-210, Castelo Branco, Portugal  
Mecalbi Engineering Solutions: Zona Industrial de  
Castelo Branco, Rua J, Lt N14, Módulo A,  
6000-459, Castelo Branco, Portugal  
Tel. & fax: +351 272 325 264  
Email: geral@mecalbi.com  
Site: www.mecalbi.com

# STCS - PHD Datasheet



## TECHNICAL CHARACTERISTICS

### STCS - PHD

#### PROCESS TEMPERATURE

Minimum	20 °C
Maximum	350 °C

#### SHRINKING SYSTEM DIMENSIONS

Length	440 [mm]
Width	240 [mm]
Height	190 [mm]
Weight	6 [kg]

#### POWER SUPPLY/CONSUMPTION

Supply	230 V @ 50 Hz; 7 A
Standby Consumption	35 mA
Working Consumption	250 mA to 15 A

#### CONTROL MODULE

#### DIMENSIONS

Length	273 [mm]
Width	200 [mm]
Height	140 [mm]
Weight	3 [kg]

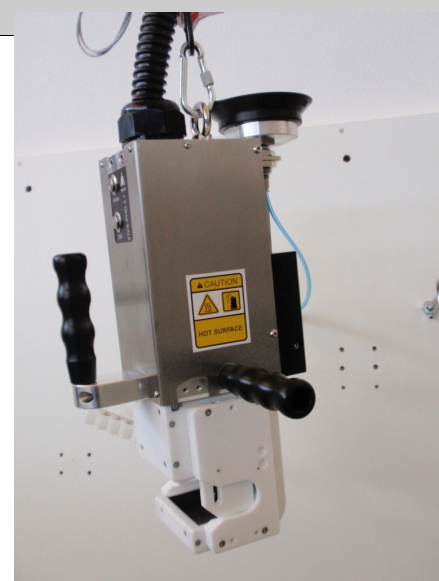
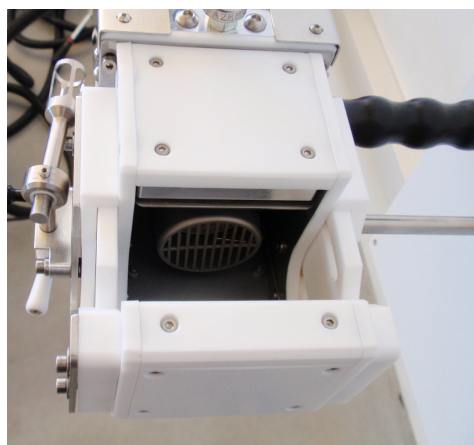
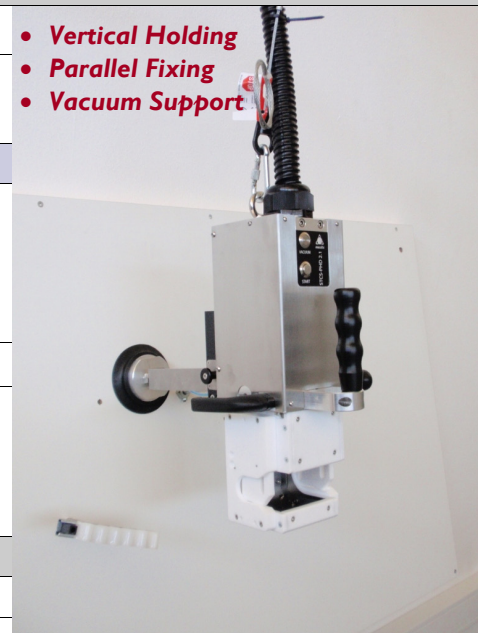
#### CONNECTIONS

Compressed Air	Quick Hold Socket, Ø 10 mm; Min: 5 Bar ; Max: 6 Bar
Electrical Grid	I IEC Standard Male Socket (Detachable Power Cord Supply)
Barcode Reader/Communication socket	DB9 Male
Programming	Membrane Keyboard, Barcode Reader
Interface	LCD 16x2, Buzzer and LED

#### SHRINKING CHAMBERS AND CLAWS

Standard Shrinking Chamber	L = 80 mm; Ø 30 mm
Large Shrinking Chamber	L = 80 mm; Ø 50 mm

- Vertical Holding
- Parallel Fixing
- Vacuum Support



18509-80-002-R03



UNIÃO EUROPEIA  
Fundo Europeu  
de Desenvolvimento Regional

Mecalbi  
Atividades de Engenharia, Unipessoal, Lda  
Headquarters: Rua Dr. Alfredo da Silva, Lt 92 A/C,  
6000-210, Castelo Branco, Portugal  
Mecalbi Engineering Solutions: Zona Industrial de  
Castelo Branco, Rua J, Lt N14, Módulo A,  
6000-459, Castelo Branco, Portugal

Tel. & fax: +351 272 325 264  
Email: geral@mecalbi.com  
Site: www.mecalbi.com