

Ref: 14-01-0003

Shrinking Tube Control System

The STCS-B is a machine for processing heat shrink tubes, based on hot air devices. It's designed for workbench applications and can process one part at a time.

The system is constituted by a control module for parameter's definition and a hot air tool for the shrinking operation.

It is supplied with a standard shrinking chamber of 15x50mm, which can be customized.



Can be supplied with custom shrinking chambers, designed to specific applications



Can be supplied with customized clamps with automatic holding systems and/or cooling system



Use of references/sequences, that can be selected manually or using barcode readers



Lightweight control module, low cost, simple and low maintenance solution for heat shrink applications that require the control of parameters



Mecalbi
Engineering Solutions, Lda

Headquarters: Rua Dr. Alfredo da Silva, Lt 92 R/C,
6000-210, Castelo Branco, Portugal

Mecalbi Operations Center:
Zona Industrial de Castelo Branco,
Rua J, Lt N14, Módulo A,
6000-459, Castelo Branco, Portugal

Tel. / Fax: +351 272 325 264
Email: comercial@mecalbi.com
Youtube Channel: www.youtube.com/mecalbi
Mod: 03.02.023-E | **Ref:** 03307-80-002-R09

TECHNICAL CHARACTERISTICS

WORKING TEMPERATURE

| | |
|---------|---|
| Minimum | 150 [°C] |
| Maximum | 350 [°C] (Due to material limitations, it's recommended to work below 280 °C) |

DIMENSIONS - HOT AIR TOOL

| | |
|--------|----------|
| Length | 255 [mm] |
| Width | 290 [mm] |
| Height | 530 [mm] |
| Weight | 3,2 [kg] |

POWER SUPPLY/CONSUMPTION

| | |
|---------------------|----------------------------|
| Supply | 230 [V] @ 60Hz |
| Standby Consumption | 50 mA |
| Working Consumption | 50 mA to 15 A (Max. 3400W) |

DIMENSIONS - CONTROL MODULE

| | |
|--------|----------|
| Length | 252 [mm] |
| Width | 200 [mm] |
| Height | 112 [mm] |
| Weight | 2,6 [kg] |

CONNECTIONS

| | |
|------------------------|--------------------------|
| Barcode Reader | DB9 Male |
| Temperature Sensor | Type K Thermocouple |
| Power Line and Hot Air | 2 IEC Socket |
| Programming | Membrane Keyboard |
| Interface | LCD 16x2, Buzzer and LED |

SHRINKING CHAMBER

| | |
|-------------------|-------------------------------|
| Shrinking Chamber | 15 x 50 [mm] or to be defined |
|-------------------|-------------------------------|

- ▲ Adjustable parameters: process temperature, shrinking time, waiting time, etc;
- ▲ Three different operating modes: continuous, intermittent and pre-heating, to perform independent shrinking operations;
- ▲ Additional mode with references usage (group of shrinking and waiting times performed in sequence - 100 in total);
- ▲ The pre-programming of references can be done manually or using a PC with STCS-RCT software (reads Excel™ files);
- ▲ The selection of references can be done automatically using a barcode reader or manually using either the rotating knob or the keyboard;
- ▲ Use of labels for each shrinking time inside a reference;
- ▲ Manual calibration;
- ▲ Programming mode password protected;
- ▲ Cycle counter;
- ▲ Interchangeable system language, including: English, French, Portuguese (others on demand).

OPTIONS

- ▲ **Customized shrinking chambers** (Ref: 06-01-0004);
- ▲ **End-Splice tool** (Ref: 06-01-0057).

OPERATION

The STCS-B has a control module where the shrinking parameters and operation mode are defined. It has an built-in K type thermocouple used in a closed loop control system to control the parameters.

The operator puts the assembly into the shrinking chamber, holding it into the clamps.

By pressing the start button, the shrinking operation starts, using the defined parameters.

When it finishes, the machine stops and the operator can take out the end product.

