

PRECALENTAMIENTO Y TRATAMIENTO TERMICO INGENIERIA DE PROCESOS TERMICOS Polig. Indus. ElCampillo II, Par.9.1 48500-GALLARTA (Vizcaya) Tfno.+34 946363944- 55 – Fax +34 946363966 E-Mail:coopertt@coopertt.com www.coopertt.com

# 50/70/100/1406VA HEAT TREATMENT UNITS



# TECHNICAL DESCRIPTION

The unit provides a 60v or 80v supply for powering various types of low voltage heating elements. The unit can control the heat treatment operation automatically by means of a solid state programmer while a temperature recorder maintains a record of the heat treatment temperature.

It consists of an air natural 3 phase transformer contained in a wheeled sheet steel case, with lockable doors to protect the front panel instruments. Control of the heating elements is made either by means of contactors or a 6 channels thyristor switching unit (Optional).

The six output channels can either be controlled automatically by the programmer unit, or manually by means of energy regulators. Each channel has its own auto/manual switch, so any combination of channels can be operated either automatically or manually. The unit is protected against over current or over temperature conditions.

# **BASIC SPECIFICATION**

POWER:Three-phase + earth (50KVA-75A., 70KVA-105A., and<br/>140KVA-210A per phase)Standard - Contact<br/>Optional - Solid StaPRIMARY: 380/415/440V- 50 o 60Hz, delta connected<br/>SECUNDARY: Star connected:Standard - Contact

50KVA: 60V-270A per phase–P. max. 48,6Kw 70KVA: 60V-360A per phase–P. max. 64,8Kw 100KVA: 60V-540A per phase-P. max. 97,2Kw 140KVA: 60V-720A per phase-P. max. 129,6Kw

COOLING: Air natural and 2 fans 120 cfm. for instruments.

RATING: 100 per cent up to max. ambient 50°C.

#### **INSULATION:** Class h.

#### **PROTECTION:**

- Over current, 3 phase m.c.b.

- Over temperature, 3 phase m.c.b. with shunt trip. In the case of the thyristor controlled unit, thyristor protection fuses are also included.

## **OUTPUTS:**

- Power: By 12 or 24 300A Panel mounted female camlocks
- Temperature: 12 or 24 Panel mounted thermocouple socket Type-K polarised
- Auxiliary: 2 Panel mounted BS socket 110V-5A (max.)

<u>MODE SELECTION:</u> Auto/manual mode selection switches for each channel

Standard - Contactorised: using 6-200Amp single pole

Optional – Solid State: using a 6 way thyristor switching unit controlled by a trigger device. Thyristor protected by semi conductor H.R.C.

Individual neon channel state indicator for each output

- Individual temperature indicator for each channel
- AUTOMATIC MODE: Through programmer/s automatic cycle P256-6 channels, control heating rate, temperature and holding time, cooling rate and final temperature cycle. Status display program. Hold function and actual temperature display for each channel simultaneously.

MANUAL MODE: From programmer by 6 or 12 temperature regulator From switching by 6 or 12 energy regulator 0÷100%

## TEMPERATURE RECORDER:

Potenciometric digital programmable - 12 or 24 points or video recorder (Paperless recorder)

### MOBILITY:

LIFTING METHOD: By 4 lifting eyebolts 200Kg./unit, in top cover DISPLACEMENT: 4 wheels 200mmØ (2 fixed and 2 swivel)

DIMENSIONS AND WEIGHTS (Aprox.): 50 KVA UNIT: 98x68x117cm (WxDxH)-350 Kg 70 KVA UNIT: 98x68x130cm (WxDxH)-425 Kg 100 KVA UNIT: 110x110x140cm (WxDxH)-600 Kg 140 KVA UNIT: 110X110X140cm (WxDxH)-750 Kg

NOTE: The indicated basic specification are for standard power unit, other models with different power, No. of outputs and option of different models recorders, video recorders and programmers, etc, can be made by customer individual requirements.