

# Technical Specifications for Burn in room

Model: BIR-3695A

Manufacturer: KOMEG Technology Ind Co.,Ltd



# I . Product Overview

Able to accurately simulate a wide range of complicated natural environments, and is suitable for reliability test in industrial products. Meet GB5170.2.3.5.6-95 standard requirements of environmental testing equipment and test methods for the basic parameters of electric and electronic products under the condition of low temperature, high temperature, and constant heat.

# **II**. Application

Applicable to environmental adaptability and reliability test in such industrial units as electronics, electrical appliance, battery, plastics, food, paper product, vehicle, metal, chemistry, building material, research institution, inspection and quarantine bureau, university etc..

### Ⅲ. Features

- GB-2423.2-89(IEC68-2-2) Test B: High Temperature Test
- GJB360.8-87(MIL-STD.202F) High Temperature Life Test
- GJBI50.3(MIL-STD-810D) High Temperature Test

1. Easy Operation	*Using company owned brand KOMEG KM-5166 LCD touch screen controller		
	with PID control parameters setting		
	※Flexible approach for data collection and recording		
2. High reliability			
	※Efficient oil separator to ensure the service life of the compressor		

# IV. Main Technical Parameters

1. Temperature range	+40°C ~+80°C
2. Temperature fluctuation	≦±0.5℃
3. Temperature uniformity	$\pm$ 2.0 $°$ C(no load)
4. Temperature deviation	≦±2.0°C
5. Heating up time	+20°C to +80°C 30min (no load)
6. Load	No heat

# ${f V}$ . Chamber Structure and Material

1. Interior test dimension	W 2540 × H 1940 × D 750 mm
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2. Room temperature test dimension	W 2540× H 1940 × D 850 mm	
3.Exterior dimension	W 3140 $ imes$ H 2550 $ imes$ D 1750 $$ mm (Excluding outstanding part such as	
S.Exterior difficultion	cycle motor)	
4.Door	Each three horizontally sliding glass doors in test zone and room temperature zone	
5.Interior material	stainless steel plate	
6.Exterior material	stainless steel plate	
7. Insulation material	50mm high rigid polyurethane foam	
8. Heater	Explosion-proof type #304L stainless steel Fins radiator pipe heater	
9. Cooler	Water-cooled copper fins cooler (water tower is supplied by customer )	
10. Air supply system	Forced ventilation loops design. Air conditioning blast	
11.Indoor lighting	Each one lighting on the test zone and room temperature zone, Attached protective cover	
	$\Phi$ 50mm*1 located on left side and room temperature zone (each*1) with	
	rubber stopper and plastic cover	
12. Cable port	(the numbers and the location between the cable port is not sure ,the	
	quotation is not include)	
13. Sample holder	The quotation is not including sample holder.	

# $V\!I.$ Over temperature protection

1. When the loop air supply motor failure, to prevent air conditioning heater burn empty. Empty burn prevent action immediately

Cut off the product and the heater power to ensure safe and immediately start alarm. So the customer required test power must pass a control box control

- 2. When indoor temperature more than over temperature protector set (that is, the product can bear), the over temperature protector action immediately, to cut off the heater and test power supply.
  - 3. When the equipment failure, over temperature or cooling, automatic start cooling water cooling.

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# **VII. Control System**

South Korea imported thermostat ST-570

- \* high accuracy (0.1%), High Performance
- \* Support multiple input (T/C, RTD, DCV)
- \* Can complete multiple output and output at the same time (Max 4 points )
- \* Parameters operation is simple, can be set with word
- \* Can support (Overshoot) function
  - \* Alarm output 1point
  - \* The operation of auxiliary output state display
  - \*The interval input adjustment function (Max 4 Zone)
  - \* control heating and cooling function
  - \*PID auto adjustment (AT Gain)
  - \*Support a variety of communication protocols (Modbus ect.)
  - \*high quality and high reliability (CE,CUL,ISO ect.)

# **III.** Control panel

- a. temperature controller,
- b. Over temperature protection
- c. operating timer
- d. power switch
- e. emergency stop switch
- f. trouble light

# IX. Safety device



- a. Empty burn prevent protector
- b. Over temperature protection
- c. motor overload protection
- d. breaker
- e. no-fuse switch
- f. hummer
- g. Automatically cut off the heater and the load power supply when failure happens

# X. Power

- 1. AC380V±10%, 50Hz±1Hz,3 phase 4 wires +Ground Wires (voltage fluctuation  $\leq \pm 10\%$ )
- PS.1. After installation, the customer will need put the power supply to the machine control box. the customer need to provide a no fuse switch especially for this equipment
  - 2. Please confirm whether the machine can access to the door or the elevator.

### Main material list

Name	Brand	Remarks
breaker	Schneider	Schneider Electric
AC contactor	Schneider	Schneider Belectric
thermal relay	Schneider	Schneider
phase sequence relay	Carlo Gavazzi	CARLO GAVAZZI
e relay	Autonics	Autonics Sensors & Controllers
AC relay	Schneider	Schneider Belectric
solid-state relay	Carlo Gavazzi	CARLO GAVAZZI

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