EA05 – LIMITED OXYGEN INDEX AT HIGH TEMPERATURE

TECHNICAL DATASHEET

Complying with:
ASTM D 2863/ ISO 4589-3/ CEI 20-22/5

Assessment of the minimum concentration of oxygen that supports flaming combustion in a flowing mixture of oxygen and nitrogen.

This test method may be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions.

The oxygen percentage is detected by a paramagnetic transducer and the combustion occurs inside the glass column.

The operator sets the O_2 ratio only, as the N2 flux is kept constant by the proportional valve of the electronic system. Two units, one to check the measurements and one to feed oxygen and nitrogen to the column where the testing sample is located. The temperature is monitored up to 400°C both during preheating of the gaseous mixture and inside the column where the sample is located, through PID temperature control.

Technical features:

- Pyrex column with built-in heating resistance complete with outer safety glass column
- Detection of O_2 percentage through paramagnetic transducer (O_2 accuracy <0.1%)
- Direct reading of O_2 percentage, flow, air on 3.2" display
- Automatic Control of the flow with massflow
- Microprocessor-governed operations
- Air addition to save consumption in O_2 high concentration mixtures
- Automatic calibration (0 and 100%)
- Propane gas regulation and cut-off valve
- Specimen surface temperature indicator complete with detection probe
- Inconel steel detection thermocouple
- Thermoregulator for the mixture pre-heating temperature control up to 400°C
- Thermoregulator for temperature control inside the glass column
- PID regulators

Code	Description
10095105	EA05 High temperature oxygen index
17101002	Protection Glass column
17101006	Column, resistance device and thermocouple
17101007	Adapter for type-A standard column of the model EA04
17101000	Type-A pyrex column (450 mm high) + cap

Supplies:

- Power 230 V 50Hz single phase
- Oxygen
- Nitrogen
- Propane
- Dry industrial air 2 atm

Configuration including:

- N. 1 self-supporting specimen holder
- N. 1 supported specimen holder
- Burner for the ignition of the test specimen, with direct connection
- Pliers for the positioning of the specimen

General:

Dimensions: 360 x 300 x 240 h (mm), main system
360 x 300 x 120 h (mm), column system
Overall dimensions: 770 x 300 x 570 h (mm)
Net weight: kg 17
Gross weight: kg 25
Column size: ø 100 x 450 (mm)

Accessories:

Adapter in order to use the type-A pyrex column (450 mm high) + cap of the EA04 model instead of the supplied one

NOSELAB ATS s.r.l
Via Garibaldi 144 -20834 Nova Milanese (MB) - ITALY
Production plant: Via Berlinguer 10 – 20834 Nova Milanese (MB) - ITALY
Phone: 0362 367454 - fax: 0362 41357
info@noselab-ats.com - www.noselab-ats.com