

INTRODUCTION

The EXAOXY Series ZA8 In-Situ Type Zirconia Oxygen Analyzer Averaging Converter System performs multipoint oxygen concentration measurement in large-scale boiler and industrial furnace flues for combustion control optimization.

In this system, up to four or eight detectors are connected to a single AV8C averaging converter. Various other accessories may also be employed in order to obtain optimal measurements.

When the various devices that comprise this system are delivered to you, be sure to exercise care in their use to avoid impairing performance.

1. Cautions

This section describes general cautions that you should observe concerning the use of the averaging converter and detectors.

Notes and cautions relating specifically to installation, wiring and piping, operation and maintenance are described in the relevant sections of this manual.

[Averaging Converter]

- **Never touch the converter when carrying a static electrical charge.**

When humidity is low, your body can be carrying an especially large static charge. Before touching any of the converter's electronic circuits, always touch a grounded metal object first to discharge static electricity.

- **Never use an organic solvent to remove dirt.**

Organic solvents can discolor or cause deterioration of the materials. Use a neutral detergent or anhydrous alcohol to clean hard-to-remove dirt.

- **Never store in locations at high temperature or humidity.**

The converter should be used indoors at an ambient temperature of -5 to 50°C and humidity of 10% to 90% RH. Also avoid storing it in locations at high temperatures or high humidity.

The permissible storage temperature range is -20 to 75°C .

[Detectors]

- **Avoid subjecting the detector to mechanical shock.**

The zirconia used in the detectors is a kind of ceramic, and is fragile. Never subject the detectors to mechanical shock. Take extreme care when unpacking and transporting the detectors.

2. Contents of This Manual

The EXAOXY Series ZA8 In-Situ Type Zirconia Oxygen Analyzer Averaging Converter System has been developed for combustion control. This analyzer basically consists of a detector and a converter. The detector comes in one of four styles which can be selected based upon your application.

Optional accessories are also available to improve measurements and automate calibration. An optimal control system can be realized if the proper types of equipment are selected.

This instruction manual refers to almost all of the equipment related to the ZA8. You may skip the sections on the equipment which is not included in your system.

Product Line Included in This Manual and Described Content for Each

Model	Name	Description in the Manual				
		Specifi- cations	Install- ation	Opera- tion	Mainte- nance	CMPL
AV8C	Averaging Converter	○	○	○	○	○
—	Case for Outdoor Installation	○	○			
ZO21D-L	General Purpose Detector (Standard type)	○	○	○	○	○
ZO21DW-L	General Purpose Detector (Pressure balance type)	○	○	○	○	○
ZO21D-H	High-temperature Detector	○	○	○	○	○
ZO21V	Probe Supporter	○	○			
ZO21R-L	Probe Protector	○	○			
ZO21P-H	High-temperature Pprobe Adapter	○	○			○
—	High-temperature Auxiliary Ejector (Part No.: E7046EC, E7046EN-A0)	○	○			○
—	Dust Elimination Filter (Part No.: E7042UQ)	○	○		○	
AV8E	Manual Calibration Flow Setting Unit	○	○	○		
AV8F	Automatic Calibration Flow Setting Unit	○	○	○		
AV8H	Reference Gas Flow Setting Unit	○	○	○		
—	Calibration Gas Unit Case (Part No.: E7044KF)	○	○			

