# ACR 700 Series Recording Controller With Profile Capability
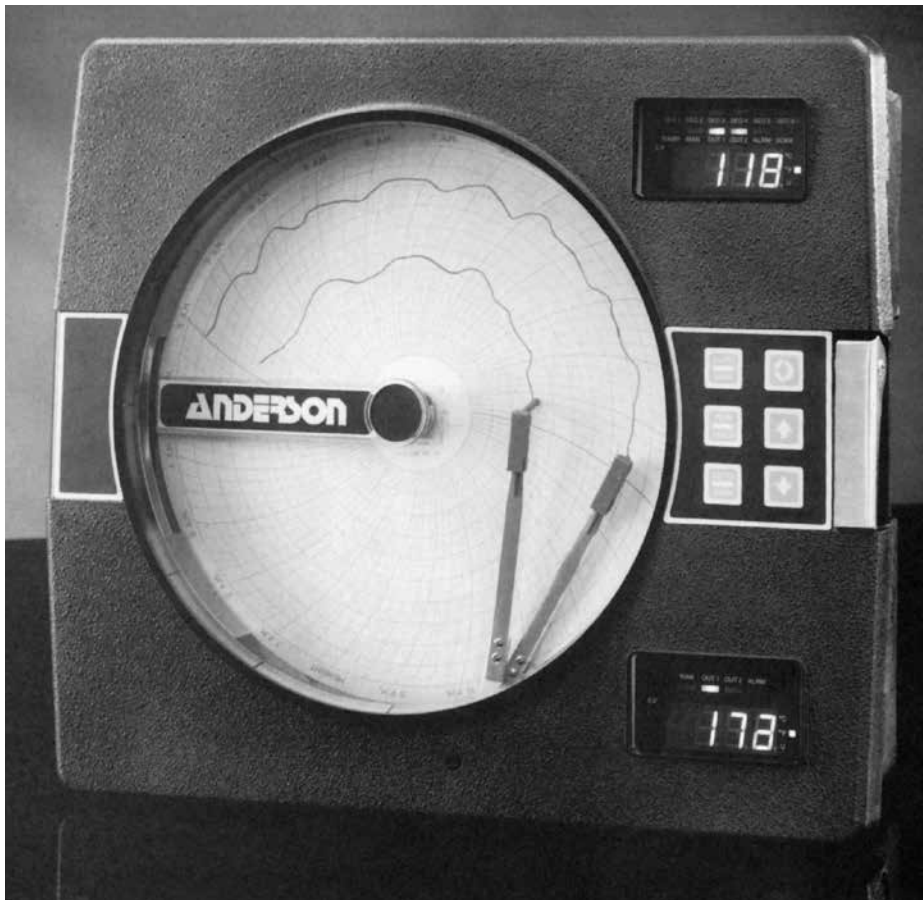
## Introduction

The ACR 700 line offers two versions: the basic recorder and a powerful recording controller. Both may be specified as either single pen or dual pen recorders. Each version is capable of measuring, recording and displaying temperature, pressure, level, flow, and other process variables. The recording controller is capable of controlling any process from one requiring simple on-off to dual 4-20mA outputs with full PID.
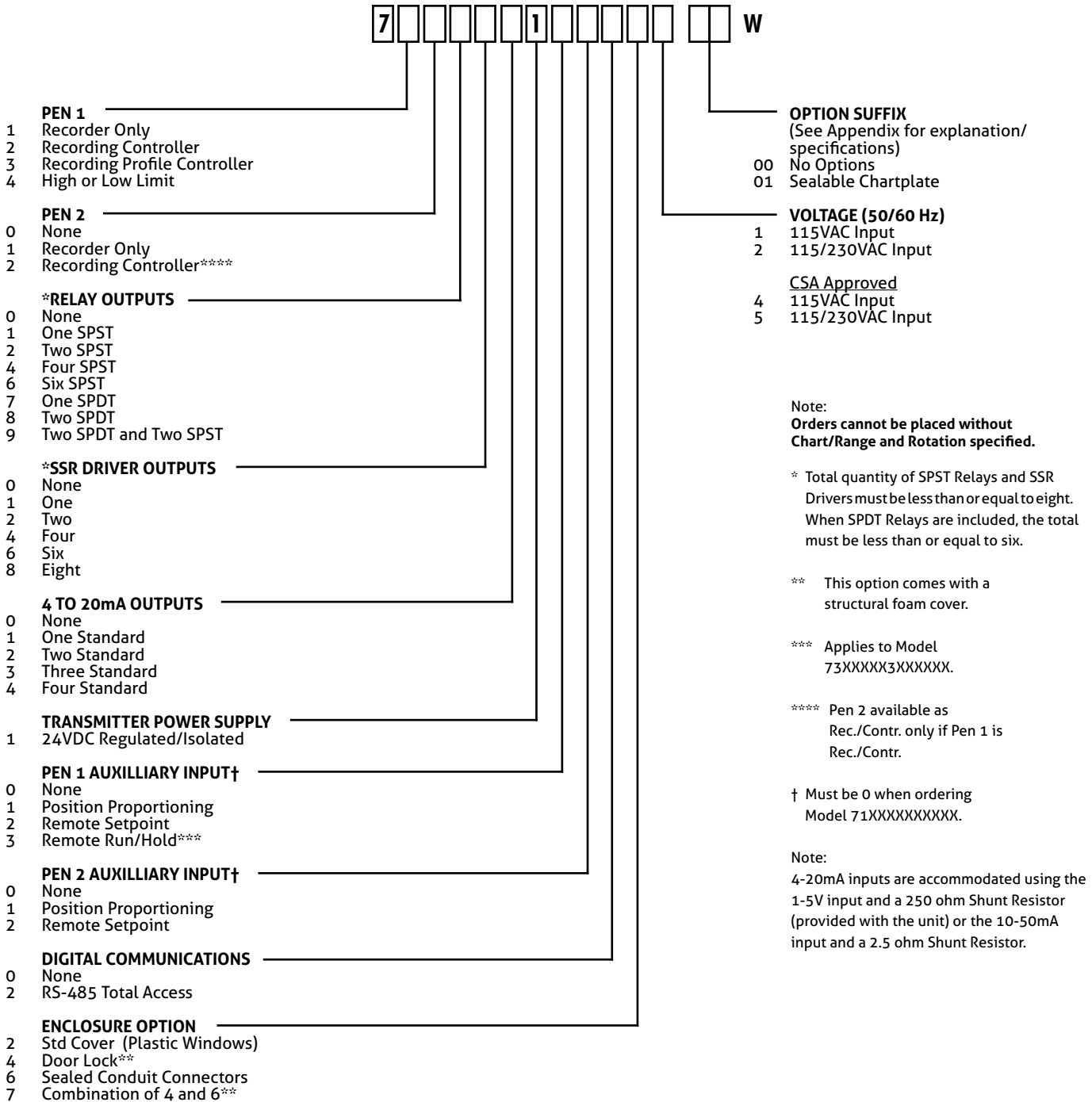
This capability may be supplied on one or two pens providing for dual loop recording and control. A recording profile controller is also available and is capable of profiling on one or two pens. Optional features include: single or dual control output, process value output(s), up to eight relay outputs, up to four 4-20mA outputs, remote setpoint input, remote run/hold, electric motor modulation, control setpoint limits, a 24VDC transmitter power supply, and RS-485 communications.

## Features

· Input capabilities include thermocouple, RTD, millivolt, volt and milliamp.

· Standard features include: isolated process input, process value display for each pen, up to two programmable alarms per pen, automatic linearization for thermocouples and RTD's, sensor break and error fault detection, display/chart and process filtering, 0.56 inch high LED displays, tactile feedback keys on front cover, programmable display, decimal point positioning, proportional control output limits, programmable output action on sensor break/error condition, auto/manual transfer, security access systems and more.

## Order Information

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**PEN 1**
1   Recorder Only
2   Recording Controller
3   Recording Profile Controller
4   High or Low Limit

**PEN 2**
0   None
1   Recorder Only
2   Recording Controller****

***RELAY OUTPUTS**
0   None
1   One SPST
2   Two SPST
4   Four SPST
6   Six SPST
7   One SPDT
8   Two SPDT
9   Two SPDT and Two SPST

***SSR DRIVER OUTPUTS**
0   None
1   One
2   Two
4   Four
6   Six
8   Eight

**4 TO 20mA OUTPUTS**
0   None
1   One Standard
2   Two Standard
3   Three Standard
4   Four Standard

**TRANSMITTER POWER SUPPLY**
1   24VDC Regulated/Isolated

**PEN 1 AUXILLIARY INPUT†**
0   None
1   Position Proportioning
2   Remote Setpoint
3   Remote Run/Hold***

**PEN 2 AUXILLIARY INPUT†**
0   None
1   Position Proportioning
2   Remote Setpoint

**DIGITAL COMMUNICATIONS**
0   None
2   RS-485 Total Access

**ENCLOSURE OPTION**
2   Std Cover  (Plastic Windows)
4   Door Lock**
6   Sealed Conduit Connectors
7   Combination of 4 and 6**

**OPTION SUFFIX**
(See Appendix for explanation/
specifications)
00   No Options
01   Sealable Chartplate

**VOLTAGE (50/60 Hz)**
1   115VAC Input
2   115/230VAC Input

CSA Approved
4   115VAC Input
5   115/230VAC Input

Note:
**Orders cannot be placed without
Chart/Range and Rotation specified.**

\*   Total quantity of SPST Relays and SSR
    Drivers must be less than or equal to eight.
    When SPDT Relays are included, the total
    must be less than or equal to six.

\*\*   This option comes with a
     structural foam cover.

\*\*\*   Applies to Model
      73XXXXX3XXXXXX.

\*\*\*\*   Pen 2 available as
       Rec./Contr. only if Pen 1 is
       Rec./Contr.

†   Must be 0 when ordering
    Model 71XXXXXXXXXXX.

Note:
4-20mA inputs are accommodated using the
1-5V input and a 250 ohm Shunt Resistor
(provided with the unit) or the 10-50mA
input and a 2.5 ohm Shunt Resistor.

**These recorders incorporate a NEMA 4 type enclosure**