

General Specifications

Model YS110 Standby Manual Station

GS 01B08G01-01E

■ Overview

If a YS1360, YS136, YS1500, YS150, YS1700, or YS170 instruments fails, the YS110 Standby Manual Station can be used to output a 4 to 20 mA signal to the control valve actuator instead of the instruments. This standby manual station can be connected to YS1360, YS136, YS1500, YS150, YS1700, or YS170 instruments by swinging up the front display, then the instrument can be exchanged (the output is back up by the YS110), YS110 is battery operated; it can also be plugged into the instrument case and operated off the system power supply.



■ STANDARD SPECIFICATION

1. Input/MV Signals Specification

Input signal : 1 to 5 V DC, 1 point
 Input resistance : 1 MΩ
 MV output signal : 4 to 20 mA DC, 1 point
 Load resistance : 0 to 750 Ω
 Input/MV indicator : Indicator Moving coil type
 Range : 0 to 100 %
 Scale : 20 equal divisions
 MV operation : Manual operation by operation wheel (on the front panel)
 I/O Connection : Connected to connector on the controller case by supplied cable
 Controller for backed up : YS1360, YS136, YS1500, YS150, YS1700, YS170

2. Power Supply Specification

2.1 Internal Power Supply

Continued operation with the internal batteries : 1 hour (with new batteries max.)
 Battery : 6F22 (IEC Type), 9V dry sell, three required
 Battery check : provided
 Push the battery check switch to display the remaining life of the internal battery. If the indicator indicates more than 75% of span, you can continue using this battery.

2.2 External Power Supply

When installed in the YS1360, YS136, YS1500, YS150, YS1700, or YS170 case, power is supplied via the connector in the back of the instruments, and the internal battery is disconnected.
 Rated Power Supply Voltage: For both DC and AC
 100 V version;
 DC drive; 24-120 V DC (±10%), no polarity
 AC drive; 100-120 V AC (±10%), 50/60 Hz (±3Hz)
 220 V version;
 DC drive; 135-190 V DC (±10%), no polarity
 AC drive; 220-240 V AC (±10%), 50/60 Hz (±3Hz)
 On the other hand, the instruments themselves have the ability to operate under the condition as shown below which is the same as the former description of the power supply voltage.

Usable Power Supply Voltage: For both DC and AC
 100 V version;
 DC drive; 20-130 V DC, no polarity
 AC drive; 80-138 V AC, 47-63 Hz
 220 V version;
 DC drive; 120-340 V DC, no polarity
 AC drive; 138-264 V AC, 47-63 Hz

3. Dimensions, Mounting

Portable (can be installed in YS1500, YS150, YS1700, or YS170 case)
 Signal cable length: 2 m
 External dimensions: 144 x 58 x 295 (mm)
 Weight: 1.6 kg

4. Design Performance

Accuracy rating for signals (input/output): 2.5%

Maximum power and current consumption

Power Supply	Range	Max.	Typ.
100V version	20 to 130V DC	190mA	130mA
	80 to 138V DC	14VA	8.4VA
220V version	120 to 340V DC	30mA	13mA
	138 to 264V DC	14VA	10VA

Isolation Resistance

Between I/O terminals and ground: 100MΩ/500V DC

Between Power terminal and ground: 100MΩ/500V DC

Withstanding Voltage

Between I/O terminals and ground: 500V AC for 1 minute

Between Power terminal and ground:

100V AC version: 1000V AC for 1minute

220V AC version: 1500V AC for 1minute

5. Hazardous Area Classification

The YS110 with the option /CSA is CSA approved as shown below.

CSA standard:

CSA C22.2 No.213 (Non-incendive Electrical Equipment for use in Hazardous Location)

Location: Class I, Division 2, Groups A, B, C & D
Temperature Code: T4

6. Normal Operating Condition

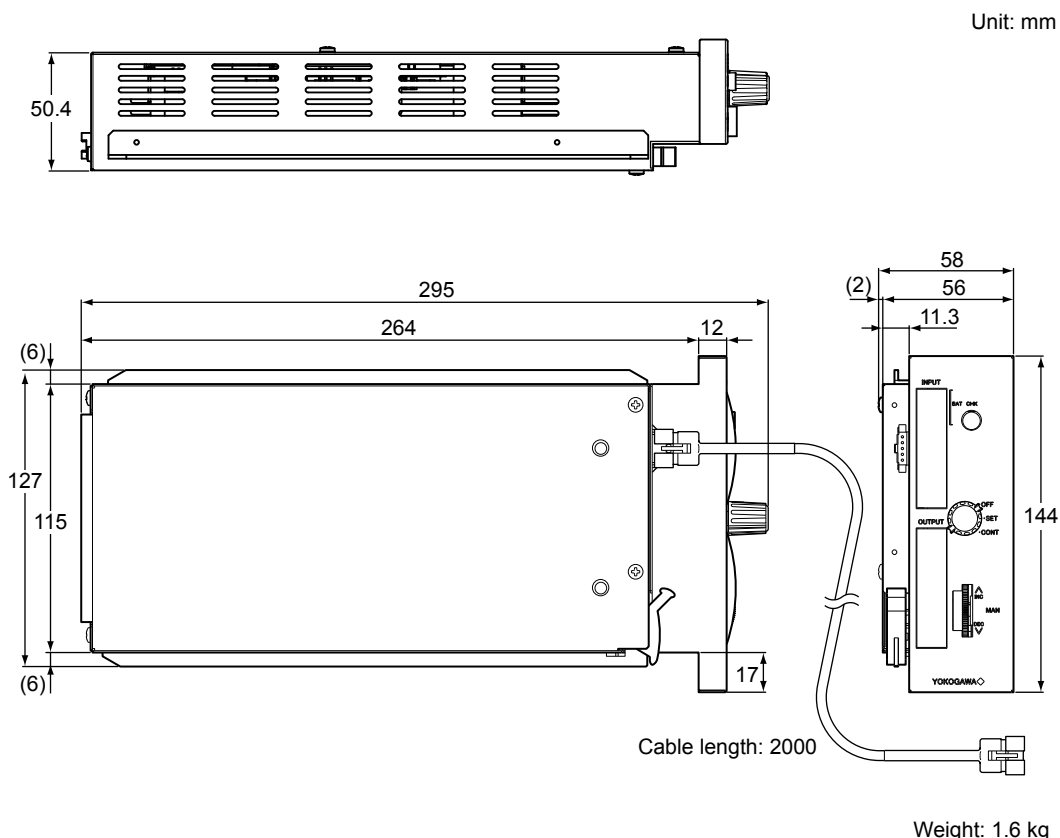
Ambient Temperature: 0 to 50 °C

Ambient Humidity: 5 to 90 %RH (non-condensing)

7. Model and Suffix codes

Model	Code	Option	Description
YS110		Standby Manual Station
	-0		Standard
	0		Always 0
Power Supply	1		100V version
	2		220V version
Options		/CSA	CSA Non-incendive Approved

EXTERNAL DIMENSIONS



TERMINAL CONNECTIONS FOR YS110

The operating terminals on YS110, and corresponding signal name (for each controller mode):

Terminals	Signal's name	Controller mode
1, 2	Analog input	Programmable mode
	PV	Single-loop mode, YS1360, YS136
	PV1	Other mode
22, 23	Analog input 1	Programmable mode
	MV1	Other mode, YS1360, YS136

ACCESSORIES

Tag plate seals: 4 sheets

RELATED INSTRUMENTS

YS1360, YS136 Auto/Manual station for MV setting
YS1500, YS150 Single-loop Multifunction Controller
YS1700, YS170 Single-loop Programmable Controller

Items to Specify when Ordering

Clearly state the model and suffix code.