

# smar - AM01P

INSTRUCTION MANUAL

## Auto/Manual Transfer Station



DEC / 07  
**AM01P**



A M 0 1 P M E



**Specifications and information are subject to change without notice.  
Up-to-date address information is available on our website.**

**web: [www.smar.com/contactus.asp](http://www.smar.com/contactus.asp)**

# AM01P - AUTO/MANUAL TRANSFER STATION

## Introduction

The Auto/Manual Transfer Station AM01P is a standby device that allows bumpless transfer from automatic to manual and manual to automatic. The output signal in manual mode can be adjusted by the frontal knob.

## Description

Opening the door, there is a switch to select Automatic or Manual mode, a digital indicator of the output signal and a potentiometer for the manual output adjustment.

The input signal can be in current (4 to 20 mA) or voltage (1 to 5Vdc). The output signal is supplied in current (4 to 20 mA) and in voltage (1 to 5 Vdc). The power supply is isolated either from the input and output signal.

The AM01P output signal in the AUTO mode will accurately be equal to the input signal.

The output signal in the MANUAL mode is adjusted by the operator.

The AUTO/MANUAL/AUTO transfer is bumpless and has a programmable adjustment from 0 to 30 seconds. The adjustment is done by internal jumpers in steps of 5 seconds.

## Technical Features



Fig.1 – Terminal Block

### Power

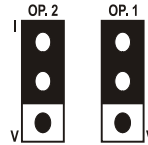
- 24 Vdc  $\pm$  10%

### Analog Input

The input selection for current or voltage is done by “Internal Jumpers” identified according to figure 2 and table 1. It allows the following values for the input signal:

- 4 to 20 mA
- 1 to 5 Vdc

The inputs are protected against inversion of polarity for the current input and against surge for the voltage input.



**Fig 2 – Input Selection Jumper**

INPUT	POSITION
4 to 20 mA	II
1 to 5 Vdc	VV

**Tab. 1 – Jumper Position for Input Selection**

### Analog Output

- Accuracy: 0.25%

#### 4 to 20 mA

- Overload Current Protection: 25 mA
- Maximum Load: 800  $\Omega$

#### 1 to 5 Vdc

- Short-Circuit Protection
- Maximum Load: 1 k $\Omega$

### Input Impedance

- 250  $\Omega$  (for current) maximum
- 1M $\Omega$  (for voltage) minimum

### Indication

- Digital indication of the output signal.
- Scale: 0 a 100%

### Current Consumption

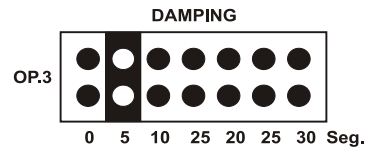
- 70 mA

### Frontal Adjustment

- Auto/Manual switch and Manual Output Adjustment (0 to 100%), see Fig. 1.

### Internal Damping Adjustment

The damping prevents that the signal has sudden changes, avoiding process disturbances. It does the signal reach the new value after a determined time interval. The damping adjustment is done by the “jumper 2” in the printed circuit board, see Fig. 3.



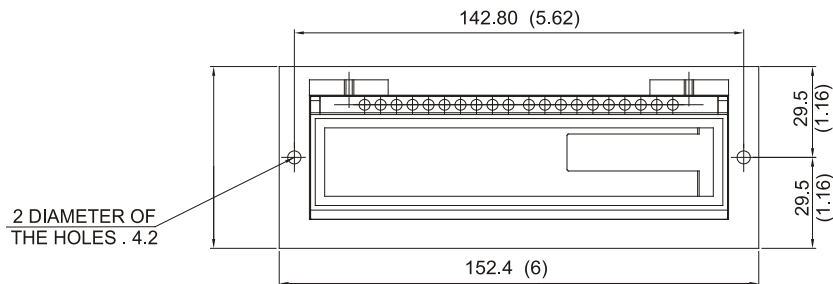
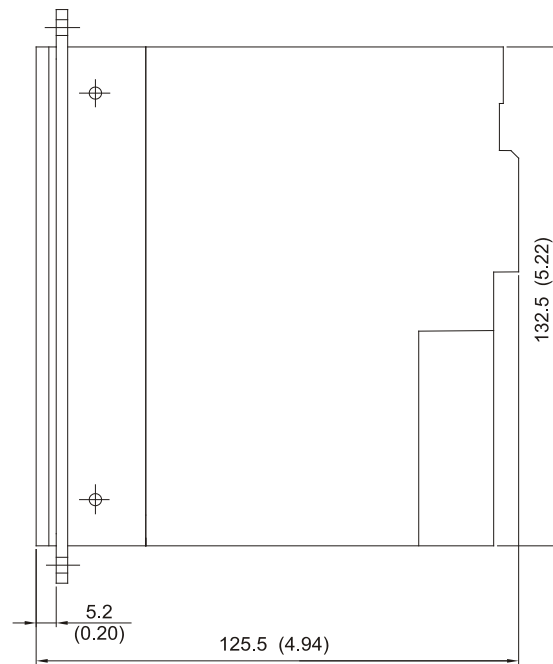
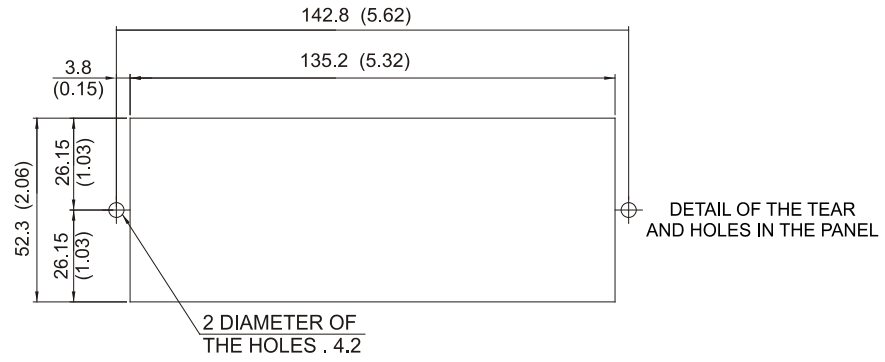
**Fig 3 – Damping Jumpers**

The damping time is the time that the output signal takes to reach 100%, starting at 0%.



**Fig 4 – AM01P's rear**

## Dimensions



NOTE: DIMENSIONS ARE mm (in)

# Appendix A

<b>smar</b>	<b>SRF – Service Request Form</b>	
	<b>AM01P – Auto/ Manual Transfer Station</b>	<b>Proposal N°:</b>
<b>COMPANY INFORMATION</b>		
Company: _____ Unit: _____ Invoice: _____		
<b>COMMERCIAL CONTACT</b>		
Full Name: _____ Phone: _____ Fax: _____ E-mail: _____		
<b>TECHNICAL CONTACT</b>		
Full Name: _____ Phone: _____ Extension: _____ E-mail: _____		
<b>EQUIPMENT DATA</b>		
Model: _____ Serial Number: _____		
<b>PROCESS DATA</b>		
Process Type (Ex. boiler control): _____ Operation Time: _____ Failure Date: _____		
<b>FAILURE DESCRIPTON</b>		
(Please, describe the failure. Can the error be reproduced? Is it repetitive?) _____ _____ _____ _____		
<b>OBSERVATIONS</b>		
_____ _____ _____ _____		
<b>USER INFORMATION</b>		
Company: _____ Contact: _____ Section: _____ Title: _____ Signature: _____ Phone: _____ Extension: _____ E-mail: _____ Date: ____/____/____		
For warranty or non-warranty repair, please contact your representative. Further information about address and contacts can be found on <a href="http://www.smar.com/contactus.asp">www.smar.com/contactus.asp</a>		

