



Auto Drain Timer Operation

SKU 3800H: High voltage AC/DC, 110 ~ 240V

SKU 3800L: Low voltage AC/DC, 7 ~ 36V



SKU 3800H & 3800L

If you have any questions on this equipment, please contact Technical Support at:

Nuvair
1600 Beacon Place
Oxnard, CA 93033 USA

Phone: +1.805.815.4044
Fax: +1.805.486.0900
Email: info@Nuvair.com

Hours: Monday through Friday
8:00 AM to 5:00 PM Pacific Time



WARNING

This Operation Manual contains important safety information and should always be available to those personnel operating this equipment. Read, understand, and retain all instructions before operating this equipment to prevent injury or equipment damage.

Every effort was made to ensure the accuracy of the information contained within. Nuvair, however, retains the right to modify its contents without notice.

Under Nuvair's system of continuous improvement, certain components may be updated or changed as higher quality or more efficient parts and assemblies become available.

Nuvair will make every effort to update manuals as parts and functional aspects change. However, the look or location of components on your product may differ from those in this manual if improvements have been made that do not affect functionality or operational procedures.

Units pictured may also be equipped with different options than those on your product. In this case, the basic operational and maintenance guidelines will still apply.

If you have problems or questions after reading the manual, stop and call Nuvair at +1.805.815.4044 for information.

1.0 Introduction

This manual will assist you in the proper identification and operation of Nuvair auto drain timers. Please be sure to read the entire manual.

1.1 Symbol Conventions

This manual uses certain words and symbols to call your attention to conditions, practices or techniques that may directly affect your safety. Pay particular attention to information introduced by the following symbols or words:

SYMBOL	MEANING	DESCRIPTION
	DANGER	Indicates an imminently hazardous situation, which if not avoided, will result in serious personal injury or death.
	CAUTION	Indicates a potentially hazardous situation, which if not avoided, could result in serious personal injury or death.
	WARNING	Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	NOTICE	Notifies people of installation, operation or maintenance information which is important but not hazard-related.

1.2 Table of Contents

1.0	Introduction	2
1.1	Symbol Conventions.....	2
1.2	Table of Contents.....	2
2.0	Nuvair Auto Drain Timer Operation	3
2.1	Typical for Gas Engines	3
2.2	Setting Gas Engine Timers.....	3
2.3	Typical for Diesel Engine and Electric Motors.....	4
2.4	Setting Diesel Engine and Electric Motor Timers	4
3.0	Manufacturer Instructions	5
3.1	Functions.....	5
3.2	Screen Indication.....	6
3.3	Mode and Time Saving.....	6
3.4	Other Functions.....	6
3.5	Specifications	6

2.0 Nuvair Auto Drain Timer Operation

Solenoid valve timers can be installed on gas-, diesel-, or electric-powered compressors manufactured by Nuvair. The typical gas-powered compressor timer installation look like Figure 1. Typical diesel- or electric-powered compressor timer installations look like Figure 2.

2.1 Typical for Gas Engines

If your auto drain solenoid timer valve has a fitting on the bottom of the solenoid, like the one pictured in Figure 1, your timing settings are:

- [ON] for 5 seconds
- [OFF] for 8 minutes

2.2 Setting Gas Engine Timers

If you have the typical GAS ENGINE TIMER setup (as illustrated in Figure 1), please follow these instructions to program your auto drain timer:

1. Press [MODE] button until "ON-OFF" appears.
2. Press [ENTER].
3. Press [ENTER] until the far-right digit flashes.
4. Press [ADD] until it reads "5". The display will read "00:00:05".
5. Press [ENTER].
6. Press [ENTER] until the flashing digit is on the third digit from the right.
7. Press [ADD] until "8" appears. The display will read "00:08:02".
8. Press [ENTER] until the "2" starts flashing.
9. Press [ADD] until the display reads "0".
10. Press [ENTER].
11. The screen will display "ON-OFF" again as the unit saves settings.
12. Once the new settings are saved, the timer will start counting.

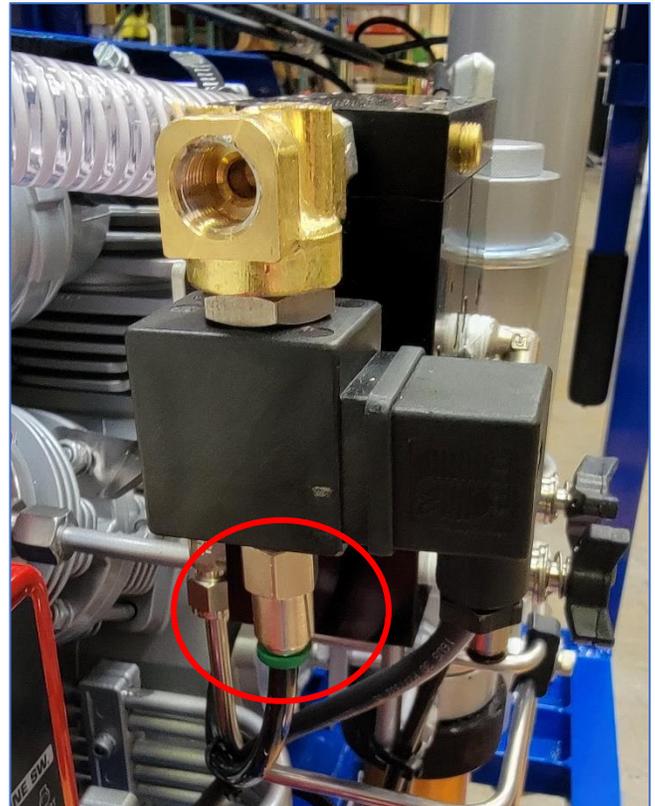


Figure 1. Typical gas engine compressor installation.

2.3 Typical for Diesel Engine and Electric Motors

If your auto drain solenoid timer valve has a fitting going into the side of the solenoid, like the one pictured in Figure 2, your timing settings are:

- [ON] for 8 minutes
- [OFF] for 5 seconds

2.4 Setting Diesel Engine and Electric Motor Timers

If you have the typical GAS ENGINE or ELECTRIC MOTOR TIMER setup (as illustrated in Figure 2), please follow these instructions to program your auto drain timer:

1. Press [MODE] button until "ON-OFF" appears.
2. Press [ENTER].
3. Press [ENTER] until the third digit from the right flashes.
4. Press [ADD] until "8" appears. The display will read "00:08:02".
5. Press [ENTER] until the "2" starts flashing.
6. Press [ADD] until the display reads "0".
7. Press [ENTER].
8. Press [ENTER] until the far-right digit flashes.
9. Press [ADD] until the display reads "5". The display will read "00:00:05".
10. Press [ENTER].
11. The screen will read "ON-OFF" again as the unit saves settings.
12. Once the new settings are saved, the timer will start counting.



Figure 2. Typical diesel engine or electric motor compressor installation.

3.0 Manufacturer Instructions

This section contains *unedited* operating instructions from 3800 solenoid valve timer manufacturer.

3.1 Functions

1. Adopts flame retardant engineering plastic shell, the solenoid valve timer is safe with high strength.
2. Controlled by microcomputer chip, its timing accuracy is high.
3. Equipped with LED screen, the timer features of night vision function.
4. Timing set range: 1Sec ~ 99h59min59Sec, bidirectional adjustable
5. Mode: Circulation mode (two: switch on first and then switch off, or switch off first and then switch on)
One-time mode (one: start at set time)
6. Power supply: High voltage AC/DC, 110 ~ 240V (XY-3800H); Low voltage AC/DC, 7 ~ 36V (XY-3800L)
7. The IP grade of this digital timer is IP65.
8. Supports standard DIN43650A input / output interface.
9. LED light indicates the state of ON and OFF.
10. Applications: solenoid valve and other devices needed to set timing.

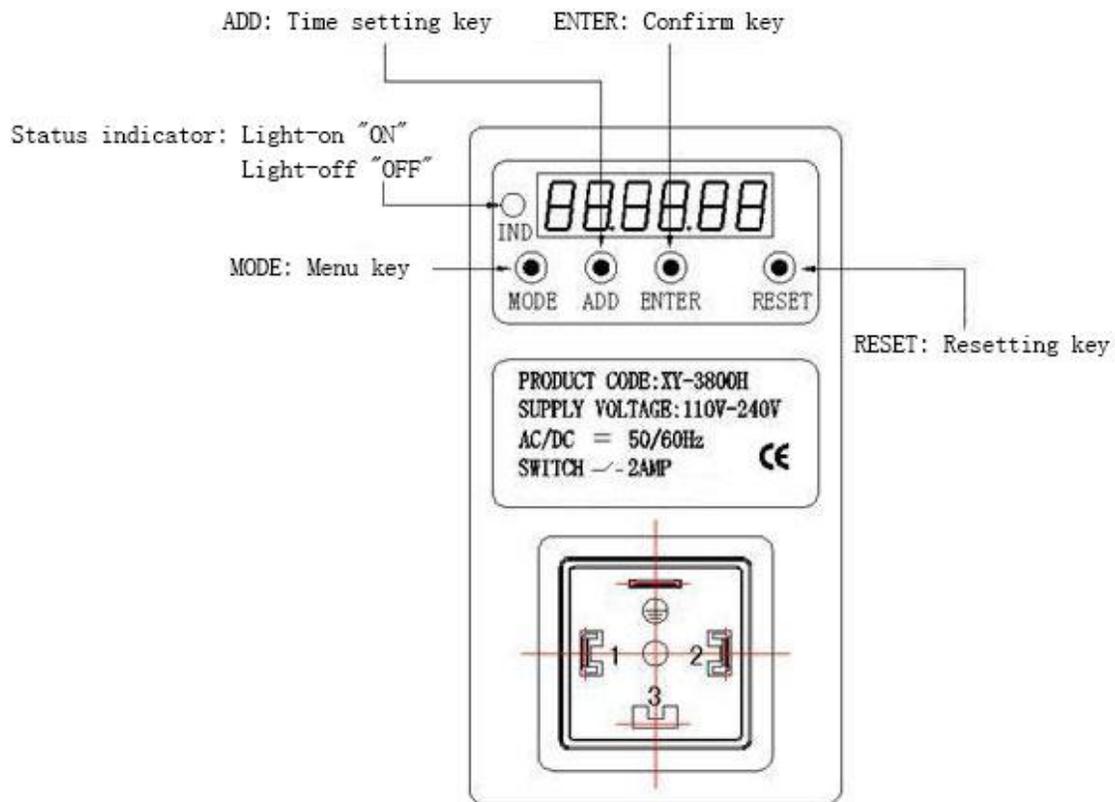


Figure 3. Manufacturer's schematic of 3800H.

3.2 Screen Indication

1. The screen indicates ON—OFF, it is the mode of switch on first and then switch off.
2. The screen indicates OFF—ON, it is the mode of switch off first and then switch on.
3. The screen indicates ON that means switch on first, the cycle time is 1Sec ~ 99h59min59Sec, it is one-time mode.

3.3 Mode and Time Saving

The solenoid valve timer is at factory settings when you use it at the first time, after power on, the timer is at "ON—OFF" circulation working state. Time of ON and off is both 2 seconds countdown (indicates "0 0 0 0 X", from which X is a decreasing number). If you want to change the mode and time, press MODE key which shows "ON—OFF", press MODE key again it will show "OFF—ON", and then you can switch to the mode of "ON", choose the function mode you wanted and press ENTER key to confirm the setting mode, after that you can start to set the time parameters.

When you set the time parameters at state of "ON" (indicates "X X X X X"), the first digit of the left side starts to flash, that means you can start to set the time, press ADD key for setting increasing time, and then press ENTER key to confirm, after that the second digit of the left side starts to flash, at this time, you can do the same thing to set all of the six bit data, when you finish all of the settings, you can start to set the time parameters at state of "OFF". All the setting modes are same as the state of "ON".

When you finish all the setting modes, the timer screen flashes the mode of "ON—OFF" 4 times, and then the timer enters into the working state which is set. When you setup parameters, the system stops working, it will get back to work until you finish the settings; if you do not press ENTER to confirm and exit the setting mode directly, the system is still working according to the settings previously. (The above parameters are taken as an example at "ON—OFF" mode, the other modes are same as which.)

3.4 Other Functions

Reset: press RESET key, the digital timer will stop currently working, and then start to cycle working according to the parameters that have been set. Note: this kind of timer is divided into two types: high voltage type and low voltage type. Please choose it according to the actual needs.

3.5 Specifications

Model	YS-3800H
Working Voltage	AC/DC: 110~240V
Working Temperature	-10~50°C
Protection Grade	IP65
Switch Life	3*10 ⁸
Opening Time	1s~99h59m59s
Closing Time	1s~99h59m59s
Indicator	LED
Manual	With manual test
Connection	DIN43650A



SKU 3800H
SKU 3800L

Nuvair
Phone +1.805.815.4044
Fax +1.805.486.0900
Address 1600 Beacon Place
Oxnard, CA 93033 USA
Email info@nuvair.com
Website www.Nuvair.com

Rev. 12.2021