

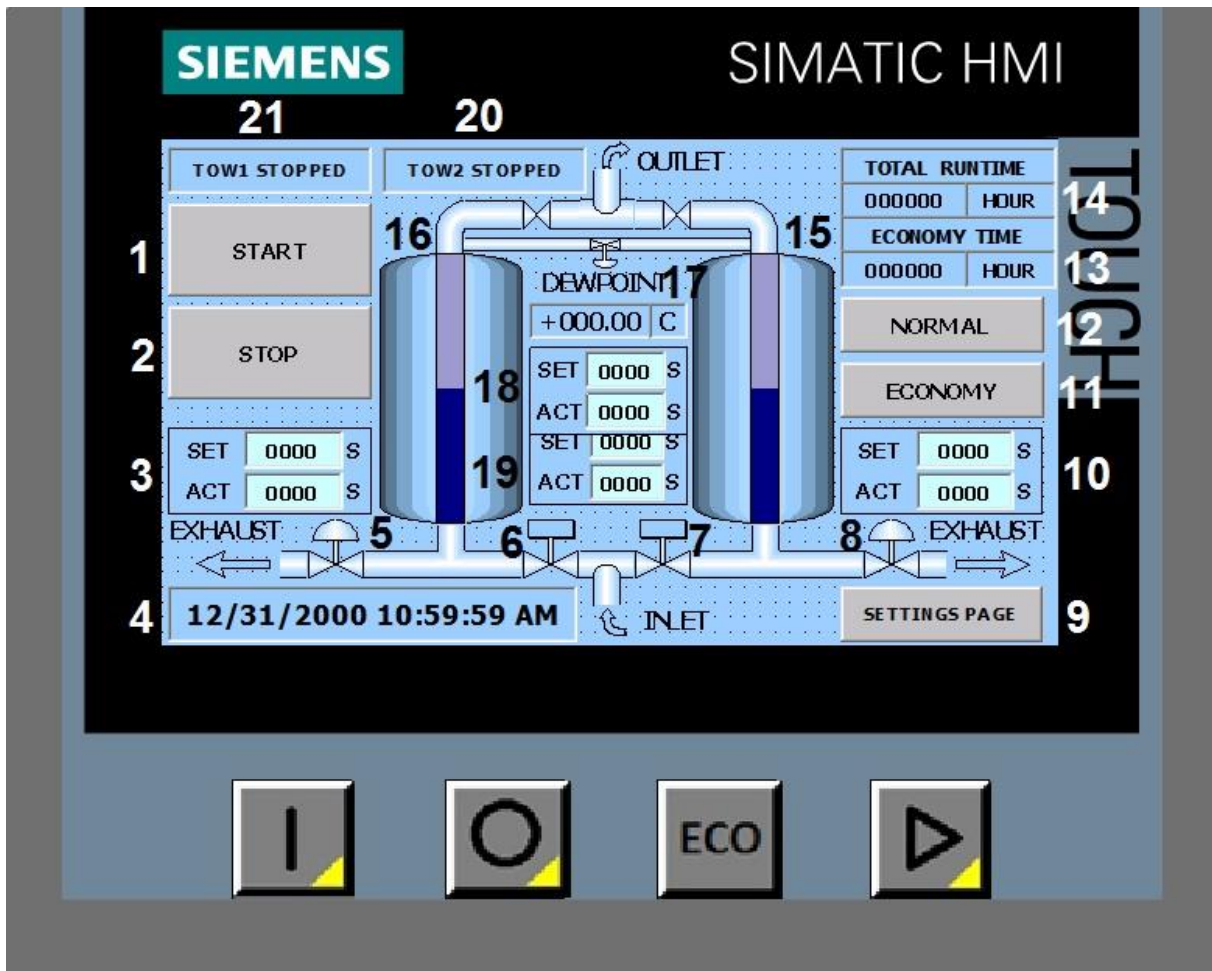
SIEMENS SIMATIC HMI TOUCH SCREEN

MDA(MHL) 130-27000 and MMD 20-240

DESICCANT AIR DRYERS

HMI USER MANUAL

1. MAIN PAGE



Picture 1

1- START BUTTON

2- STOP BUTTON

3- TOWER1 EXHAUST VALVE SET TIME AND ACTUAL TIME

4- DATE AND TIME

5-TOWER1 EXHAUST VALVE ACTUAL STATUS

6- TOWER1 AIR INLET VALVE ACTUAL STATUS (EXIST DEPENDING ON DRYER SIZE)

7- TOWER2 AIR INLET VALVE ACTUAL STATUS (EXIST DEPENDING ON DRYER SIZE)

8- TOWER2 EXHAUST VALVE ACTUAL STATUS

9- ENTERING SETTINGS PAGE BUTTON

10- TOWER2 EXHAUST VALVE SET TIME AND ACTUAL TIME

11, 12- RUNNING MODE STATUS

13- TOTAL ECONOMY MODE RUNTIME

14- TOTAL RUNTIME

15- TOWER2

16- TOWER1

17- DEW POINT

18- TOWER1 RE-PRESSURIZATION SET TIME AND ACTUAL TIME

19- TOWER2 RE-PRESSURIZATION SET TIME AND ACTUAL TIME

20-TOWER2 STATUS

21-TOWER1 STATUS



: START BUTTON



:STOP BUTTON



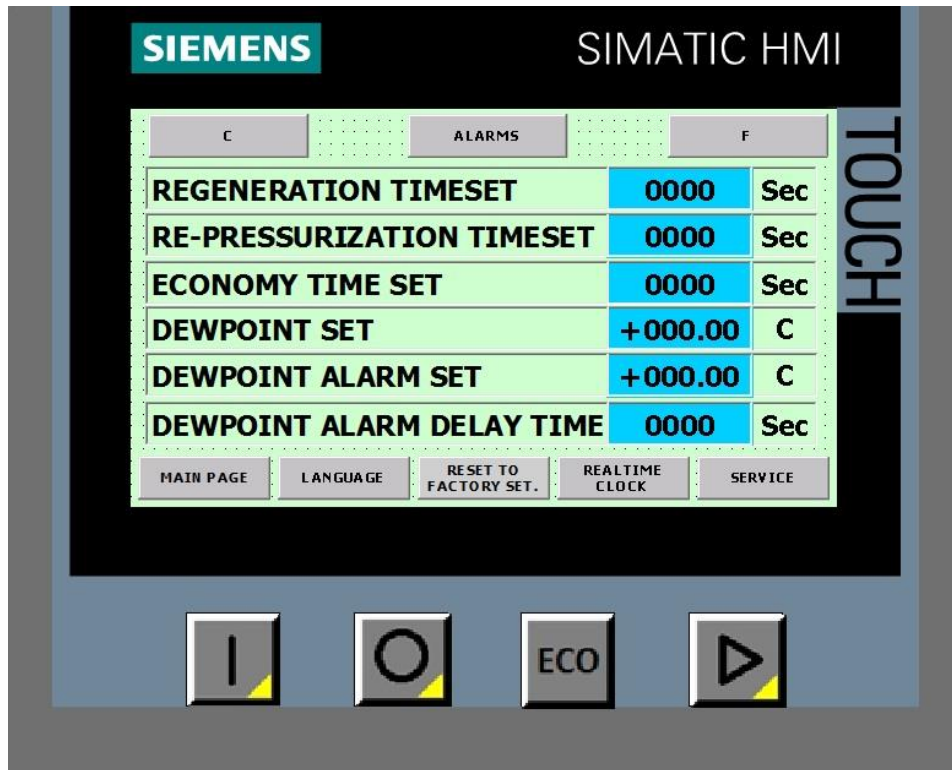
: ECO MODE BUTTON



: BUTTON FOR ENTERING SETTING PAGE

2. SETTINGS PAGE

You can enter the Settings Page by using “SETTINGS PAGE” button on Main Page and enter “1112” security code. Then you will see the screen which is shown in Picture 2. The factory defaults are mentioned in the table below.



Picture 2

MDA-DWG 130-250		MDA-DWG 300-360		MDA-DWG 440-850		MDA-DWG 1000-3600		MDA-DWG 4400-10800	
Set Values	Unit	Set Values	Unit	Set Values	Unit	Set Values	Unit	Set Values	Unit
120	Sec	150	Sec	180	Sec	240	Sec	300	Sec
30	Sec	40	Sec	40	Sec	60	Sec	60	Sec
1200	Sec	1200	Sec	1200	Sec	1200	Sec	1200	Sec
-40	C	-40	C	-40	C	-40	C	-40	C
-20	C	-20	C	-20	C	-20	C	-20	C
1200	Sec	1200	Sec	1200	Sec	1200	Sec	1200	Sec

Regeneration Time Set: When tower 1 is running and drying the air, the tower 2 is getting dried with the %18 of the dried air of tower 1 outlet, to remove the humidity inside of it. Then this process happens in the reverse order starting with the tower 2. In order to change the purge time, press the blue area, enter the requested value with the help of the virtual keyboard and then confirm.

Re-pressurization Time Set: After the purge and drying of tower 1 or tower 2, it is getting pressurized depending on this parameter. In order to change the value, press the blue area, enter the requested value with the help of the virtual keyboard and then confirm.

Economy Time Set: Dryer runs in economy mode depending on the dewpoint with the limit of this parameter. In order to change this value, press the blue area, enter the requested value with the help of the virtual keyboard and then confirm.

Dewpoint Set: This is the target value of the dewpoint based tower switching. The towers will switch depending on the economy time set and dewpoint set which occurs first.

Dewpoint Alarm Set: If the dew point reaches this value after the time indicated “Dewpoint Alarm Delay Time” parameter, then an alarm will be displayed on the screen.

Dewpoint Alarm Delay Time: Dewpoint Alarm Set value is not controlled within the time indicated in “Dewpoint Alarm Delay Time” at the start-up.

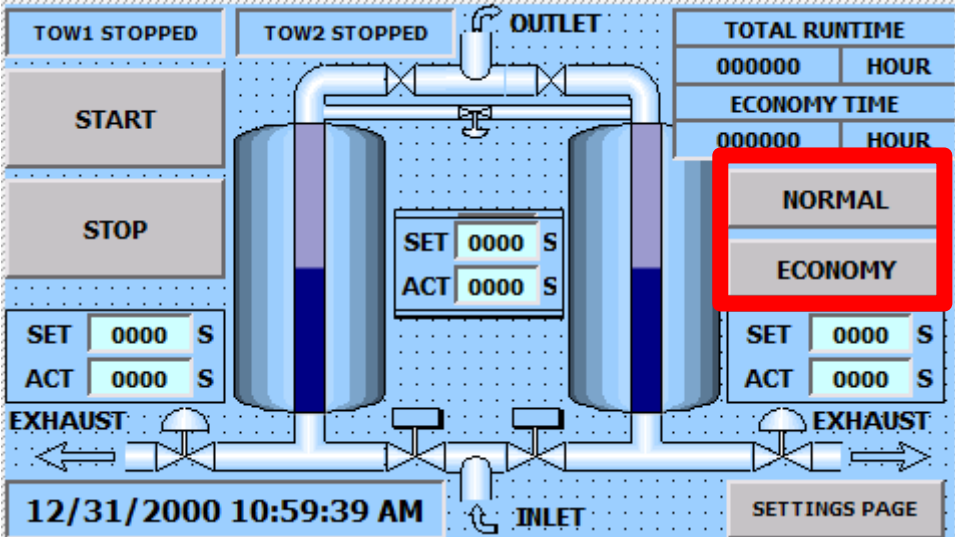
RESET TO FACTORY SETTINGS: When this button is pressed, all the parameters will be adjusted to factory set values.

When you press this button, you will be asked for security code. The necessary code is “1113”.

Celcius and Fahrenheit unit convert can be done on this page by pressing “C” or “F” buttons.

3. Dewpoint Control

You can run the machine in economy mode on all MDA with DCC control (MDA-DWG). The operating mode is selected with the help of buttons that appear in the below picture and are marked in red.



Normal Mode: Machines operating in this mode perform their operations in accordance with the set values below. You can make these adjustments from the settings page shown in the picture.

(Regeneration time / Re-Pressurization Time)

C	ALARMS	F
REGENERATION TIMESET	0000	Sec
RE-PRESSURIZATION TIMESET	0000	Sec
ECONOMY TIME SET	0000	Sec
DEWPOINT SET	+000.00	C
DEWPOINT ALARM SET	+000.00	C
DEWPOINT ALARM DELAY TIME	0000	Sec

MAIN PAGE	LANGUAGE	RESET TO FACTORY SET.	REALTIME CLOCK	SERVICE
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Economy Mode: When this mode is active, after the Regeneration Time is completed, Regeneration step continues to work extra considering the adjusted Dewpoint value and the set Economy Mode Time. If the Dewpoint value is below the Dewpoint Set value, the economy time starts operating. When the dewpoint value goes above the dewpoint set value, it moves to the re-pressurization step without waiting for the economy time to end.

For example,

Model: MDA-DWG 250

Regeneration Time: 120 sec

Pressurization Time: 30 sec

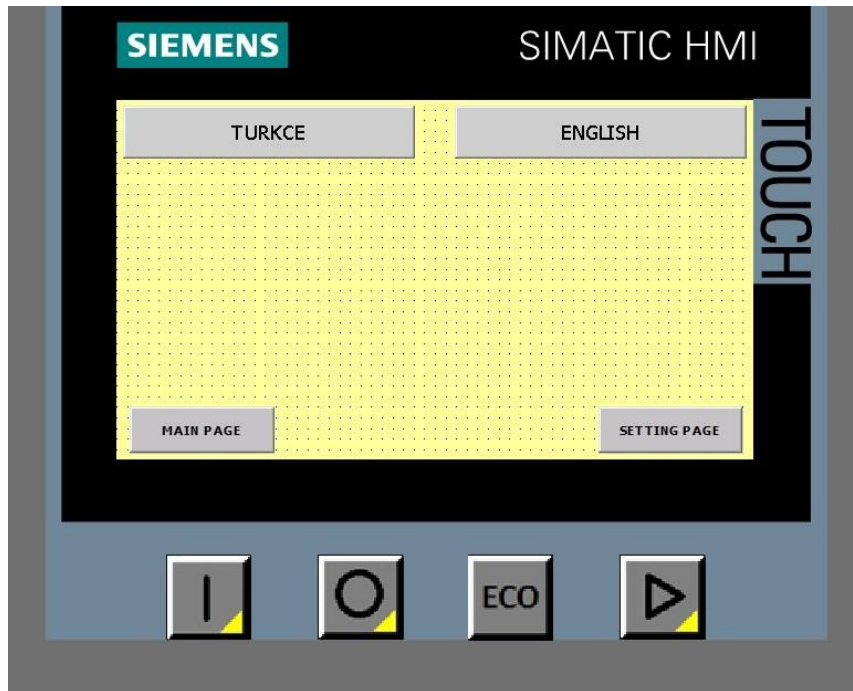
Economy Period: 1200 sec

Dewpoint Set: -40 C

After the regeneration period (120 sec) is completed, the dewpoint value is checked. If the Dewpoint value is below the Dewpoint Set (-40), the regeneration step will continue to run for the economy time (1200 seconds). At the end of the period, it starts to pressurize. If the dewpoint value rises above the dewpoint set (-40) during the economy period, the re-pressurization step is passed without waiting for the economy period to end.

4. LANGUAGE PAGE

You can enter the Language Page by pushing “LANGUAGE” button on SETTINGS PAGE. Picture 3 page will be displayed.



Picture 3

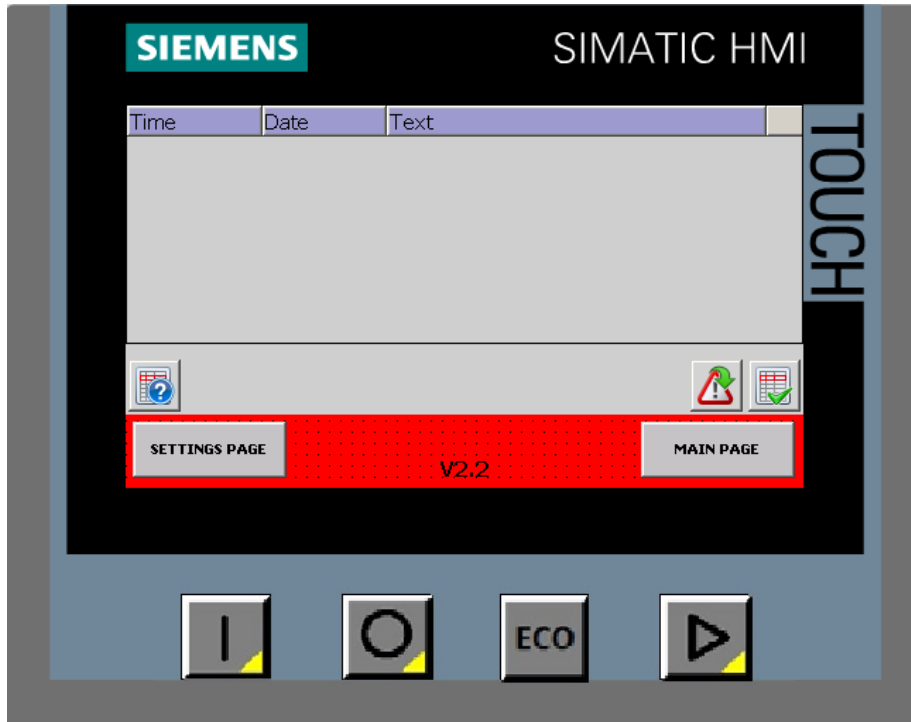
For language set, press the related button and then which page is requested to continue.

5. ALARMS PAGE

You can enter the Alarms Screen by pushing the “ALARMS” button on SETTING PAGE. You will enter to the screen mentioned on Picture 4 below. Previous alarms can be examined on this screen.

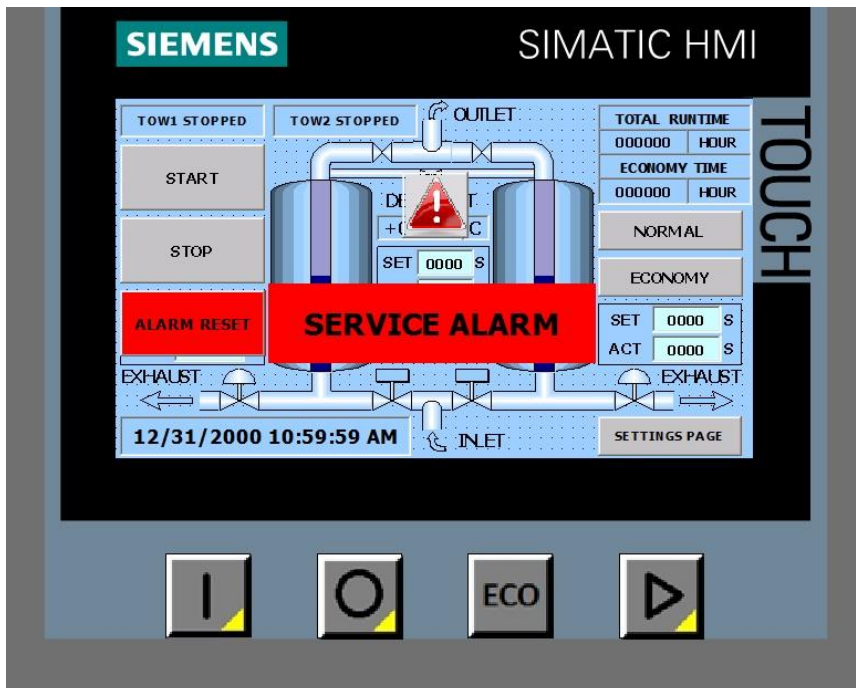
Note1: If an alarm occurs during the dryer running, alarm message will be shown on the HMI but the dryer will not stop except “Dew Point High Alarm” .

Note2: When there is an actual problem on the dryer, you will see an alarm message on the screen, also a reset button will appear on the left of the alarm message and you will see an exclamation (!) sign within a triangle (Picture 5). In that case you can easily enter the “Alarms Screen” by pressing the exclamation (!) sign which is shown within a triangle. If the problem is solved, the alarm can be reset by using the alarm reset button on the main screen.



Picture 4

Also existing program version number is shown on Alarms Page.



Picture 5

6. REAL TIME CLOCK SETTING PAGE

You can enter the Real Time Clock Page by pushing the “REAL TIME CLOCK” button on SETTINGS PAGE. You will enter to the screen mentioned on Picture 6 below.



Picture 6

Press the related box which parameter is requested to set. Press “SET TIME” button and then which page is requested to continue.