tork
valve & automation

GAP 10
GAS ALARM CONTROL PANEL
USER MANUAL

PLEASE READ THE INSTRUCTIONS BEFORE USE

CONTENT

INTRODUCTION

Purpose of Document

This user manual is only for guide to authorized person who use GAP 10 gas alarm panel. This book cannot be a reference for any other devices. We reserve the right to make changes.

Warranty Period

SMS-TORK GAP10 against malfunction due to material and production (from the date of sale) for a period of two years. Specified substances will ensure safe and effective use of the gas alarm panel.
Read and implement this user manual prepared gas alarm
It is a prerequisite for the use of the panel. SMS - TORK is not responsible for damage caused by failure to comply with the instructions in this manual.

SECTION 1. GAP 10 CONTROL PANEL BASIC INFORMATION:

1.1. Warning and Considerations

In order to use the appliance safely, it is necessary to follow the following points carefully.

• Do not use the appliance outside of purpose.
• Take care that the device is used by authorized persons.
• Never place liquids on top of the unit.
• If liquid is poured on the device, the device should be shipped immediately or controlled by the authorized company.
• Make sure that the device is used in the following conditions.
° The appliance should not be kept in 75% Rh damp areas.
° The appliance should not be operated under atmospheric pressure above 1060 millibar.
° The appliance must be protected against sudden and high temperature and humidity changes.
• Use the appliance properly and on a suitable floor.
• Protect the device from vibrations and mechanical shocks.
• Always use a grounded outlet that meets the standards.
• The frequency and voltage of the power line must conform to the specifications of the device and must have sufficient current capacity.
• There should be no high-voltage generators, X-ray devices or devices that cause noise in the vicinity of the device.
• The device's power cords, sensor cords, and output cabling must not be configured to interfere with movement of persons.
• Make sure that the connections of the device are made correctly and completely.
• GAP10 should be used with accessories and parts recommended by SMS-TORK. Using different accessories, parts and sensors may result in incorrect output currents and damage to the device.
• The device cables must not be exposed to any mechanical stress.
• Use cables so that no one is going to trip over them, and that no crushing tools, such as a wheel, will pass.
• Shock hazard: Do not attempt to remove the power cord with wet hands. Make sure your hands are clean and dry before touching the power cord.
• Make sure that the installation of GAP10 is done safely.
• The device and accessories should be tested at least once a year on a regular basis.

⚠ the device does not turn off the output in case of leakage gas detection, malfunction, signal interruption and alarm. If gas leak occurs in the areas where the detectors are connected, it is necessary to follow the following points carefully.

First of all, stay calm.

• Take into account the warnings, alarms and messages given on the device and follow them.

• The device switches off the corresponding outputs in case of any malfunction, gas detection or signal interruption.

• Ventilate the gas detection area by opening doors and windows.

• Close the gas valve, starting from where you are closest.

• Be careful not to use any electrical devices.

• Do not wear any electrical equipment that is prime electricity.

• Do not use the door bell or allow it to be used.

• Do not use mobile phones or radios against risk of ignition.

• Connect with a specialist from a gas distribution company in a convenient location.

• If there is a fire, turn it off. If there is a flame in natural gas, trying to put it out without closing the valve is useless and dangerous.

• If you get the gas smell before the alarm is heard, follow the warning without waiting for the alarm.

• If the gas alarm is still in progress and the alarm is not found, drain the area for precaution. You should contact the gas distributor company to check the parts, make them safe and repair them, or contact the gas emergency which is accessible 24/7.

• The alarm sound and light warning system remain active until the user interrupts the device.

• The appliance should not be opened. Otherwise, an electric shock may occur and the device may malfunction.

• Set the tank settings to the required values. Otherwise, it may cause the tank to overflow or the tank not to be filled up regularly.

• Tank filling is automatic and you can turn on / off the desired limit levels by manually intervening in case of emergency.

• Any fault in the tank area should be intervened with authorized personnel

• In case of tank overfill or if the appliance is ineffective, close the relevant main filling valve.
• Follow the instructions in the guide.

1.2. Consideration During Use

• Before using the device, read all documents related to the device.
• Check all accessories and connections before using the appliance. Unacceptable accessories and poor connections can cause unexpected problems.
• Do not wrap the accessory cables around metal objects.
• Before use, check that the accessories are cracked and damaged. Do not use damaged accessories or cables. Otherwise, electric shocks may occur and the device may be damaged.
• At the back of the device, the detector which gives 8 4-20mA output signal can be connected to the inputs. The supply voltage of 8 detectors is supplied from the device as 12V DC voltage. The maximum power that the 8 sensors will draw from the device must not exceed 45 Watt. Failure to do so may result in malfunction.
• There are 8 outputs on the back of the device. External systems can be controlled.
• There is a tank level detection detector input with 2 1-5 volt outputs on the back of the unit. + 5V DC voltage is supplied from the device.
• There are 2 upper limit and 2 lower limit tank level outputs at the back of the unit. External systems can be controlled.
• After starting up the device and making the necessary settings, check that the functions of the device's inputs and outputs are working. Make connections on the back of the device. Otherwise, contact the manufacturer.
• Make sure that the safety of the equipment is checked by qualified technical personnel.

SECTION 2. GAP 10 CONTROL PANEL USAGE

2.1. Definition of the Device

GAP10 is a general purpose, easy to use and microprocessor controlled device that can detect gas detectors, 4-20mA output detectors and sensors that output 1-5 volts.

The GAP10 gas alarm panel, developed in consideration of user needs, is a structure that simplifies user-device communication. It is easy to use with 128x64 graphic LCD screen, keys and rotating setting button. It warns the user by visual warning with Power, GasFault, Tank Fault and Filling lights and buzzer with warning sound. Adjusted settings, warning and error messages, menus and tank filling can be monitored numerically and visually via graphic LCD screen. 8 channel gas, 2 channel tank level can be displayed. Relevant channels can be activated and deactivated, allowing the use of gas detectors in appropriate detectors outside the TORK brand. It aims to keep user satisfaction at the highest level, allowing all channels to use same or preferred channels.

The user can select the "Language" option from the main menu screen by choosing one of the languages "English" or "Turkish".

2.2. Purpose and Working

GAP10 detects gas signals from gas detection detectors connected to gas detection inputs, 4-20mA with gas alarm panel and 1-5V from tank level sensors. It is aimed to inform, inform and interfere the user by visual, audible and illuminated by controlling the systems connected to the detected signal values.

In order for the GAP10 to operate, it is sufficient for the gas detection detectors to provide an analog signal at the 4-20mA range. The desired systems can be controlled by connecting 4-20mA devices. GAP10 gas alarm panel is not just gas detector, temperature, pressure etc. It allows the use of all

sensors capable of producing 4-20mA analog outputs.

It is sufficient for the tank level detectors to signal the GAP10 at 1-5V. For this reason, GAP10 gas control panel can be used in all areas filled with other liquids, especially tank filling stations.

2.3. Front Face

The front view and detail of the GAP10 gas alarm panel are given in Fig.1

Fig.1: GAP 10 control panel front face (Numbered)

1.1. Graphic LCD screen

1.2. POWER

1.3. GAS FAULT

1.4. TANK FAULT

1.5. FILLING (tank filling indicator)

1.6. MENU/OK (adjustment button)

1.7. T2 ON/OFF (emergency shutt off button for gas and tank)

1.8. BUZZER

1.9. T1 ON/OFF (emergency opening button for gas and tank)

1.10. GAS SLC (emergency channel selection button for gas and tank)

1.11. EXIT

2.4. Back Face

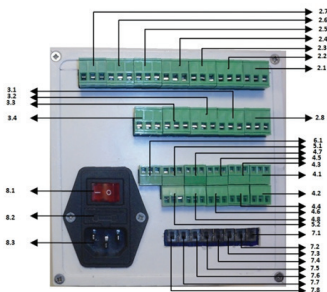The back view and detail of the GAP10 gas alarm panel are given in Fig.2

Fig.1: GAP 10 control panel back face (Numbered)

Explanations of the items in Figure 2:

2.1-8 "CH1-8 channel" Gas control output

3.1. "TANK 1" upper limit control output

3.2. "TANK 1" lower limit control output

3.3. "TANK 2" upper limit control output

3.4. "TANK 2" lower limit control output

4.1-8 CH1-8 channel gas dedector connection and signal input

5.1 TANK 1 level detection signal input

5.2 TANK 2 level detection signal input

6.1. RS232 serie communication input (Reserved for next applications, not activated now)

7.1-8. CH1-8 input signal cutoff switch (Manual)

8.1. GAP10 energy open/close button

8.2. 250V 350mA glass insurance

8.3. 230V AC 50/60 Hz mains voltage input

ⓘ Outlets **2.1** to **3.4** (NC-NO-COM) are dry contacts.
The detector inputs between **4.1 and 4.8** are (+ 12VDC - SIGNAL - GND).
5.1.-5.2. level inputs are (+5V – SİNYAL – GND)

2.5. Buttons and Functions

MENU / OK: The set button has 3 different functions which can be turned right and left and can be used by pressing. Navigating through the menus and choosing the relevant menu makes the value increase / decrease operations.

EXIT: to return to the MAIN MENU screen

GAS SLC: Used to select the corresponding channel from the gas level monitoring screen in alarm situations. It helps to show on the screen which of the upper limit and lower limit levels are selected for Tank1 and Tank2.

T1 ON / OFF: 1) To make ACTIVE the desired channels if there is no alarm condition,

2) Used to enable / disable Tank1.

T2 ON / OFF: 1) To PASSIVE the desired channels if there is a gas alarm condition,

2) Used to activate / deactivate Tank2.

Fig.3. Appearance of keys

2.6. Input- Output Settings and Functions

This section will explain the preparation and adjustment of gas detection and tank level input functions.

2.6.1. Preparation and adjustment of gas detection input functions

⚠ 1-Connect the gas detection detectors to the preferred channel / channels in the GAP10 device, and set it to output 4-20mA.

It is recommended for safety to make settings with a reliable LEL device to give 4mA at 0% LEL and 20mA at 20% LEL for the value of % LEL (Lower explosion limit).

2-The slide switch of the preferred channel (s) should be set as below. Otherwise, the device can not detect the input signals, turns off the outputs, or opens the outputs.
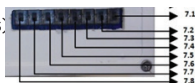

Fig.4. Selection of manual gas channels

3- The following SENSOR SETTINGS menu will appear on the screen when the GAS LEVEL menu is selected by pressing MENU / OK in the MAIN MENU / SETTINGS menus.

Fig. 5. Adjusting the gas level

4- Rotate the MENU / OK dial to scroll to "**SESNS:**" and press the MENU / OK button to select the desired channel from CH1 to CH8. The channels to which the gas detectors are connected must be selected as CH1, CH2, CH3, CH4, CH5, CH6, CH7, CH8, CH1-CH8.

For example; If CH1 channel is selected, the gas detection detector means channel 1 is connected. If CH1-CH8 channels are selected, the gas detection detectors means that 8 channels are connected.

5-Turn the MENU / OK dial to select "**TYPE:**" and press "MENU / OK" to select "TORK" if you are using TORK brand sensors or "OTHER" if you are using other brand sensors. It is possible to use it in gas detection detectors other than "TORK" brand.

For example; If "CH1" is selected from the **SENS:** line and "TORK" is selected from the TIP: line, it means; 1. channel connected to TORK brand gas detection detector.

For example; If "CH1" is selected from the **SENS:** line and "OTHER" is selected from the TIP: line, it means; 1. channel connected to OTHER brand gas detection detector.

6- Turn the MENU / OK dial to move to the "**LMT:**" line. The setting limit is limited to 0-20mA. The setting is in mA type. This setting is necessary for the device to trigger an alarm. A value between 0-20mA can be selected. The current value detected by the device from the detectors alarms when the value reaches the set value here and activates the outputs to close or open the connected systems.

For example; SENS: "CH1" channel, "TORK" is selected in the TIP: line, and "12" mA is entered in the

LMT: line means that; The alarm level of the TORK brand gas detection sensor connected to channel 1 is 12 mA. If this value is reached, the device will alarm and activate or deactivate the connected systems by activating the outputs.

7- Turn the MENU / OK dial to scroll to "DRM:". If the connected gas detection detector is activated, "ACTIVE" should be selected, otherwise it should be selected as "PASSIVE".

For example; If the "CH1" channel is selected in the SENS: line and "TORK" is selected in the TIP: line and the value 12mA is entered in the LMT: line, then the DRM: line is selected to be "ACTIVE": 1. TORK brand gas the alarm level of the detection detector is set to 12mA, and the status is selected as "ACTIVE".

❶ DRM: When the line is selected as "ACTIVE", all functions related to the channels (alarm, audible, illuminated and written warning, input / output alarm functions) are activated. Otherwise it will be disabled and will not work.

8- Saving saved settings:
Separate settings and memory retrieval:
Turn the MENU / OK control knob to bring up the "RECORDED" questionnaire on the bottom line in Fig. 6. Press the MENU / OK button to save the settings to the device memory. Once the settings are saved in the memory, the "RECORDED" notification message will appear on the bottom line.

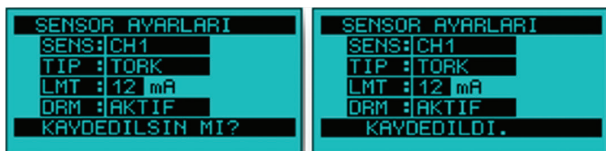❶ Follow the same steps to set the other channels for which you want to use the gas.

Fig.7. Saving settings one time

2.6.2 Preparing and setting the tank level input functions:

1- Connect the tank level detectors to the TANK1 and / or TANK2 level detection signal inputs.

2- Select the TANK LEVEL menu by pressing the MENU / OK control knob in the MAIN MENU / SETTINGS menus. The TANK SETTINGS menu in Figure 7 will appear on the screen. There are two options, "TANK1" and "TANK2". From this menu, select "TANK1" or "TANK2" for the tank / tanks to be used by coming to the "TankSec:" line.


```
     TANK AYARLARI
> TankSec   : TANK1
  UstLimt(%): 80
  AltLimt(%): 15
  Durum     : AKTIF
```
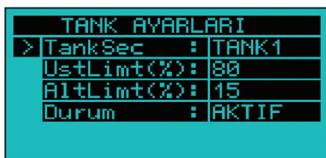
Fig.7. Tank Settings

3- Set "Upper limit (%):" Line to set the upper limit value between 0-100% in%. When the sensed value reaches the set value level; TANK1 Open or close the system connected to the upper limit output (TANK1-UL). Stop if the tank is full. Audible, illuminated and written warning, input-output alarm functions are activated. When the sensed value drops below the set value level, it automatically returns to normal by automatically deactivating the audible, illuminated and written alarm, input-output alarm functions. If the tank is filled, the tank starts to fill.

4- Set "Lower limit (%):" Line to set the lower limit value in the range of 0-100%. If the sensed value falls below the set value level, TANK1 opens or closes the system connected to the lower limit output (TANK1-AL). If the fluid in the tank is being evacuated, the evacuation stops. Audible, illuminated and written warning, input-output alarm functions are activated. If the level goes above the set value, it automatically returns to normal with the audible, illuminated and written warning, input-output alarm functions disabled.

5- Go to the "Status:" Line and select the selected tank as "ACTIVE" or

"PASSIVE". If Tank Status "ACTIVE" is selected, the selected tank information appears on the screen. TANK1 upper limit, TANK1 lower limit, audible, illuminated and written warning, input-output alarm functions are activated. Otherwise, the settings made for TANK1 will not work.

6-Saving the settings made to memory

Turn the MENU / OK control knob to bring up the "RECORDED" questionnaire on the bottom line in Fig.8. Press the MENU / OK button to save the settings to the device memory. Once the settings are saved in the memory, the "RECORDED" notification message will appear on the bottom line.
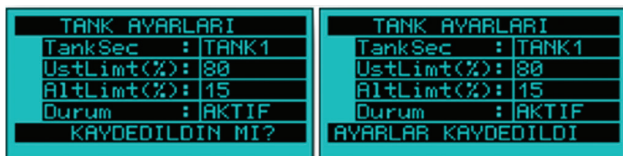
Fig.8. Saving tank settings

ℹ️ Follow the same steps to redo TANK1 and TANK2 settings. Press "EXIT" button to return to the "MAIN MENU" screen.

SECTION 3. GAP 10 CONTROL PANEL MENU AND FUNCTIONS

3.1. Opening:

The initial opening sequence of the GAP 10 gas alarm panel is shown in FIG.9. The device name and version number appear on the first screen. Then brief information about the manufacturer was given. After these two information screens MAIN MENU screen is displayed.

Fig.9. GAP 10 opening screens

3.2. Language selection:

The language selection settings are made via the language selection menu screen. The language selection menu screen is shown in Figure 10 below.
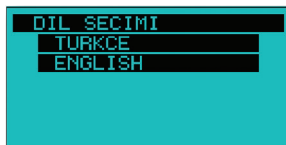
Fig.10. Language selection menu

To make a language selection, use the rotary knob to move the cursor to "TURKCE" or "ENGLISH" as shown below and select one. Figure 11 shows a screenshot.

Fig.11. Turkish/English language selection screen

After the selected language is confirmed, the screen in Figure 12 will appear.
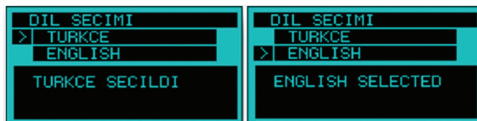
Fig.12. Language selection confirmation screen

🛈 Press "EXIT" button to return to the "MAIN MENU" screen.

3.3. Gas Level:

From the main menu screen, go to "Gas Level Monitoring" screen. It works if all alarm functions are activated in this screen. It is interrupted from this menu in both emergency and normal situations. The Gas Level Monitoring screen is shown in Figure 13

Fig.13. Gas level monitoring screen

"GAS SLC" button is used to select the desired channel. The selected channel is activated by the "T1 ON / OFF" key. The channel selected with the "T2 ON / OFF" button is deactivated.

⊕ The alarm and output functions of inactive channels do not work

3.3.1 Alarm-warning and notification:

GAP10, if gas is detected in any channel, as shown in Fig. 14, the name of the alarming channels is shown on the display. Also in case of alarm, it will give a light warning by lighting both the audible warning and the red "GASS FAULT" LED.

Fig.14. Alarm-warning and notification screen

If any or all of the detectors connected to the device are disconnected, an alarm will be generated as shown in Fig.15.

Fig.15. Signal disconnection signal warning screen

3.4. Tank Level:

Go to the "Tank Level Monitoring" screen from the main menu. In both emergency and normal situations, press "GAS SLC" button;

• After the key is pressed; "Tank1 UL Selected" appears on the display and is activated by the "T1 ON / OFF" key. Immediately following the message "Tank1 UL Active" is displayed.

• After the key is pressed; "Tank1 AL Selected" appears on the display and is deactivated with the "T1 ON / OFF" key. Immediately following the message "Tank1 AL Passive" is displayed.

After the key is pressed; "Tank 2 UL Selected" appears in the display and is activated by the "T2 ON / OFF" key. Immediately following the message "Tank2 UL Active" is displayed.

• After the key is pressed; "Tank 2 AL Selected" appears on the display and is deactivated with the "T2 ON / OFF" key. Immediately following the message "Tank2 AL Passive" is displayed.

• After the key is pressed again, the device continues to operate in the last settings made with "TANK LEVEL VIEWING" again.

Fig.16. Tank level viewing screen

If an alarm condition occurs at one of the upper and lower limits of TANK1 and TANK2, the alarm will continue until the alarm is turned off. After the alarm condition is cleared, make it passive. The device will continue to operate normally.

3.5. Level Monitoring:

When you want to use the Level Monitoring menu, "Gas Level Monitoring" and "Tank Level Monitoring" screens are switched in 5 second intervals to monitor the user's gas and tank display. When an emergency occurs, "EXIT" button can be displayed on the MAIN MENU screen and the "Gas Level" screen related to the gas and the "Tank Level" screen related to the tank can be interfere with the device.

3.6. Settings:

This screen shows the gas level, tank level, time and date, and return settings to the factory settings.

3.6.1 Gas Level:

The gas level is described in chapter 2.6 Input-Output Settings and Functions. 3.3 The Gas Level section also provides information on alarm conditions and technical specifications.

3.6.2 Tank Level:

The tank level is described in section 2.6 Input-Output Settings and Functions. The 3.4Tank Level section also provides information on alarm conditions and technical specifications.

3.6.3 Time and Date:

It is unavailable.

3.6.4 Factory Settings:

This option is used to restore the initial settings of the GAP10 gas alarm panel. If you want to return to the initial settings, a query screen will be displayed before you delete all the settings made.

Fig.17. Factory settings screen

Deleting all settings will require the user to reset it. An information message appears with the words "Settings cleared". Pressing the "EXIT" key repeats the settings via the MAIN MENU screen.

SECTION 4. GAP 10 CONTROL PANEL FEATURES

4.1. General Features

In this section, the general specifications of the device are given.

Dimensions: Width x Depth x Height	144 x 135 x 144 mm
Weight:	0.60 kg
User Interface	28 * 64 Blue-White Graphic LCD - screen Rotating Adjustment Knob Buttons
Mounting	Flat surface, fixed surface
Environmental Working Cpnditions: Ambient Temperature Range: Humidity Range :	-10 C⁰ ile 40 C⁰ %30 ile %75
Storage and Transportation : Ambient Temperature Range : Humidity Range :	-40 C⁰ ile 70 C⁰ %0 ile %75

Table 1. General Features

❗ If the device has not been used for a long time, test that all functions work before use.

Technical Features

In this section, technical specifications of the device are given.

Operating voltage	230V AC
Working Frequency	50Hz/60Hz
Output Power	4 W
Output Voltage	5V DC, 12V DC
Main Insurance	500mA AT
Power Cord	10A,250V, IEC 320 power cable
Signal Input and Type	8 piece 4-20mA, 2 adet 1-5VDC
Tank Detector Supply Voltage: Gas Detector Supply Voltage:	15V DC 12V DC
Compatible Detectors	4-20mA output current, all detectors with output voltage of 1-5V
Control Output and Control Type	8 pieces, control of max.5A / 250V loads
Protection Class	IP 54

Tablo 2. Technical Features

SECTION 5. GAP 10 CONTROL PANEL MAINTENANCE AND SERVICE

5.1. 5.1. Troubleshooting

Table 3 lists possible failures. The corrective interventions given in this table are useful for troubleshooting without causing damage to the device, damage to the device and service procedure.

Troubleshooting	Corrective Interventions
Device not opening	Check the power cord. If it is found defective, replace it with new one. Check if the fuse is on. Replace if burned. If the problem persists, contact TORK.
The device does not properly whwn it is opening	Turn off the device and turn it back on. If the problem persists, use a backup device and contact TORK.
Continuously "GAS FAULT" led flashes, Example on the screen: "CH1 ALARM" appears and an alarm is given:	Check that there is a gas leak in the environment where the 1st channel connected detector and the detector are located. If there is a gas leak review 1.1 Warnings and Cautions Warning and 1.2 Cautions sections. If there is no gas leak, make sure the detector is secure. If the detector fails, replace it with a new one.
Example on the screen: "CH1 NO SIGNAL" appears and an alarm is given:	Check that there is no breakage or crushing of the contact and connection cables in the socket of the detector connected to channel 1, and that the manual switch positions and detector work properly. After corrective action, the alarm functions of the device will automatically return to normal.
Continuously "TANK FAULT" led flashes, Example on the screen: "TANK1 NO SIGNAL" appears and an alarm is given:	Check that the socket connected to the tank 1 input is disconnected, that the connecting cables are not broken or crushed, and that the level sensor is secure. After corrective action, the alarm functions of the device will automatically return to normal.

Table 3. Possible failures and solution recommendations

5.2. System Warnings and Explanations

In Table 4, the system warnings that may be encountered and what they mean are explained. The information in this table is useful for determining what the stimuli mean when the system is operating properly.

System Warnings	Descriptions
"CH1-CH8" NO SIGNAL	CH1-CH8 signal is cut off error
"TANK1/ TANK 2" NO SIGNAL	TANK 1 or TANK 2 signal is cut off error
"CH1-CH8" ALARM	Gas leak detected in channel CH1-CH8 warning
The POWER LED is dimmed	No energy on the device
GAS FAULT led blinks and audible alarm status	Upper limit value is reached or the signal is cut off warning
TANK FAULT led blinks and audible alarm status	Signal is cut off warning
FILLING led blinks and audible alarm status	Upper or lower limit value is reached or the signal is cut off warning

Table 4.System Warnings and Explanations

5.3. GENERAL CARE, REPAIR AND CLEANING

The device must be checked by the user before used. All cables must be checked for breakage,
crushing, cracking etc; whether device's connections are applicable according to
use manual; whether taking protection for leakage. Before cleaning the device, cut off the
electricity. Use soft cleaning solution and dry cloth. Do not use abrasive materials.

5.4. Replacement of the Fuce

The power cable must be disconnected from the device before the fuse change is made. Open the fuse holder with a suitable screwdriver. Check the fuse with an eye or gauge. Close the fuse drawer by replacing the burnt fuse.

5.5.Shipment and Shipment of the Device

By adding devices such as device name, phone number, address, address, city, serial number, problem description and warning alerts, and if possible, the device can be shipped original box.

5.6. WARRANTY CONDITIONS

1) The period of warranty shall start from the date of delivery of the product to the customer and shall cover a period of 2 years.

2) Every and all parts of the product are under SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş. warranty coverage. (against any defect that may occur during production, assembly and/or defective parts)

3) In the case that the product fails within warranty period, the time spent on the repair work is added to the warranty period. Repair time of the product is maximum 20 (twenty) working days. This time starts from the date on which the failure concerning the product is notified to the service station and to seller of the product, dealer, agency, representative, importer or producer. It is possible to make the consumer failure notification by telephone, fax, e-mail, registered mail or similar. However, in case of disagreement, the obligation of proof belongs to the consumer.

4) Product replacement or refund is mandatory depending on the choice of the consumer in case one of the conditions below:

 a) If failure occurs in the product at least four times in one year or six times with the condition of being within the warranty period.

 b) If the maximum time for its repair is exceeded.

c) In case a service station is not exist by a report issued by seller, dealer, agency, representative, importer or producer respectively that, repair of the failure is not possible, exchange process will be carried out free of charge.

 d)The warranty period of the products changed during the warranty condition is limited to the remaining warranty period of the purchased products.

5)Free repair and product exchange obligations will be annulled under the following conditions:

 a) If the product becomes faulty due to use contrary to the terms or condi-

tions stated in the user guide,

 b) If the product serial number has been altered or removed

 c)The warranty labels have been destroyed,

 d) If the product has been opened, used, or previously repaired by unauthorized persons,

 e) Use of the product by plugging into inappropriate voltages or with faulty electric installation without the prior knowledge of our authorized services,

 f) If the fault or damage to the product occurred during the transportation outside of the responsibility of SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş.,

 g) When our product is damaged due to use with accessories or devices purchased from other firms or unauthorized services,

 h) Those damages caused by natural disasters such as fire, lightning, flood, earthquake, etc.

6) A report prepared by the SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş. will determine whether the damage was caused by improper use.

7) The warranty certificate should be kept throughout the warranty period. The customer must provide the warranty certificate during request for repair. Otherwise, the cost of repair will be charged.

8) The warranty certificate attached to the product during sale should be fully completed by the retailer and customer, signed and stamped. The customer copy must be immediately provided to the customer, followed by the other piece to be mailed out to SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş. by the retailer.

9) In the case when you send the product via courier, please remember to add a description your complaint, the photocopy of your warranty certificate, your address and telephone number.

10) For possible problems which may arise concerning the warranty certificate, it can be applied to the Ministry of Customs and Trade, Directorate General of Consumer Protection and Market Surveillance.

WARRANTY CERTIFICATE

Manufacturer : SMS Sanayi Malzemeleri Üretim ve Satışı A.Ş.

Address : Head Office: Y.Dudullu Mh. Bostancı Yolu Kuru Sk. No:16 Ümraniye - İstanbul / TURKEY

Factory: İMES O.S.B 5. Cd. No: 6 Çerkeşli OSB Mh. Dilovası - Kocaeli / TURKEY

Product : ....

Trade Mark : TORK

Model : ....

Serial Number : ....

Delivery Place & Date : ....

Warranty Period : ....

Max. Repair Time : ....

Seller / Distributor : ....

Address : ....

....

....

....

Manufacturer Representative
Name / Surname :
Title :
Date :
Signature :

Seller / Distrubutor Representative
Name / Surname :
Title :
Date :
Signature :

tork
valve & automation

SECTOR
LEADER WITH
30 YEARS
EXPERIENCE

bsi.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2008

This is to certify that: SMS-Tork Endüstriyel Otomasyon Ürünleri
Sanayi ve Ticaret Ltd. Şti.
Bostanlı Yolu Kuru Sokak No : 16
Yukarı Dudullu
Ümraniye/İstanbul
34776
Turkey

Holds Certificate No: **FM 647592**

and operates a Quality Management System which complies with the requirements of ISO 9001:2008 for the following scope:

Design, production and sales of industrial valves, automation, control and measurement equipment.

For and on behalf of BSI:

Frank Lee, EMEA Compliance & Risk Director

Original Registration Date: 04/06/2013   Effective Date: 31/05/2016
Latest Revision Date: 31/05/2016   Expiry Date: 14/05/2018
                                           Page: 1 of 2

...making excellence a habit.™

tork

valve & automation