IFEX 3000 Impulse Fire Extinguishing Technology

IF 3000 - 100

Manual

Trolley Fire Extinguisher Typ IFEX 3035 and IFEX 3050



 1. Impulse Gun IFEX 3001
 Serial-n°:______

 2. Trolley unit
 IFEX 3035 Fabr.-n°:______

 IFEX 3050 Fabr.-n°:______
 IFEX 3050 Fabr.-n°:______



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Edition 3012-E-10/01-20.11.12

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In addition: TÜV certificate, declaration of conformity, warranty.

Safety Regulations

BEFORE USE OF THE IFEX GUN AND TROLLEY PLEASE READ THE INSTRUCTION MANUAL CAREFULLY!

NEVER AIM AT ANIMALS OR HUMAN BEINGS! MINIMUM SAFETY DISTANCE IS 6 METERS!

BEWARE OF ELECTRICAL UNITS. USE ONLY UP TO 1000 V; MINIMUM SAFETY DISTANCE 1 METER.

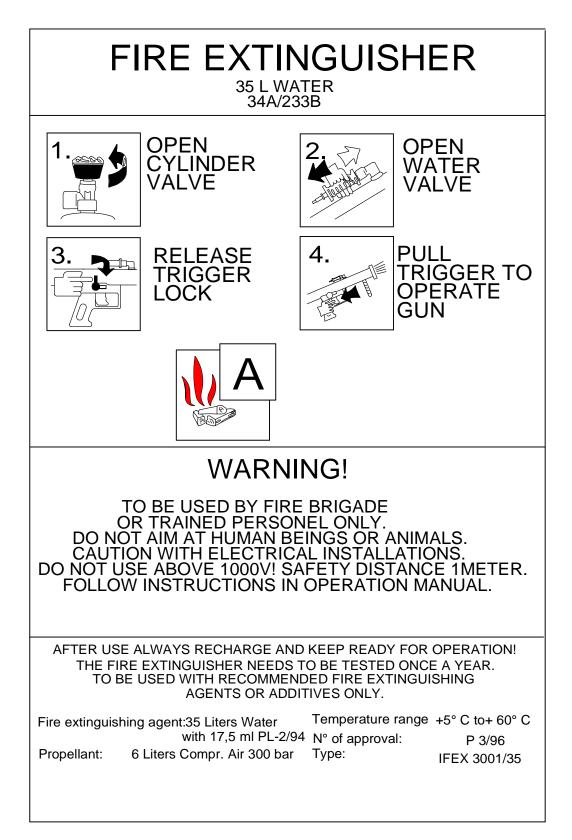
CAUTION!

IFEX TECHNOLOGIES GMBH IS NOT RESPONSIBLE FOR ANY DAMAGE TO ANIMALS, HUMAN BEINGS OR MATERIAL CAUSED BY WRONG OR IRRESPONSIBLE USE AND OPERATION OF THE IFEX 3000 IMPULSE FIRE EXTINGUISHING EQUIPMENT.

> IFEX 3000 PRODUCTS ARE DESIGNED FOR FIRE FIGHTING PURPOSES ONLY!

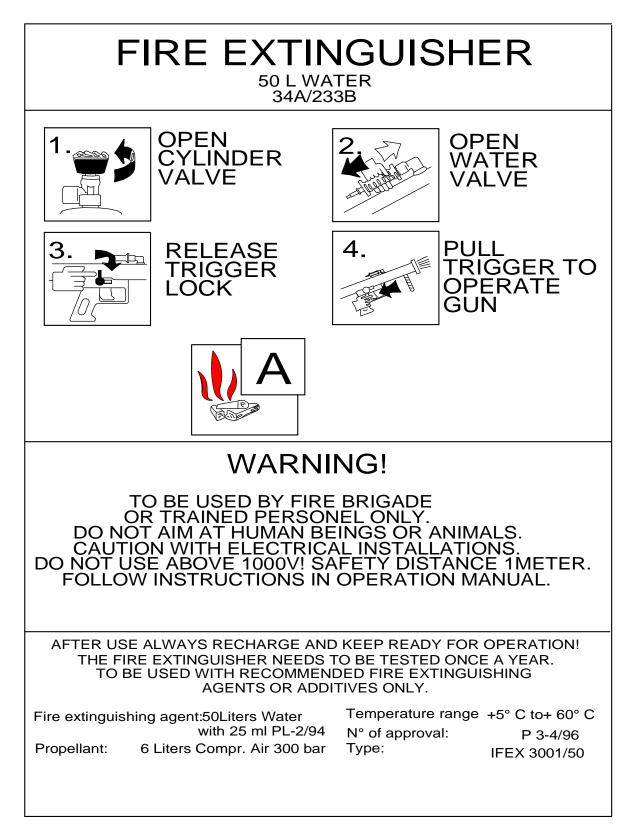
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Labelling Fire Extinguisher 35 L



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Labelling Fire Extinguisher 50 L



Instruction for use and operation

A. Preperation

- 1. Fill the water cylinder with extinguishing agent as described in Para 7.2 of the filling instructions.
- 2. Fill the the air pressure cylinder with air as described in Para 7.3 of the filling instructions.
- 3. The unit will be ready for operation as described in Para 8 of the test and filling instructions.
- 4. Put on personal safety wear and breathing apparatus as per standard safety regulations.

B. Use and operation

- 1. Loosen the connections of the gun at the trolley.
- 2. Take the IFEX Impulse Gun, and put the strap around the shoulder.
- 3. Adjust the shoulder strap.
- 4. Hold the gun upwards at an appr. 30° vertical angle.
- 5. Check whether the water valve is closed.
- 6. Take the hose from the trolley.
- 7. Slowly open the air pressure cylinder valve. There will be <u>6 bar</u> pressure on the water container and the water hose, and <u>25 bar</u> pressure on the gun.
- 8. <u>Note:</u> The pressure gauge on the pressure regulator only shows the approximate filling pressure of the air cylinder.
- 9. Further hold the gun upwards at an 30° vertical angle. Open the water valve. The gun is filled, when small amounts of water spray through the split rubber diaphrame of the gun. Close the water valve.

Adjust the safety catch at the gun. The Impulse gun is ready for use.

10. Please note:

The Impulse-Technology achieves a very high velocity in that water is shot from the gun at a high speed. This leads to short but powerful recoil of the gun. In order to minimize this recoil it is advisory to move the gun forwards while shooting and to bend your body forwards with your legs in a so-called "walking position". Always aim slightly below the aligned target. Pull the trigger evenly and let go immediately after the shot. The air pressure will be refilled automatically within 3 seconds. Open the water valve and repeat the extinguishing process as before. The most effective shot range is between 1 and 10 meters. The maximum shot range is 16 meters.

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- 11. When well trained in using the gun and rapid shooting is required, simply let the water valve open and shot when the gun is filled. Use the refilling time to consider where to place the next shot. For the extinguishing of smaller fires the gun can be filled with smaller amounts of water simply by opening of the water valve for shorter periods or through a faster shooting sequence.
- 12. Regular training and exercise with the IFEX 3000 Impulse fire extinguishing equipment will result in maximum fire extinguishing efficiency, reducing the time needed to extinguish fires and the amount of water used.

C. After use of the IFEX Impulse Gun and Trolley

- 1. Close the water valve, and empty the water chamber.
- 2. Close the air pressure cylinder valve.
- 3. Empty the gun by pulling the trigger repeatedly, until the remaining air has left the hoses and the gun.
- 4. Open the drain valve at the trolley to reduce the air pressure.
- 5. Refill the water cylinder with fire extinguishing agent as per Para 7.2 and the air pressure cylinder as per Para 7.3 of the filling instructions.
- 6. Put the hoses together, if possible in an 8 form and fold them across the handles of the trolley.
- 7. Put the gun into the foot ring of the trolley, and tighten it with the strap.

Place the IFEX 3000 Impulse Fire Extinguishing Equipment at its destined location.

Test and filling instructions

Please note carefully:

These test and filling instructions describe the standard rules for testing by the user and for maintenance of the mobile IFEX 3000 Impulse Fire Fighting Equipment. Maintenance should be carried out as per DIN 14406, part 4, latest edition.

Warning:

Before testing of IFEX 3000 Impulse Fire Extinguishing Equipment:

- **1. Make sure the air pressure valve is closed.**
- 2. Use the drain valve at the water container to release remaining pressure.
- 3. Make sure there is no remaining pressure in the IFEX- gun or hose. This is done by triggering the gun repeatedly until the remaining air in the hoses and gun is evacuated.

Caution:

Put on the gun according to the user manual as there may be a recoil due to the remaining air in the gun!

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1. Testing of the equipment

To ensure the perfect functioning of the equipment it is required to have it tested by an expert at least once a year. The periods between testing of the gun may need to be reduced if this is required by local regulations.

1.1 Visual testing

Test the equipment's general condition (cleanliness, condition of the fittings, the hoses, the water container, the pressure containers, the safety equipment, the gun, the hose connections, the mounting of the water container and the air pressure bottle, the inscriptions). Equipment and fittings which are damaged will need to be replaced immediately.

1.2 Spare parts

Use only certified spare parts. IFEX-original parts are certified.

- 1.3 <u>Testing</u> of the Fire Fighting Equipment according to the testing regulations for "IFEX 3035 and IFEX 3050 Impulse Fire Fighting Equipment".
- 1.4 <u>Preparation</u> before use of Fire Fighting Equipment IFEX 3035 and IFEX 3050 according to the filling instructions for "IFEX 3035 and IFEX 3050 Impulse Fire Fighting Equipment" as per Para 7.1, 7.2 and 7.3.

2. Testing of the IFEX 3001 Impulse gun

"Caution - note warning on page 7"

- 2.1 Disconnect the air pressure and water hose from the gun.
- 2.2 Check the shoulder strap for damage.
- 2.3 Check the screws at the front and back strap connections.
- 2.4 Check the membrane at the barrel end for damage (the membrane has 6 incisions from the inside to the outer side, ending appr. 6 mm from the outer side).
- 2.5 Check the screwed cap on top of the membrane, if necessary tighten it with a special tool.
- 2.6 Check the water connection at the gun and the water coupling for damage and cleanliness.
- 2.7 Check the water valve for external damage and condition of operation of valve.
- 2.8 Check the stability of the handle at the gun (key KS 3) as the operational condition of the triggering mechanism.
- 2.9 Check the safety mechanism for operation.
- 2.10 Check the air pressure connection at the gun handle for damage and cleanliness.



3. <u>Testing of the trolley</u> "Caution - note warning on page 7 ".

- 3.1 Check the trolley for damage and corrosion.
- 3.2 Check the tightness of the wheel caps on the axes.
- 3.3 Check the rotation of the wheels, if necessary grease the wheel caps.
- 3.4 Check the rubber of the wheels for damage.
- 3.5 Check the connection screws on the water container/trolley,(Hexagon screws KS 13).
- 3.6 Check the pressure bottle straps for damage and the velcro for strength
- 3.7 Check the connection strap of the gun for damage and its general condition.

4. <u>Check of the water container and the mounted fittings</u> "Caution - note warning on page 7 ".

- 4.1 Disconnect thewater and air hoses from the container, and check the couplings.
- 4.2 Remove the air pressure bottle from the trolley.
- 4.3 Check the water container for external damage, scratches in the paint and corrosion.
- 4.4 Check the water connection and the fittings at the container and the couplings for damage.
- 4.5 Check the air pressure connection and the fittings at the container and the couplings for damages.
- 4.6 Check the manometer for damages.
- 4.7 Remove the filling unit from the container by turning the handle anti-clockwise.
- 4.7.1 Check the filling unit for damages.
- 4.7.2 Check the screw in thread and the o-sealing ring for damages.
- 4.7.3 Check the reducing valve and spindle thread for damages.
- 4.7.4 Check the fixedness of the handle fixing screw (KS13).
- 4.8 Empty the water container and check the inside visually.
- 4.9 Check the type plate and instruction sticker for damages and readability.
- 4.10 Demount the filter mesh (KS21), and check for damages.
- 4.11 After re-installation of all parts and re-connection of the water connection the safety valve needs to be checked. Fill the container with water and air pressure. The valve requires 6 bar +10% tolerance (6,6 bar). If the safety valve opens before reaching 6,0 bar, or if it fails to open at 6,6 bar, the valve is to be renewed.

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Reminder:

- **1.** All couplings, threads and other parts of the extinguishing unit need to be checked for cleanliness, and cleaned if necessary!
- 2. All parts which are demounted for testing need to be re-installed expertly.

Testing of the water and air pressure hoses including couplings etc. "Caution- do note warning on page 7 ".

5. <u>Testing of the water and air pressure hoses including coupling</u> "Caution - note warning on page 7 ".

5.1 <u>Water hoses:</u>

- a) Water hose from the Impulse Gun to the delta connector.
- b) Co-axial water hose (with air pressure hose inside), both ends with a delta connector.
 - Check the water hoses visually for damages.
 - Check the couplings at the hoses and the hose for damages and cleanliness.
 - Check delta connector plus screws for damages and cleanliness, and check safety screw for tightness (KS 3).

5.2 <u>Pressure hoses:</u>

- a) Pressure hose from the delta connector to the Impulse Gun.
- b) Pressure hose between the two delta connectors (this hose floats in the water hose).
- c) Pressure hose from the pressure regulator to the delta connector.
- d) Pressure hose from the pressure regulator to the water container.
 - Check the pressure hoses visually for damage and cleanliness.
 - The couplings at the hoses and the hose swaging sockets for damages and cleanliness.
 - Caution: The pressure hose in the water hose can only be checked for function while in operational condition through triggering of the gun.
- 5.3 <u>Testing of the pressure hose para 5.2 b) between the two delta connectors</u> The pressure hose between the two delta connectors needs to be demounted every 5 years. Then remove the air connector piece and pull the air pressure hose out of the water hose.
 - Check the hose visually for damages.
 - Check the connecting pieces, thread and sealings for damages.

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6. <u>Air pressure cylinder</u>

- 6.1 <u>The air pressure cylinder needs to be checked for:</u>
 - German regulations "§15 Betriebssicherheitsverordnung"
 - cylinder valve for damages.
 - external damages.
 - air pressure of the container checked per test manometer.
 - the check-up needs to be done as follows:
 - 1. Make sure the cylinder valve is closed:
 - 2. Remove the pressure regulator from the bottle, fit test manometer and slowly open the valve and read the pressure:

IFEX 3035 = 6 ltr./300 bar, Minimum pressure 180 bar/+20°C, if less, refill. IFEX 3050 = 6 ltr./300 bar, Minimum pressure 270 bar/+20°C, if less, refill.

<u>Note:</u> The pressure meter at the pressure regulator shows the <u>approximate</u> filling pressure of the pressure cylinder only.

6.2 <u>Pressure regulator</u>

- Remove the pressure regulator from pressure bottle valve (if not already done as per 6.1).
- Check the manometer glass for damage and cleanliness.
- Check the couplings and thread for damage and cleanliness.
- 6.3 <u>Testing the fire extinguishing agent container:</u>

The fire extinguishing agent container needs to be tested every 10 years by an expert according to German regulations "§15 Betriebssicherheitsverordnung" Note appendix A, page 1, para 1.1.

6.4 Testing the air pressure container on the gun:

The air pressure container needs to be tested every 10 years by an expert according to German regulations "§15 Betriebssicherheitsverordnung" Note appendix A, page 1, para 1.2.

6.5 Maintenance label:

Maintenance dates need to be entered on the label, which should not obstruct any prints from the manufacturer. Note DIN 14406-4 latest edition.

The Maintenance/Testing needs to be confirmed on page 15 "Maintenance record" of the manual. Deficiencies will have to be repaired and faulty or deficient parts exchanged only use original parts, note para 1.1 and 1.2. After complete examination of the entire IFEX-Fire Extinguishing Unit return the unit to operability according to page 14 and 15.

Filling Instructions

7. Filling of the fire extinguishing agent:

- 7.1 IFEX 3035 mobile fire extinguishing equipment = 35 L container:
 - a) Fill the container with fresh and clean water through the filling opening (30 Liter).
 - b) Pour 17,5 ml (+5%) PL-2/94 FC-201F in the container through the filling opening.
 - c) Fill the container with clean water 35I -5% Tolerance (-1,75I)!
 - d) Tighten the top filling closure firmly.

7.2 IFEX 3050 mobile fire extinguishing unit = 50 L container

- a) Fill the container with fresh and clean water through the filling opening (45 Liter).
- b) Pour 25 ml (+5%) PL 2/94 FC-201F in the container through the filling opening.
- c) Fill the container with clean water 50l 5% Tolerance (-2,50l)!
- d) Tighten the top filling closure firmly.

7.3 Filling of the air pressure cylinder:

Check the air pressure level with a test manometer. - Test as follows:

- 1. Make sure the cylinder valve is closed.
- Remove the pressure regulator from the cylinder, adjust the test manometer, open the valve slowly and read the pressure: IFEX 3035 = 6 ltr./300 bar, Minimum pressure 180 bar/+20°C, if less, refill.

IFEX 3050 = 6 ltr./300 bar, Minimum pressure 270 bar/+20°C, if less, refill.

Note:

Should the mobile equipment be used for training, it will suffice to fill the water container without fire extinguishing agent and with water only. After training it is important to refill the fire extinguishing agent container immediately and air pressure bottles according to para 7.1, 7.2 and 7.3, to ensure the equipment is ready for action.

8. Getting the unit ready for use

- 8.1 Make sure the fire extinguishing agent container and the air pressure cylinder are filled according to para 7.1, 7.2 and 7.3.
- 8.2 Fit the air pressure cylinder to the trolley using the 2 straps.
- 8.3 Screw the pressure regulator to the bottle valve on the air pressure cylinder.
- 8.4 Connect the air pressure hose from the pressure regulator to the fire extinguishing agent container.
- 8.5 Connect the water hose (Delta connector) to the fire extinguishing agent container.
- 8.6 Connect the air pressure hose (Delta connector) to the pressure regulator.
- 8.7 Place the IFEX 3001 Impulse Gun in the holder of the trolley and secure it with the safety strap.
- 8.8 Connect the air pressure hose to the IFEX 3001 Impulse Gun.
- 8.9 Connect the water hose to the IFEX 3001 Impulse Gun. (The water valve needs to be closed).

The mobile fire extinguishing unit is now ready for use!

Machinery and tools for maintenance

The following list of tools is separate from the instructions. The listed tools are to be used for their specific purposes only.

| 1. | Test pressure gauge | 0 bar to 400 bar |
|-----|------------------------|-------------------------------|
| 2. | Double open-end wrench | 13 x 15mm |
| 3. | Double open-end wrench | 14 x 17mm |
| 4. | Double open-wrench | 19 x 22mm |
| 5. | Open end-wrench | 21mm |
| 6. | Open end wrench | 27mm |
| 7. | Ring-wrench | 8mm |
| 8. | Pipe angle wrench | 13 x 110mm |
| 9. | Hook wrench | 60-90 x 5mm |
| 10. | Hexagon screwdriver | 3mm (for inner hexagon screw) |
| 11. | Pozidrive screw driver | size 2 |

Torques

| - | Front support grip | | 25 Nm |
|---|----------------------------------|------|--------|
| - | Pistol grip (KS 3 inner hexagon) | | 7 Nm |
| - | Fastening screws | | 30 Nm |
| - | Ermeto-hose screw joints | L 6 | 25 Nm |
| - | Ermeto-hose screw joints | L 18 | 100 Nm |
| | (Co-axial hose) | | |
| - | Safety valve | | 20 Nm |
| - | Drain and outlet valve | | 15 Nm |

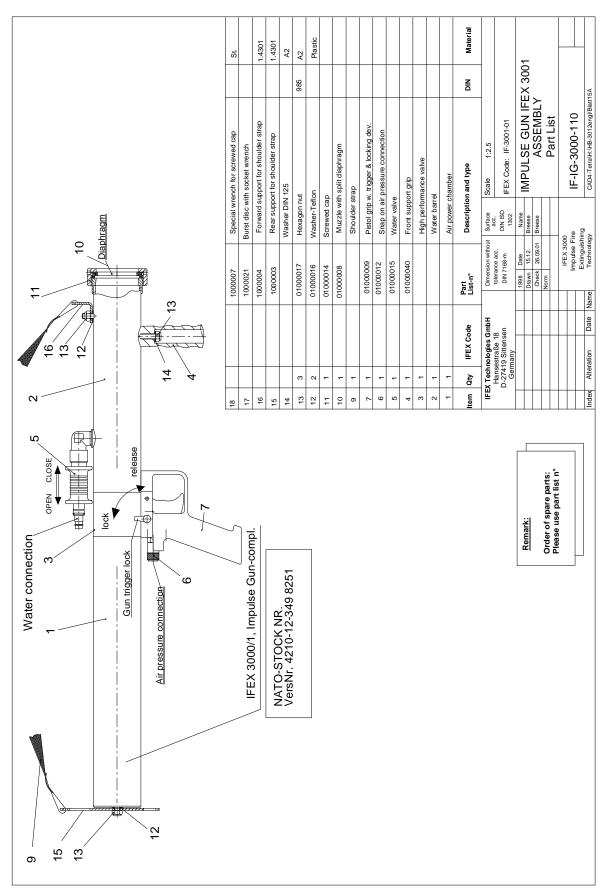
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Maintenance and test certification for Trolley IFEX 3035 and IFEX 3050

| Maintenance record | | |
|-------------------------|---------|--|
| | | |
| | | |
| Extinguisher test date: | Expert: | |
| | | |
| | | |

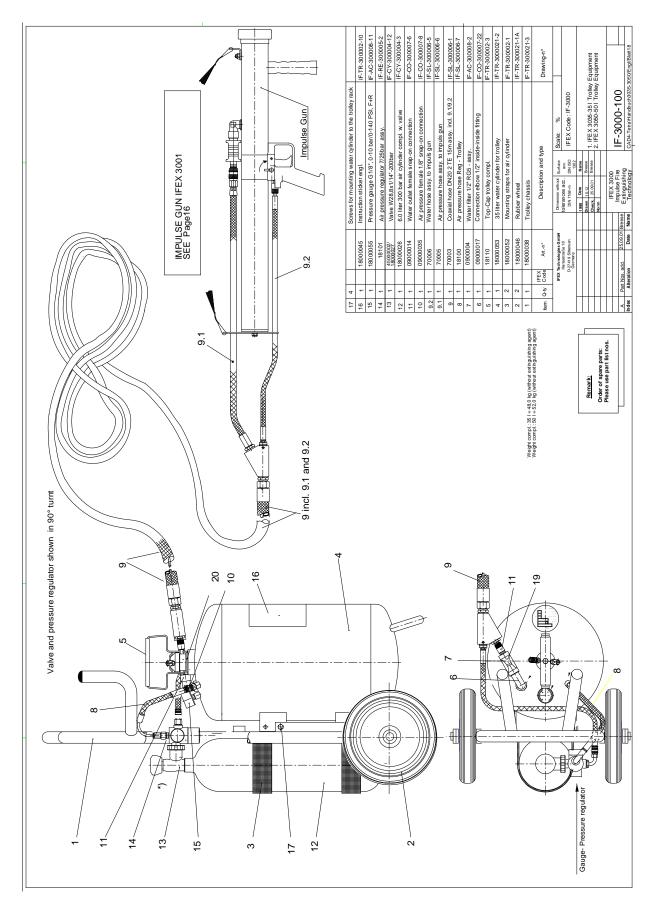
| | Maintenance record | |
|-------------------------|--------------------|--|
| Extinguisher test date: | Expert: | |

| | Maintenance record | |
|-------------------------|--------------------|--|
| | | |
| | | |
| | Export | |
| Extinguisher test date: | Expert: | |
| | | |
| | | |



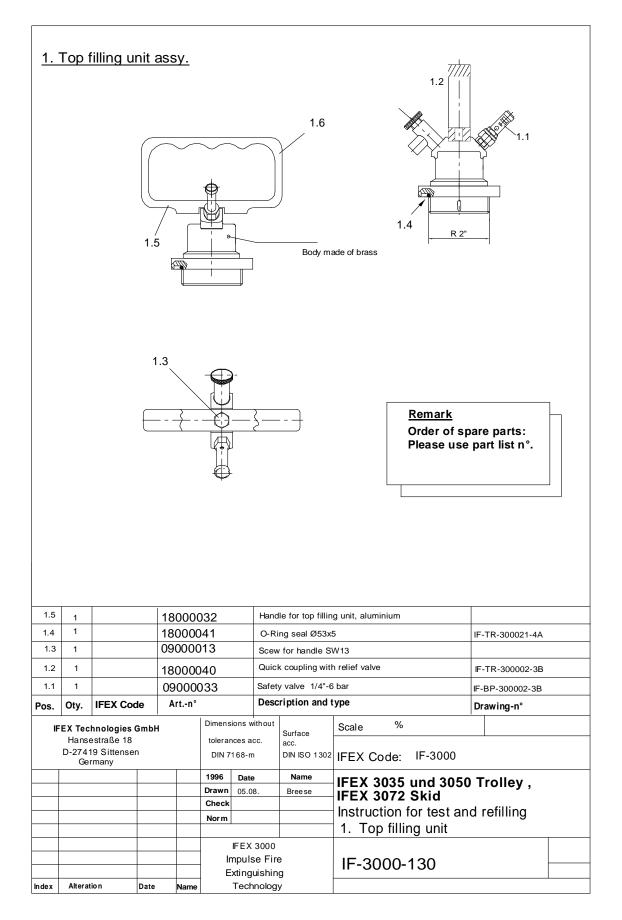
Technical drawings

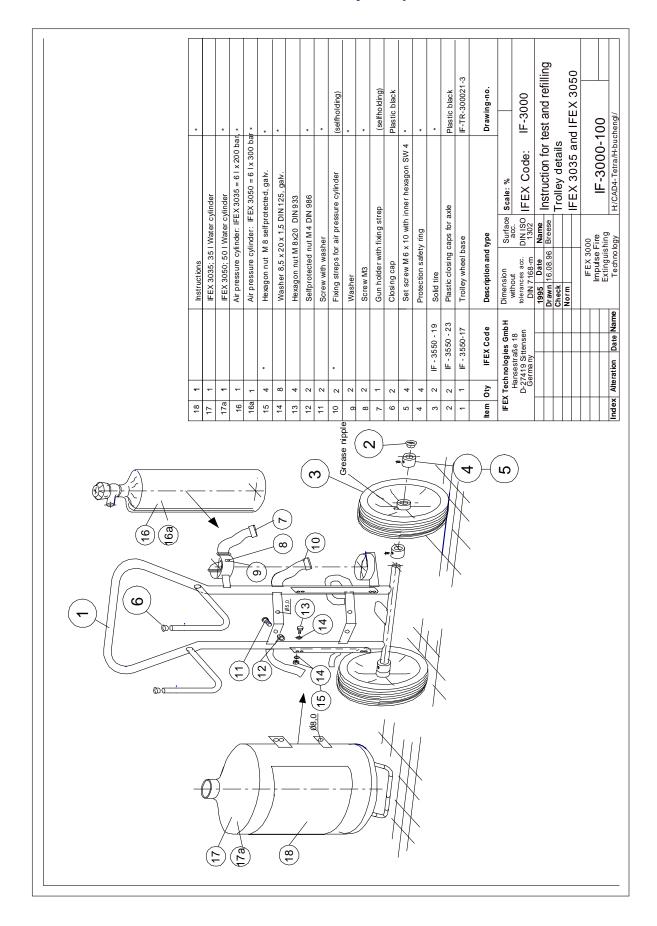
1. Impulse Gun IFEX 3001, assembly



2. IFEX 3035/3050 Trolley Equipment

3. Top filling unit





4. IFEX 3035/3050, Trolley components

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Appendix A

1. Testing the extinguishing agent container (by an expert):

The extinguishing agent container needs to be checked by an expert as per directive 2009/104/EC:

- external check every 2 years
- internal check every 5 years
- pressure test every 10 years

Reduce the pressure in the container and empty the container completely. Disconnect all fittings except the air pressure fitting and close the connections. Remove the safety valve from the filling unit and close the connections. Fill the container with water through the filling opening and close the filling unit. Fill the container with 10,4 bar through the air pressure connector. Check the pressure by a test manometer. The pressure must be held for 10 minutes. Empty the container and remount the fittings after testing.

Enter results of test in maintenance record Appendix A page 2/page 3.

2. Testing the air pressure container on the gun (by an expert):

The air pressure container needs to be checked by an expert as per directive 2009/104/EC:

- external check every 2 years
- Pressure test every 10 years

Remove the bursting disc or safety valve and close the opening with a cylinder screw. Connect the air pressure hose from the pressure source via a pressure regulator. The pressure regulator must supply a secondary pressure of 60 bar to the air pressure coupling of the gun. Put the gun in a water basin, slowly open the valve at the pressure source, observe the manometer and close the valve as soon as the pressure is 60 bar. This pressure must be held for 30 seconds. After testing re-install the bursting disc or safety valve.

(TÜV-bursting test at 03.02.96, Pall=45 bar, V= 0,8L, $P_{Test} = 58,5bar$),TÜV agreed rounded P_{Test} value= 60,0 bar).(TÜV= German technical inspection authority)

Enter results of test in maintenance record Appendix A page 4.

3. Test according to national regulations for Extinguishing Agent Container 35 L

| User | Invoice address | Pla | ce of use | | |
|--|----------------------------|-------------------|---|--|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | +- | | | |
| | | +- | | | |
| Test certification as per | | Type Nr.: IF | EX Trolley 3035 | | |
| directive 2009/104/EC | | Serial-Nr.: | | | |
| Extinguishing containe | er IFEX 3035 | | Constr. date: TÜV test protocol: 08/92 Volume: 35 Liter | | |
| - Out of order | | | | | |
| Cert. pressure: 8, | 0 bar Test pressure: 10,4 | | | | |
| - Inside test - Pressure test - other test | Reg. every 1 with water | 0 years | | | |
| Test result | no minor | major | dangerous deficienies | | |
| Deficiencies: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Futher use is: | | | | | |
| No problem. | | Not | advisible. | | |
| | Hereine Rockerd | We | will notify the appropriate | | |
| No problem, if fai | uits are adjusted. | auth | ority. | | |
| | | | | | |
| — — (Place) — — – | ,Date | | | | |
| | | Next regular pres | ssure test | | |
| | | | | | |
| Expert | | | | | |
| | IFEX 3000 Impulse | Fechnoloav | Nr.: IF3000-100 | | |
| IFEX | | | | | |
| Technologies GmbH | Directive 2 | 2009/104/FC | Appendix A | | |
| GmbH Hansestr. 18 | Directive 2009/104/EC | | Page: 2 | | |
| D-27419 Sittensen | Extinguishing age | ent container 35 | 1 | | |
| | | | Date: 20.11.12 | | |

4. Test according to national regulations for Extinguishing Agent Container 50 L

| User | Invoice address | Place of | fuse | |
|---|-------------------------------|--|------------------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| — | | | | |
| Test certification as per directive 2009/104/EC | | Type Nr.: IFEX Serial-Nr.: | Trolley 3050 | |
| | ntoinar 2050 | Constr. date: | | |
| IFEX Extinguishing container 3050 | | TÜV test protocol: 08/92 Volume: 50 Liter | | |
| | | | | |
| - Inside test - Pressure test - other test - other test | - Reg. every 10 ye with water | ears | | |
| Test result | no minor | major | dangerous deficienies | |
| Deficiencies: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Notes: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Futher use is: | | | | |
| No problem. | | Not adv | isible. | |
| | | We will | notify the appropriate | |
| No problem, if fau | lits are adjusted. | authority | y. | |
| | | | | |
| — — (Place) — — - | ,Date | | | |
| | | Next regular pressur | e test | |
| | | | | |
| — — — — — — — — — — — — — — — — — — — | | | | |
| Expert | | | 1 | |
| | IFEX 3000 Impulse | e Technology | Nr.: IF3000-100 | |
| IFEX | | | 7 | |
| Technologies | Directive 2009/ | Page: 3 | | |
| GmbH Hansestr.18 | | | | |
| D-27419 Sittensen | Extinguishing agent | container 50 l | _ | |
| | | | | |
| | | | Date: 20.11.12 | |

5. Tests according to national regulations for air pressure chamber of Impulse Gun

| User | Invoice address | Place | of use |
|---|--|-----------------------|--------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Test certification as pe | r | Type Nr.: | IFEX 3001 |
| directive 2009/104/EC | | Serial-Nr.: | |
| Extinguishing Gun IFE | EX 3001 | Constr. da | |
| - Out of order | | TÜV test p Volume: | 07/95/0016 0,8 l |
| | 5 bar Test pressure: 60 ba | | ressure container |
| | | | |
| - Inside test - Pressure test - other test - other test | - Reg. every 10 y with water | ears | |
| Test result | no minor | major | dangerous deficienies |
| Deficiencies: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Notes: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Futbaarraa iar | | | |
| Futher use is: | | | |
| No problem. | | Not ad | |
| No problem, if fa | ults are adjusted. | We wil authori | I notify the appropriate |
| | | | |
| | 5.4 | | |
| — — <u>(</u> Place) — — – | ,Date | | |
| | | Next regular pressu | ure test |
| | | | |
| | | | |
| Expert | | | |
| | IFEX 3000 Impul | se Technology | Nr.: IF3000-100 |
| IFEX Technologies GmbH | | | |
| | Directive 2009/104/EC Gun air power chamber | | Appendix A |
| Hansestr. 18 | | | Page: 4 |
| D-27419 Sittensen | | | - |
| | | | |
| | | | Date: 20.11.12 |



ZERTIFIKAT CERTIFICATE

(Konformitätsbescheinigung) / (of conformity) EG-Baumusterprüfung EC type-examination nach Richtlinie 97/23/EG / according to directive 97/23/EC Zertifikat-Nr. / Certificate No.: 07 202 1321 Z 0053/0/007

Name und Anschrift des Herstellers IFEX Technologies GmbH Name and address of bearer/ manufacturer:

Hansestraße 18 27419 Sittensen

Hiermit wird bescheinigt, dass das unten genannte EG-Baumuster die Anforderungen der Richtlinie 97/23/EG erfüllt. We hereby certify that the type examination mentioned below fulfills the requirements of directive 97/23/EC.

Geprüft nach Richtlinie 97/23/EG Tested according to 97/23/EC

Prüfbericht-Nr .: / Test report No .:

Beschreibung des Baumusters (Druckgerät): Description of type (pressure equipment):

Fertigungsstätte/Place of manufacture:

Gültig bis/ valid until:

EG-Baumusterprüfung (Modul B) EC type-examination (module B)

1321 P 0053/0/003 und / and 1321 P 0050/13/D/001

IFEX 3035 (35 L) and IFEX 3050 (50 L) with IFEX 3001 Impuls fire extinguishing gun

IFEX Technologies GmbH Hansestraße 18 27419 Sittensen 31.12.2020

Hamburg, 12.06.2013

TÜV Nord Systems GmbH & Co. KG Große Bahnstraße 31 D-22525 Hamburg

gbe 05.07 **BA 51**

+49-(0) 40 8557 1427 Tel +49-(0) 40 8557 2187 Fax e-mail sluckmann@tuev-nord.de Zertifizierungsstelle für Druckgeräte der TÜV NORD Systems GmbH & Co. KG

> S. Korn Benannte Stelle/ Notified Body, 0045

Mitglied der member of

CEOC CONFÉDÉRATION EUROPÉENNE D'ORGANISMES DE CONTRÔLE



ZERTIFIKAT CERTIFICATE

Überwachung der Bauart Monitoring of type

nach Richtlinie 97/23/EG / according to directive 97/23/EC

Zertifikat-Nr. / Certificate No.: 07 202 1321 Z 0053/0/008

Name und Anschrift des Herstellers Name and address of manufacturer:

IFEX Technologies GmbH Hansestraße 18 27419 Sittensen

Der Hersteller ist nach Prüfung der Voraussetzungen berechtigt, die von ihm im Rahmen des Geltungsbereichs des Moduls hergestellten Druckgeräte mit dem abgebildeten Zeichen zu kennzeichnen: After having examined the preconditions, the manufacturer is entitled to mark the pressure equipment produced within the range of the ambit of the module with the following mark:

CE 0045

Geprüft nach Richtlinie 97/23/EG: Tested according to directive 97/23/EC:

Prüfbericht-Nr.: Test report No .:

Beschreibung des Druckgerätes: Description of pressure equipment:

Zertifikat-Nr. des EG-Baumusters: Certificate-No. of EC type- examination:

Fertigungsstätte: Place of manufacture:

Hamburg, 12.06.2013

TÜV NORD Systems GmbH & Co. KG Große Bahnstr. 31 D-22525 Hamburg, Germany

abe 05.07 **BA 51** Konformität mit der Bauart (Modul C1) Conformity to type (module C1)

1321 P 0050/13/D/001

IFEX 3012 Backpack, IFEX 3035 (35 Liter) and IFEX 3050 (50 Liter) Trolley, IFEX 3072 (72liter) Skid every with IFEX 3001 Impuls fire extinguishing gun 07 202 1321 Z 0053/0/005; 07 202 1321 Z 0053/0/006;

07 202 1321 Z 0053/0/007

IFEX Technologies GmbH Hansestraße 18 27419 Sittensen

Member of



Tel. +49-(0) 40 8557 1427 +49-(0) 40 8557 2187 Fax e-mail sluckmann@tuev-nord.de Zertifizierungsstelle für Druckgeräte der TÜV NORD Systems GmbH & Co. KG

Benannte Stelle / Notified Body, 0045

Korn

Mitglied der CEOC

CONFÉDÉRATION EUROPÉENNE D'ORGANISMES DE CONTRÔLE

CE Declaration of conformity

according to directive 97/23/EC

for pressure equipment the manufacturer IFEX Technologies Hansestraße 18 27419 Sittensen Tel.: 04282/ 9306-0 Fax: 04282/ 9306-16 herewith declares that the pressure equipment

| | Incorde | |
|--|---------|--|

| | Description: | Impulse gun IFEX 3001/ | |
|---|---|------------------------------|--|
| | | Trolley IFEX 3035/ IFEX 3050 | |
| | Max. allowable pressure PS | | |
| | Impulse gun/ water cylinder: | 45,00 bar/ 6 bar | |
| | Allowable max./ min. temperature TS: | -10°C - +50°C | |
| | Volume V Impulse gun/ water containers: | 0,8 L/ 35 L/ 50 L | |
| | Year of manufacturing: | From 2004 | |
| | Test pressure PT/ Impulse gun: | 64,4 bar | |
| _ | Test medium: | Water | |
| | | | |

corresponds with the directive 97/23/EC.

Applied conformity assessment procedures:

Applied standards and Techn specifications:

Engaged notified bodies:

Certificates which are included:

EC-Design examination certificate N°: EC-Type examination certificate N°: EC-Certificate of conformity module C1 N°:

Location, Date:

Sittensen, 03.01.2011

Modules B + C1

PED 97/23/EC

TÜV Nord Systems GmbH & Co. KG, Große Bahnstraße 37, 22525 Hamburg

1321 P 0053 TÜV Nord of 16.12.2010 07 202 1321 Z 0053/0/003 07 202 1321 Z 0053/0/004

> IFEX GmbH Hansestraße 18 D-27419 Sittensen Tel. 49.4282.93060 Fax 49.4282.930626

Stamp/ Signature



Warranty

IFEX Technologies GmbH grants a warranty for the product purchased by the customer for a period of 24 months after purchasing.

The following information details the terms of the warranty offered by IFEX Technologies GmbH. You are entitled to make a claim under this warranty in the event of any manufacturing or material defects on the product you have purchased. The warranty provided is based on a voluntary obligation of IFEX Technologies GmbH as the manufacturer. It only applies to end customers. No warranty rights other than those expressed herein, whether given by IFEX Technologies sales partners or third parties, can be asserted against IFEX Technologies GmbH.

The warranty begins on the day of purchase stated in the invoice. Please note that warranty claims can only be processed if accompanied by the original invoice in combination with the approval certificate of the product. Therefore, always keep the invoice and the approval certificate together with the warranty documents.

The invoice must show the type of the product and the serial number.

Warranty claims must be submitted immediately following discovery of the fault to the sales partner or to IFEX Technologies GmbH.

Please check the availability of the sales partner in the documents given to you by the sales partner. IFEX Technologies GmbH is available by phone: +49 (0) 4282/ 9306-0, by fax: +49 (0) 4282/ 9306-26 or by e-mail at info@ifextechnologies.com.

After consulting IFEX Technologies GmbH the customer should return the defective product to IFEX Technologies GmbH.

In the event of a warranty claim IFEX Technologies GmbH will pay the costs for the resulting labour and any required materials or replacement parts.

The costs of the transport to and from IFEX Technologies GmbH will be accounted separately, without the common additional charges net/ net.

The warranty is limited to restoring the performance features and condition of the original product prior to the warranty claim. In this respect it is always sufficient for the affected product to fulfill the test requirements in accordance with the IFEX Technologies specifications for the original product. The warranty is fulfilled at the discretion of IFEX Technologies GmbH either by repairing or replacing the defective device. In cases of material and/ or processing defects, defective parts shall be replaced with new or as-new reconditioned parts. If necessary, the complete product should be exchanged for an identical product or an alternative product offering the same level of functionality. The value of the warranty service is always limited to the value of the defective product.

The defective parts removed or replaced from a product during the course of warranty action shall become the property of IFEX Technologies GmbH.

Genuine IFEX Technologies parts installed under warranty in an IFEX Technologies product are only covered by the remaining duration of the warranty of the overall device.



Warranty exclusions

Defects caused by improper use are excluded from the warranty. Improper use of the equipment is taken to be any operation of the product under conditions which do not meet the terms of proper use described in the operating manual or documentation of the product.

The warranty also does not cover the following points:

- Wearing parts and consumable materials
- Diagnosis and rectification of defects caused by improper use or improper maintenance of the device by the customer or third parties. Improper actions include operations that are not compatible with the instructions contained in the product manual.
- Force majeure (lightning strike, floods, war etc.)
- Dirt, seals or stickers
- Any other circumstances for which IFEX Technologies cannot be held responsible.

The warranty is rendered null and void if:

- IFEX Technologies products are operated or fitted with parts, components or peripherals which have not been approved for that purpose by IFEX Technologies GmbH.
- The device is covered with irremovable seals, stickers or similar.
- The original warranty sticker at IFEX Technologies products is damaged or removed respectively if manipulations at those stickers are apparently.
- Services/ repairs or other changes to the product are carried out by persons who have not been authorized by IFEX Technologies GmbH to carry out such work.

This clause is not valid if the customer can prove that any defects were neither caused by nor arose as a consequence of such events.

Limitation of liability

Any claims of the party entitled to the warranty which exceed the scope of terms expressly mentioned in these warranty conditions are excluded. This also applies in particular with regard to claims to compensation for subsequent damages, loss of profits, data losses or information losses or damages following of the inoperability or missing of the product due to maintenance or repair.

Applicable law

The warranty is subject to the applicable laws in the country of purchase and is to be interpreted in agreement with the said laws.

IFEX 3000

IFEX 3000 - 100

Typ IFEX 3035 and IFEX 3050

ATTENTION!

ANY UNAUTHORIZED ALTERATION TO

THE EQUIPMENT WOULD RESULT IN

LOSS OF APPROVAL AS WELL IN

LOSS OF GUARANTEE!



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