Operating Instructions
Media Supply System
Bestapower
W5-traxX

Order number
0489xx-xxxx

Index

1 Definition ........................................................................................................................................................................................ 2
2 Operating conditions ...................................................................................................................................................................... 2
2.1 Intended use ................................................................................................................................................................ 2
3 Safety instructions ......................................................................................................................................................................... 3
3.1 General safety instructions ................................................................................................................................................. 3
3.1.1 Safety instructions and hazard information ................................................................................................................ 3
3.1.2 General safety regulations and organizational measures ........................................................................................... 4
3.1.3 Special safety advice ................................................................................................................................................... 4
3.2 Hints for protection from danger .................................................................................................................................. 5
3.2.1 Danger by mechanical influences ............................................................................................................................ 6
3.2.2 Danger by electrical power ........................................................................................................................................ 6
3.3 Technical status ............................................................................................................................................................... 7
3.4 Recurring tests ............................................................................................................................................................ 7
3.5 Hints for the use of the operating instructions ............................................................................................................. 7
4 Additional documents .................................................................................................................................................................. 8
1 Definition

Bestapower W^5-traxX is a media supply system for mobile consumers which combines a 2” compressed air pipe with an aluminum profile for trolleys. With the adaptation of energy guiding chains, conductor rails or festoon systems, the trolleys can easily be supplied with electrical energy and data signals.

2 Operating conditions

Bestapower W^5-traxX is admitted for the following operational conditions:

<table>
<thead>
<tr>
<th>Operation mode:</th>
<th>Manual operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspension distance:</td>
<td>Maximum 4 m</td>
</tr>
<tr>
<td>Maximum load:</td>
<td></td>
</tr>
<tr>
<td>Point load</td>
<td>100 kg</td>
</tr>
<tr>
<td>Section load</td>
<td>250 kg</td>
</tr>
<tr>
<td>Travel speed:</td>
<td>Maximum 80 m/min</td>
</tr>
<tr>
<td>Operating pressure:</td>
<td>Maximum 12 bar</td>
</tr>
<tr>
<td>Environmental conditions:</td>
<td>Indoors, +5 °C to +60 °C</td>
</tr>
<tr>
<td>Interfaces:</td>
<td>2” ball valve at feeding point, outlet with ½” mini ball valve; electric feed trough terminal boxes</td>
</tr>
</tbody>
</table>

See technical datasheet and specific documentations for load diagram, pressure drop and technical details.

INFORMATION!
See Technical datasheet and additional documentation (TDB0489-0001-E, project specific documentation)

2.1 Intended use

The system has been constructed according to the latest technology and the approved safety-engineering regulations and has been checked for safety by the manufacturer. Suspended track installations may only be operated in a technically perfect condition according to their intended use and by trained, safety-conscious personal. Intended use of the system also includes the observance of the operating, maintenance and repair conditions specified by the manufacturer.
Unintended use includes:

- Exceeding the projected loads
- Passenger transportation
- Exceeding the projected working pressure
- Use of unsuitable mounting elements
- Use of inappropriate cables and hoses
- Operation in unsuitable atmospheric conditions
- Projecting edges at insufficient distance to the installation

The manufacturer is not responsible for any damage to the installation or to third parties if the installation is not used as intended.

3 Safety instructions

3.1 General safety instructions

3.1.1 Safety instructions and hazard information

The following symbols and designations will be used in these operating instructions as safety and alarm signs:

![WARNING! Threat to life or physical health!](image)
Severe injury or deadly accidents can happen when working and operating instructions with this symbol are not observed accurately. Instructions of the category "Warning" must be strictly observed.

![ATTENTION! Damage to machines and property!](image)
Severe damage to machines and/or material can be the consequence, if working and operating instructions with this symbol are not observed accurately. Instructions of the category "Attention" must be followed precisely.

![ADVICE!](image)
Working will be more effective and easier, if working and operating instructions with this symbol are observed.

![INFORMATION!](image)
Refers to another valid document.
3.1.2 General safety regulations and organizational measures

The operating instructions must be within reach at the location of the installed system any time. In addition, it is important to observe the general legal regulations for the prevention of accidents and protection of the environment.

Before starting work the operating and maintenance staff must have read and understood the operating instructions and in particular the safety directives. Protective equipment for the operating and maintenance staff must be provided and worn. The operator of the installation or an authorized person must supervise the correct handling of the system with respect to safety and prevention of damage.

3.1.3 Special safety advice

During transport and assembly:

- Fasten components and larger assembly groups carefully to suitable and technically faultless hoist units and load-carrying equipment with sufficient load capacity.

When connecting:

- Connections must only be finished by specially skilled staff.
- The customer must imperatively install a safety valve.

**WARNING!**

A safety device for the feeding system of compressed air (pressure control valve) must be provided by customer! The safety device must inhibit a system overpressure of more than 10% above the allowed operating pressure!

Prior to commissioning:

- Visual control of the entire installation and its components.
- Check safety relevant parts and equipment (fittings, safety devices, ...).
- Conduct a pressure test under real operating conditions. Get an expert to perform the test and document the results.

When commissioning:

- Visual controls and compulsory tests must be carried out prior to the first commissioning and during daily commissioning.
- Avoid each operation that is causing safety risk.
- Only operate the system with functional protection and safety devices.
- Notify any damaged parts of system immediately to the responsible person.
- Protect the system from unintended or unauthorized use.
For cleaning / maintenance / repair / servicing:

- Cordon off the maintenance and repair area largely.
- Switch off electric and pneumatic supply and secure the system against unexpected switch-on during maintenance works (main supplies for electrical power and compressed air).
- Deaerate the pneumatic components completely.
- Do not use machine parts as access aids.
- Secure detached parts from falling down.
- Safety devices that have been removed for assembly, maintenance and repair works, must be remounted and checked immediately after termination of those works.
- Check cables and hoses for chafe marks and damage.
- Care for safe and environmentally sound emptying, collection and disposal of operating and auxiliary supplies.
- Observe the maintenance and inspection intervals specified in the maintenance instructions.
- Observe the statements in the operating/maintenance instructions for the replacement of components.
- Retighten and secure the bolted connections detached during maintenance works as prescribed.
- Replace mounting elements and seals that are no longer usable (e.g. self-locking nuts, washers, splints, O-rings, seals, glued or micro-encapsulated screws).
- Cleaned, wiped-off or removed lubricated or greased spots must be relubricated as prescribed after termination of the maintenance and repair works.

**INFORMATION!**

See also maintenance instruction WV0489-0001-E and corresponding installation instructions of components

### 3.2 Hints for protection from danger

Dangerous areas must be clearly marked by warning signs and secured by barriers. It must be ensured that advice about dangerous areas will be observed.

Dangers can be produced by:

- improper application,
- insufficient observance of safety instructions,
- insufficient execution of test and maintenance works.
3.2.1 Danger by mechanical influences

**WARNING! Threat to life or physical health!**
Unconsciousness and injuries by:
- Crushing, shearing, cutting, winding
- Pulling in, pushing, stinging, rubbing
- Sliding, stumbling, falling

**Causes:**
- Crushing, shearing and winding areas
- Breakage and bursting of parts

**Possibilities of protection:**
- Keep floor, equipment and machines clean
- Seal leakage
- Observe required safety distances

3.2.2 Danger by electrical power

At first, all disturbances must be analyzed, then the cause of the disturbance must be remedied. Works on electrical installations or operating equipment must only be carried out by qualified staff or by instructed people under the direction and supervision of a qualified expert and according to the electrical regulations.

**WARNING! Threat to life or physical health!**
Death by electric shock, injuries and burns by:
- Touching
- Faulty insulation
- Faulty maintenance and repair
- Short circuit

**Causes:**
- Contact with, touching of or immediate proximity to not insulated current-carrying, live parts
- Application of a tools without insulation
- Exposed electro-conductive parts after breakdown of the insulation
- Insufficient execution of the safety control after maintenance works
- Installation of incorrect fuses

**Possibilities of protection:**
- Machine and system parts that are subject to maintenance works must be disconnected from the power supply and secured against reactivation.
- Confirm by testing that power has been disconnected and cover or block off neighboring parts still carrying electrical current.
- Control the electric equipment at regular intervals
- Replace loose or damaged cables immediately
- Always replace blown fuses by equivalent ones
- Avoid touching live parts
- Use voltage-insulated tools
3.3 Technical status

These operating instructions have been issued in August 2006.

3.4 Recurring tests

Each operator must duly enter all tests, maintenance and repair works into the test book and have them approved by the responsible person / surveyor. Warranty will be restricted in case of inexact or missing entries.

ATTENTION! Damage to machines and property!
Apparatus and equipment must be checked by a technical expert at regular intervals. Basically he has to carry out visual and functional controls, ascertaining the condition of components as to damage, abrasion, corrosion and other changes. Moreover he will judge about the completeness and efficiency of the safety devices. For the evaluation of wearing parts it may be required to dismount the parts.

ATTENTION! Damage to machines and property!
All periodic tests have to be initiated by the operator.

INFORMATION!
See maintenance instruction WV0489-0001-E for recurring tests!

3.5 Hints for the use of the operating instructions

As a supplement to the operating instructions the operator must observe the following documentations (if applicable):

- Order-related documentations
- Installation instructions
- Maintenance instructions
- Operating instructions of installed electrical equipment
- Drawings
- Spare parts lists
- Drafts
4 Additional documents

INFORMATION!
The following documents refer to the Bestapower W5-traxX media supply system and must be considered:

- Technical Datasheet TDB0489-0001-E
- Installation Instructions of components in use MV0489-XXXX
- Maintenance instruction WV0489-0001-E
- Documentation of customized system installations