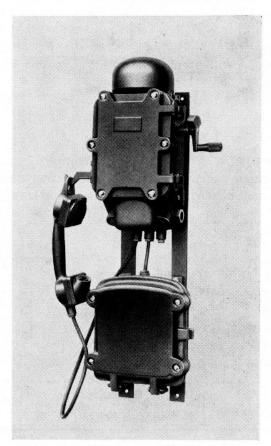


TESLA MINE TELEPHONE INSTRUMENT "T 641 E 2963" L. B. System



SCANNED 2009, PAUL-F.COM

APPLICATION

The instrument with magneto generator is designed for telephone intercommunication in localities with explosive atmosphere, e. g., in mines, refineries, chemical works, etc. Direct intercommunication facilities of two stations or of max. five stations connected in parallel. If a higher number of telephone sets are used they must operate in conjunction with I. b. manual telephone exchange provided with calling drops.

DESCRIPTION

The rigidly built instrument is of cast-steel. It consists of two selfcontained parts, i. e., the telephone proper and the battery box. Both these parts are suspended on two mounting bars and interconnected by a rubber cable passing through air-tight metal grommets.

A magneto bell with a bronze gong, diameter 130 mm, is mounted at the top of the instrument. The bell iron hood is fastened to the box with two locked screws which can be loosened only by a special wrench. The bell leads are brought into the box through two air-tight grommets. The box is devided into two compartments. In the larger there are the base plate with the magneto generator, induction coil, switch hook, switching device and terminal block. The connecting line as well as the handset and battery cables are brought through rubber-packed metal grommets into the smaller compartment. Both the compartments are interconnected by means

of a air-tight six-way grommet. The generator crank with its counterweight is on the right side of the set.

The shaft, transmitting the rotary motion to the magneto generator, passes through a bearing in the wall of the box. The switch hook has also a bearing in the left wall of the instrument. The rugged aluminium alloy handset is suspended on the hook. The cover, with finished contact surface, is fastened with six locked screws which can be loosened only by a special wrench. Also the cover, housing the terminals, has finished contact surface and is fastened with two special screws.

The battery box houses two dry cells, model \$ 3, providing power supply to the station. The battery box as well as its cover have finished contact surfaces and are assembled by means of special screws.

An extension receiver, model T 512 E 52560, for which a spare outlet is provided, is available on request.

ADVANTAGES

Safe operation in localities with explosive atmosphere, and of course, in damp places, too. The telephone box is tested by a static overpressure of 8 atmospheres, the battery box by 6 atmospheres. After final assembly each telephone is officially tested and checked.

TECHNICAL DATA

Magneto generator: Output 5 VA, resistance 400Ω , frequency $20 \div 25$ c/s.

Magneto bell: $2\times200\,\Omega$, 75 V, $20 \div 25$ c/s.

Induction coil: 1st winding 3.7Ω , 2nd winding 32Ω ,

3rd winding 100Ω , 4th winding 300Ω .

Anti-side-tone.

Battery voltage for the microphone circuit: 3 V. Max. permissible resistance of the line: $600 \,\Omega$.

| ltem | Model | Dimensions mm | | | Net weight | Order | |
|--|---------------------------|---------------|--------|-------|------------|-------|-------|
| | | width | height | depth | kg | No. | Price |
| Mine telephone I.b. system, explosionproof | TESLA T 641 E 2963/III | 415 | 800 | 170 | 37.5 | 8 | |
| Ditto but with extension receiver | TESLA T 641 E 2928/III | 415 | 800 | 170 | 38.5 | | |

