

Battery Electric Protective Equipment

Customer Service

LIEBHERR

Liebherr-Electronics and
Drives GmbH



Maximum safety. Compact size.



The comprehensive set for working under voltage worry-free

Liebherr's battery electric protective equipment set has been specially developed for specialised personnel who work on electrical systems. The maintenance and repair of electrically powered machines and vehicles not only requires employees to be appropriately qualified, but also certified specialised equipment.

The Liebherr tool set offers a comprehensive solution: It contains all the insulated tools, measuring instruments and personal protective equipment necessary when working on battery-powered machines. This means you are optimally equipped for safe live working. The set also includes material for cordoning off the work area.

Protective equipment case

Safety has top priority especially when working on high-voltage systems. With the tested Liebherr PPE case, you are always on the safe side. The case offers a complete set of equipment for safe working on electrical systems. From special helmets to insulating mats, everything is included.

Measuring device case

All measuring devices are certified in accordance with the relevant standards and are especially suitable for measurements of voltages up to 1000 VAC/1500 VDC. The case contains everything required to carry out measurements after a part has been exchange.

Insulated tool case

The tool case offers a complete range of insulated hand tools required for live work on Liebherr devices. The tools are suitable for installation, commissioning, maintenance or repair work on electrical systems up to 1000 VAC/1500 VDC.

Everything secure. Everything inside.

Protective equipment case



Insulated tool case



Measuring device case



Insulated measuring and hand tools



Insulation measuring device

Measure insulation and potential equalisation



Voltage and continuity tester

Determine absence of voltage and voltage level



Current clamp

Guarantee freedom from liability



Insulated torque spanner

Correct torque, even when working live



Tools

Use the most popular hand tools



Protective equipment

Arc fault protective sheath

APC 2 coat



Protective gloves

Combination of 2 gloves for APC 2



Safety helmet with visor and hearing protection

APC 2 protection for head and face



Warning sign

Labelling of the machine



Barrier material

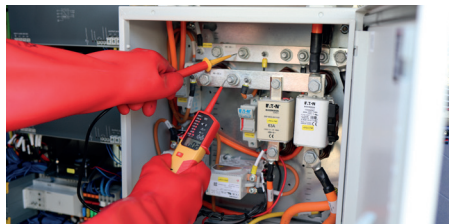
Cordoning off of the work area



Many applications. One solution.



As electrification increases, so do the requirements for special protective equipment. The battery-electric protective equipment set from Liebherr offers customised solutions for a wide range of applications in which high voltages require safe and reliable equipment. This minimises the risk of life-threatening electric shock.





Safety without borders



The set fulfils international safety standards and can therefore be used in more than 50 countries. Country-specific requirements must be checked before use.



The battery-operated safety device set can be ordered and delivered worldwide.



Orders via Liebherr dealers under the following article number: 14944514.



If you have any questions, please contact CustomerService.LED-solution@liebherr.com

Compliance of the tools

Hand tools	DIN EN IEC 60900	1000 VAC/1500 VDC
Current clamp	IEC EN 61010-1, IP40	CAT IV 1000 V
Voltage tester	IEC EN 61243-3:2014, IP64, CE	CAT III 1000 V/CAT IV 600 V
Insulation measuring device	CSA according to standard CSA/CAN C22.2 Nr. 61010,1-04; TÜV according to standard IEC EN 61010-1 2nd edition	Overvoltage category in accordance with ANSI/ISA 82.02.01 (61010-1) 2004, CAN/CSA-C22.2 NO. 61010-1-04 and IEC EN 61010-1, 2nd edition: CAT IV 600 V
Combination of gloves	Tested APC 2 after EN 61482-1-2. EN 60903:2003, IEC 60903:2014, EN ISO 21420:2020, EN 388:2016 + A1:2018, EN 407:2004 EN 388:2016 + A1:2018, EN 407:2004 EN 388:2016 + A1:2018, EN 407:2004	1000 VAC/1500 VDC
Visor	EN 166:2001/GS-ET 29/EN 170:2002	3 (liquid droplets and splashes) 8-2 (arc fault according to GS-ET 29) 9 (hot solids and molten metal) B (120 m/s)
Coat	EN ISO 11611:2015/EN ISO 11612:2015/EN 1149-5:2018/ EN 61482-2:2020/EN ISO 13688:2013+ EN ISO 13688:2013/A1:2021	in 2-layer areas of the jacket (front and sleeves) = 46 cal/cm² (EC 61482-1-1 ATPV)
Hearing protection	DIN EN IEC 60900	SNR: 28 dB
Helmet	EN 397:2012 + A1:2012/EN 50365:2002	EN397 with additional very low temperature (-30 °C) and „Molten Metal“ EN50365 (1000VAC) fulfilment of ANSI/ISEA, Type I, Class E (20 kV) requirements