Claims

1. A modular LED light (1), in particular for explosive areas, having at least one LED module (2, 3) and one central power supply module (4), wherein at least the LED module (2, 3) is detachably attached to a housing module (5), which housing module (5) has two arrangement planes (6, 7) in the vertical direction (8), wherein at least power supply connectors (9) for the modular LED light and connection lines (10) to the central power supply module (4) and to the LED module (2, 3) are arranged in the upper arrangement plane (6) and the LED module (2, 3) and a driver device (15) on an LED module receiving element (11, 14) or on the central power supply module are arranged in the lower arrangement plane (7), wherein the housing module (5) has at least one LED module receiving unit (11) that is arranged lateral to the central power supply module (4) and in which an LED power supply interface (12) is arranged in the LED module receiving element for supplying electrical power to the LED module (2, 3) in the LED module's (2, 3) usage position (13).

2. The modular LED light according to claim 1, wherein LED module receiving elements (11, 14) having LED power supply interfaces (12) for arranging two LED modules (2, 3) are embodied on both sides of the central power supply module (4), and
wherein the central power supply module (4) is detachably connected to the driver device (15), wherein
a plurality of LEDs (16) are arranged in each LED module (2, 3), especially as LED conductor card (17).

3. Modular LED light according to claim 1 or 2, characterized in that a light focusing device (18) for light distribution is associated with each LED or each group LEDs of an LED module, and
each LED module (2, 3) has a module housing (19) made of a thermally conductive plastic material and has a cover (21) that is transparent or translucent in the light emission direction (20).

4. A modular LED light according to claim 3, wherein the modular housing (19) is made of a thermally conductive plastic material and has cooling fins and

the LED module (2, 3) has a second, shell-shaped, protective housing (22) in which the module housing (19) is arranged.

5. A modular LED light according to any of the preceding claims, wherein the LED module (2, 3) may be snapped into the LED module's (2, 3) usage position (13) and an articulated device (23) is embodied between LED module (2, 3) and housing module (5) and
the articulated device (23) is formed between an outer edge (26) of the housing module (5) and a top (24) of the protective housing (22), wherein there is at least one articulated device and preferably three or more.

6. A modular LED light according to any of the preceding claims, wherein at least one articulated hook (25) for suspending on the outer edge (26) of the housing module (5) and in particular of the LED module receiving element projects from the top (24) of the protective housing (22), by means of which articulated hook (25) the LED module (2, 3) may be pivoted into the LED module's (2, 3) usage position (13), wherein in the usage an electrical connection is produced between LED module (2, 3) and LED power supply interface (12), and
the protective housing (22) is embodied shock resistant or impact resistant.

7. A modular LED light according to any of the preceding claims, wherein the upper arrangement plane (6) furthermore has continuous wiring for connecting to further LED lights (1), and
the LED module receiving element (11, 14) is embodied for receiving a blind cover, or a battery module.

8. A modular LED light according to any of the preceding claims, wherein the LED modules (2, 3, 5, 15) are embodied at least in the "intrinsically safe" type of protection against ignition and
the electrical connection between the LED modules and the central power supply module (4) is embodied in the "increased safety" type of protection against ignition and
the central power supply module (4) is embodied in the "powder filling" type of protection against ignition.

9. A modular LED light according to any of the preceding claims, wherein the central power supply module (4) has output current circuits for the LED module that are intrinsically safely limited in power and in voltage or in current, and
the power supply connection (9) or the LED power supply interface (12) is embodied or wired in the “increased security” or “flame-proof enclosure” type of protection against ignition.

10. A modular LED light according to any of the preceding claims, wherein the LEDs (16) are arranged in an LED module (2, 3) wired in series or parallel, and
the LEDs (16) are provided by group in one plane or in a curved arrangement in the LED module (2, 3), and
the LED modules (2, 3) are detachably fixed in the LED module’s (2, 3) usage position using a locking device (27).

11. A modular LED light according to claim 10, wherein the locking device (27) is coupled to a voltage interruption device and
the central power supply module (4) has a cooling device (28), and
the driver device (15) has a honeycomb structure, wherein
a separating metal sheet is arranged in the LED light (1) between upper arrangement plane (6) and lower arrangement plane (7).

12. A modular LED light according to claim 10, wherein the central power supply module (4) is embodied for arranging an LED module, and
the locking device (27) is formed by one or a plurality of fastening screws (30) that joins the protective housing (22) to the LED module receiving element (11).

13. A modular LED light according to claim 4, wherein on top (24) of the modular LED light the protective housing (22) has an opening (32) through which the LED power supply interface (12) and connection device (33) of the module housing (19) may be brought into contact, and
wherein the protective housing (22) has a light outlet opening (31) associated with the cover (21) of the module housing (19), and
LED modules (2, 3) and central power supply module (4) with driver device (15) essentially terminate in a common horizontal plane (35) on a bottom (34) of the LED light (1).

14. A modular LED light according to claim 10, wherein the locking device (27) is embodied in the protective housing (22) as a pivotably borne closing rod (36) that may be brought into engagement with at least one of the locking eyelets (37) projecting from the LED module receiving element (11), and

in the region of the central power supply module (4) the housing module (5) has air slits (38) oriented towards LED modules (2, 3) and in particular towards openings in the protective housing (22).

15. A modular LED light according to any of the preceding claims, wherein connection clamps (40) are embodied as power supply terminal clamps on one or both sides of the central power supply module (4) in the upper arrangement plane (6),

wherein in particular the locking system (36) has an engagement head (44) for engaging a tool from the outside.