

Zone 0 Lighting Unit with cable-connected Power Supply Unit BS 780000 IBExU 06 ATEX 1166 X

Technical Specifications:

BS 780000 (complete device)

Consisting of:

- BS 780100 (lighting unit for zone 0)
- BS 780200 (power supply unit for zone 1)
- BS 780300 (special cable [max. 50 m] on coiling unit)

Primary voltage AC	230 V \pm 10 %
Frequency	50/60 Hz
Voltage range AC	207 to 253 V
Power input	27 W
Output open-circuit voltage DC	3 x U _o = 13.5 V
Short circuit current DC	3 x I _o = 360 mA
Power consumption	3 x 4.3 W = 13 W
Temperature ranges	t _a = - 20 °C ... + 60 °C (T4 application) t _a = - 20 °C ... + 50 °C (T6 application)

Dimensions and weights:

BS 780100 (lighting unit)

Length approx.	323 mm
Width approx.	240 mm
Height approx.	70 mm
Weight approx..	3.6 kg

Type of explosion protection and degree of enclosure protection:

EN 60 079-0 : 2004
 EN 60 079-7 : 2004
 EN 60 079-11 : 2007
 EN 60 079-14 : 2003
 EN 60 079-18 : 2004
 EN 60 079-26 : 2004
 Richtlinie 94/9/EG



II 1G Ex e + ib IIC T6 lighting unit (zone 0)
 II 2G Ex e mb [ib] IIC T6 or T4 power supply unit (outside zone 0)

EN 60 029: minimum IP 66



Operating Instructions

Installation and operation:

The lighting unit of type BS 780100 is designed for application in potentially explosive atmospheres of zone 0, after the work permit has been issued. The lighting unit is portable. It may be installed, mounted or attached in any position. The power supply unit **must** be connected outside the potentially explosive area and **must not be operated within zone 0**. Within zone 0, it is only allowed to operate the lighting unit with the associated connecting cable.

The operator is not allowed to carry out any adjustments of settings and/or repairs of the devices and the cables! Defect equipment may only be repaired by the manufacturer!

The system BS 780000 is put into operation by **positioning the power supply unit within zone 1** and by **connecting and unwinding the mains cable outside the Ex area**, and the **lighting unit BS 780100 can be moved into zone 0** by unwinding the connecting cable.

The lighting unit BS 780000 serves only for mobile utilisation, e. g. for inspection purposes; permanent installation within zone 0 is forbidden. Cleaning the translucent cover has to be carried out by means of damp cloth only. When operating the system the connecting cable has to be uncoiled completely. In order to avoid rusting it is absolutely necessary to repair coating damages of the lighting unit's steel parts.

The operator is entitled to exchange the Ex fuses of the power supply unit according to the installation label (F101 = 500 mA T and F102 = 1250 mA T).

If rated voltages ≥ 250 V occur the fuse F102 will be destroyed by means of a protective circuitry.

The following signals are displayed by means of 5 LED in the window of the power supply unit:

230 V \pm 10 % mains voltage present: green LED

12 V luminaire voltage: green LED

For application in explosion groups IIC and IIB the cable connecting the lighting unit and the power supply unit is metal-sheathed.

For application in explosion group IIA the metal sheath is not required.