Description

The BR385 is an intrinsically safe sounder that produces a loud warning signal in a hazardous area. Forty nine different first stage alarm sounds can be selected by internal switches and each one can be externally changed to a second or third stage alarm sound.

Intrinsic safety

The BR385 has IECEx, ATEX, UKEX and FM gas certification.

Code:

II 1 G Ex ia IIC T4 Ga -40°C ≤ Ta ≤ +60°C

Input safety parameters

terminals + and -

Ui	=	28V
Ii	=	93mA
Pi	=	660mW
Ci	=	0
Li	=	0

terminals S2 and S3

Ui	=	28V
Ii	=	0

Special conditions for safe use

The user shall ensure that the cable entry devices that are fitted will provide an ingress protection that is appropriate to the environment in which the sounder is installed.

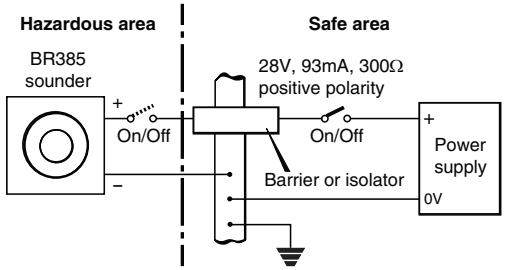
The sounder shall not be directly installed in any process where its enclosure might be electro-statically charged by the rapid flow of a non-conductive media. Only clean the BR385 sounder with a damp cloth.

The equipment shall only be supplied via Terminals + w.r.t. Terminals - from a Zener barrier or galvanic isolator having a maximum open circuit voltage Uo that is ≤ 28V and a maximum short circuit current Io that is ≤ 93mA, where Io is resistively limited. The barrier or galvanic isolator shall be ATEX certified by a notified body.

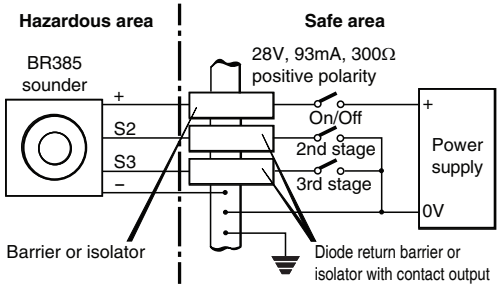
The total capacitance connected to terminals + wrt - (i.e. the capacitance of the cable plus any other capacitance) shall not exceed 83nF.

Manuals, certificates and datasheets can be downloaded from https://www.beka.co.uk/br385

Terminals and circuits



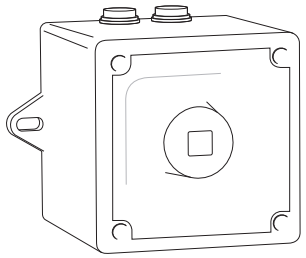
Single stage alarm using single channel Zener barrier or galvanic isolator



Multi-stage alarm using Zener barriers or galvanic isolators

Essential Health & Safety Requirements for BR385 Intrinsically Safe Sounder

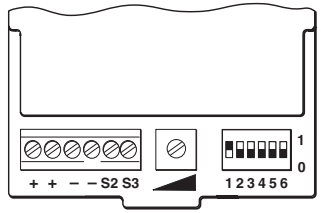
UK



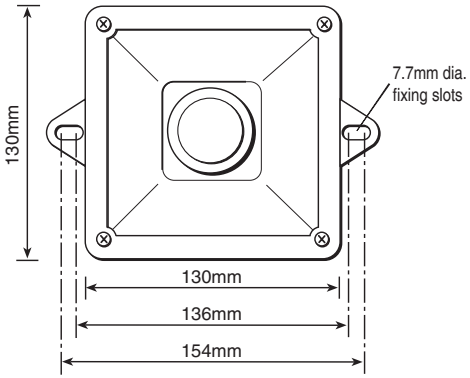
Issue 1
10th June 2024

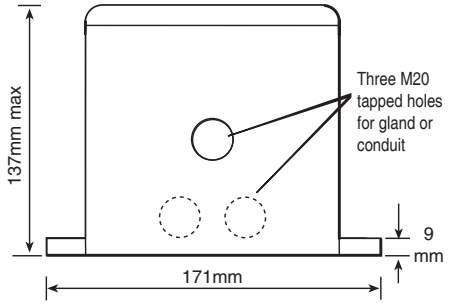
BEKA associates Ltd. Old Charlton Rd, Hitchin, Hertfordshire, SG5 2DA, UK Tel: +44(0)1462 438301 e-mail: sales@beka.co.uk
web: www.beka.co.uk

Terminals, controls and dimensions



Location of field terminals and controls.





Dimensions

Repair

No attempt should be made to repair a faulty BR385 sounder. Suspect sounders should be returned to BEKA associates or your local agent.

Disposal

Sounders should be correctly disposed of, not in household rubbish

EU Declaration of Conformity

This declaration of conformity for electrical apparatus BR385 is issued under the sole responsibility of the manufacturer.

Description
BR385 field mounting intrinsically safe sounder.

Manufactured by
BEKA associates Ltd, Old Charlton Road, Hitchin, Herts. UK. SG5 2DA

Council Directives this equipment complies with:

2014/34/EU (ATEX Directive)

Relating to equipment and protective systems intended for use in potentially explosive atmospheres.

Provisions of the Directive fulfilled by the equipment:

Group II Category 1G
Ex ia IIC T4 Ga Ta -40°C to +60°C

Notified Body for EU-Type Examination
CSA Group 2813, The Netherlands B.V.

Notified Body for production
INTERTEK ITALIA SPA 2575
Via Guido Miglioli, 2/A 20063
Cernusco sul Naviglio (MI) Italy

EU-Type Examination Certificate
CSA06ATEX2032X Issue 0

Standards used:
EN 60079-0:2012/A11:2013; EN 60079-11:2012 and EN 60079-26:2014 Ed 3.0.
Compliant with EN IEC 60079-0:2018

2014/30/EU (EMC Directive)

Standards used:
EN 61326-1:2021

2011/65/EU (RoHS Directive) relating to hazardous substances in electronic and electrical equipment.

2015/863/EU additional substances added by amending Annex II to Directive 2011/65/EU as regards the list of restricted substances.

CE mark first affixed in 2006

Authorised Signatory: Issue 16 19th Jan 2023

Olivier Lebreton CEng MIET
Managing Director