

# Electronic Ignition Units EBI4 Series



## General Data Sheet

For specific information on this product, please contact Danfoss Burner Components

The EBI4 series is electronic ignition units for intermittent ignition between 2 electrodes or 1 electrode and frame in small and medium size oil or gas burners.

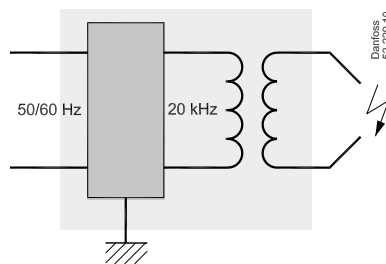
Low weight and small dimensions, due to high frequency operation, makes the EBI4 series very suitable for use in modern compact burners.

Connections with a plug on the primary side and bushes on the secondary side make installation and service quick and simple.

### Applications and Features

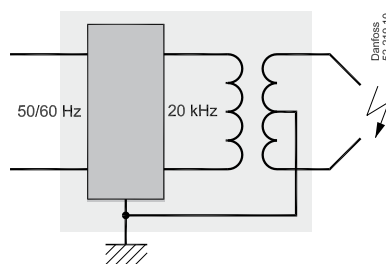
- 1- or 2-pole ignition
- Low power consumption due to high efficiency (new technology)
- Complies with the RoHs and WEEE directives

- EMC according to EN 55014-1 and EN 55014-2
- Earth connection through the primary cable
- Same dimensions and flexible mounting as the well-known EBI series



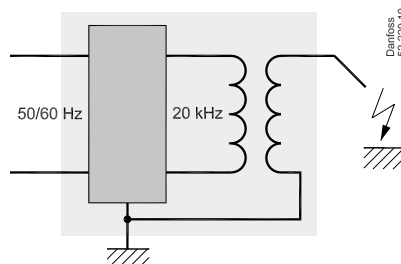
### EBI4

- Oil/gas burners
- 2-pole ignition
- 33% ED at 60°C
- Top or front connection for secondary cables
- 230 V



### EBI4 M

- Oil/gas burners
- 2-pole ignition
- Secondary mid-point connected to earth/frame
- 33% ED at 60°C
- Top or front connection for secondary cables
- 230 V



### EBI4 1P

- Gas burners
- 1-pole ignition between 1 electrode and frame
- 33% ED at 60°C
- Top or front connection for secondary cables
- 230 V

## Technical Data

| Type                         | EBI4  | EBI4 M                                   | EBI4 1P                             |
|------------------------------|---|--|-------------------------------------|
| Mains connection             | 230 V - 0.25 A - 50/60 Hz - 60 VA   |  |                                     |
| Working range                | 187 - 255 V   |  |                                     |
| Main fuse                    | max. 10 A   |  |                                     |
| Secondary connection*        | 15 kV amp.<br>40 mA (rms)<br>20 kHz   | 2 × 7.5 kV amp.<br>40 mA (rms)<br>20 kHz | 12 kV amp.<br>40 mA (rms)<br>20 kHz |
| ED in 3 minutes (cutting in) | 33% at 60°C   |  |                                     |
| Ambient temperature          | -10°C to +60°C  |  |                                     |
| Storage temperature          | -25°C to +85°C  |  |                                     |
| Enclosure                    | IP 40 (Not for secondary connections)   |  |                                     |
| EMC (Generic Standard)       | Emission EN 55014-1<br>Immunity EN 55014-2  |  |                                     |
| Primary connection           | 3 × 0.75 mm <sup>2</sup> cable with special plug. Cables in 7 standard lengths from 180 mm to 630 mm<br>3 × 0.75 mm <sup>2</sup> cable with standard AMP connection |  |                                     |
| Secondary connections        | 2 × Ø4 mm plugs   |  | 1 × Ø4 mm plugs                     |
| Earth connection             | Through the primary cable   |  |                                     |
| Distance between electrodes  | Recommended 2.5 mm to 5.0 mm  |  |                                     |
| Weight                       | 235 g   |  |                                     |

\* Avoid use of divergent electrodes due to risk of electrical cable break down and too high ignition voltage.

## Dimensions and Connections

| EBI4  | EBI4 M | EBI4 1P |  |
|-------|--------|---------|--|
| a+b+c | a+b+c  | b+c     | a: Left terminal<br>b: Right terminal<br>c: Earth connection |

