



Ignition Units

EBI4 series

Description

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.

Features & Benefits

- 1- or 2-pole ignition
- Low power consumption due to high efficiency (new technology)
- Earth connection through the primary cable
- Same dimensions and flexible mounting as the well-known EBI series
- CE-marking in accordance with the directives: EMC, LVD, RoHS

Applications

- Oil burners
- Gas burners

Ordering

Product code numbers

Type	Housing	Supply voltage [V] AC	Code number
EBI4	Standard	230	052F4030
EBI4	Special	230	052F4031
EBI4 M	Standard	230	052F4038
EBI4 1P	Standard	230	052F4040
EBI4	Standard	230	052F4041
EBI4 M	Standard	230	052F4042
EBI4	Standard	230	052F4043
EBI4 1P	Special	230	052F4044
EBI4 M S	Standard	230	052F4045
EBI4 1P	Standard	230	052F4050
EBI4	Special	230	052F4054
EBI4 M	Special	230	052F4055
EBI4 M	Standard	230	052F4057
EBI4 1P	Standard	230	052F4058
EBI4 M	Standard	230	052F4059
EBI4	Standard	230	052F4064
EBI4 M	Standard	230	052F4065
EBI4 1P	Standard	120	052F4066
EBI4 1P	Standard	120	052F4067
EBI4 1P	Standard	230	052F4068
EBI4	Standard	230	052F4230
EBI4	Special	230	052F4231
EBI4 M	Standard	230	052F4238



EBI4 1P	Standard	230	052F4240
EBI4	Standard	230	052F4241
EBI4 M	Standard	230	052F4242
EBI4	Standard	230	052F4243
EBI4 1P	Special	230	052F4244
EBI4 1P	Standard	230	052F4250
EBI4 M	Special	230	052F4255
EBI4 M	Standard	230	052F4257
EBI4 1P	Standard	230	052F4258
EBI4 M	Standard	230	052F4259
EBI4	Special	230	052F4260
EBI4	Special	230	052F4261
EBI4 1P	Standard	120	052F4263
EBI4 M	Standard	230	052F4265
EBI4 1P	Standard	120	052F4266
EBI4 1P	Standard	230	052F4268
EBI4 1P	Standard	230	052F4269

Accessories code numbers

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.



052F0131

EBI CABLE, 160 mm. SPECIAL HOUSING

EBI CABLE, 160 mm. SPECIAL HOUSING

Related products

052F4031

052F4041

052F4044

052F4054

052F4231

052F4244

052F4261



052F0151

EBI CABEL 500 mm. SPECIAL HOUSING

EBI CABEL 500 mm. SPECIAL HOUSING

Related products

052F4031

052F4041

052F4044

052F4054

052F4231

052F4244

052F4261



052F0153

EBI CABLE 1000mm. SPECIAL HOUSING

EBI CABLE 1000mm. SPECIAL HOUSING

Related products

052F4031

052F4044

052F4054

052F4231

052F4244

052F4261



052F2130

EBI CABLE, 300 mm. SPECIAL HOUSING

EBI CABLE, 300 mm. SPECIAL HOUSING

Related products

052F4031

052F4044

052F4054

052F4231

052F4244

052F4261



052F0155

EBI CABLE 1155 MM WITH STOCKO CONN.

EBI CABLE 1155 MM WITH STOCKO CONN.

Related products

- 052F4031
- 052F4044
- 052F4054
- 052F4231
- 052F4244
- 052F4261



052F0067

BUSH FOR IGNITION UNIT TYPE EBI

BUSH FOR IGNITION UNIT TYPE EBI

Related products

- 052F4030
- 052F4031
- 052F4041
- 052F4044
- 052F4054
- 052F4064
- 052F4066
- 052F4230
- 052F4231
- 052F4238
- 052F4240
- 052F4241
- 052F4242
- 052F4243
- 052F4244
- 052F4250
- 052F4257
- 052F4259
- 052F4261
- 052F4265
- 052F4268



052F0060

BUSH FOR IGNITION UNIT TYPE EBI

BUSH FOR IGNITION UNIT TYPE EBI

Related products

- 052F4030
- 052F4031
- 052F4041
- 052F4044
- 052F4054
- 052F4064
- 052F4066
- 052F4230
- 052F4231
- 052F4238
- 052F4240
- 052F4241
- 052F4242
- 052F4243
- 052F4244
- 052F4250
- 052F4257
- 052F4259
- 052F4261
- 052F4265
- 052F4268



052F0130

EBI CABLE, 300 mm. SPECIAL HOUSING

EBI CABLE, 300 mm. SPECIAL HOUSING

Related products

- 052F4031
- 052F4041
- 052F4044
- 052F4054
- 052F4231
- 052F4244
- 052F4261
- 052F4265



052F0132

EBI CABLE, 320 mm. SPECIAL HOUSING

EBI CABLE, 320 mm. SPECIAL HOUSING

Related products

- 052F4031
- 052F4041
- 052F4044
- 052F4054
- 052F4231
- 052F4244
- 052F4261



052F0134

EBI CABLE, 313 mm. SPECIAL HOUSING

EBI CABLE, 313 mm. SPECIAL HOUSING

Related products

- 052F4031
- 052F4044
- 052F4054
- 052F4231
- 052F4244
- 052F4261



052F0136

EBI CABLE, 800 mm. SPECIAL HOUSING

EBI CABLE, 800 mm. SPECIAL HOUSING

Related products

052F4031

052F4041

052F4044

052F4054

052F4231

052F4244

052F4261



052F5037

EARTH CABLE

EARTH CABLE

Related products

052F4031

052F4041

052F4044

052F4054

052F4066

052F4231

052F4240

052F4243

052F4244

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F0154

EBI CABLE 980 mm. SPECIAL HOUSING + STOCKO

EBI CABLE 980 mm. SPECIAL HOUSING + STOCKO

Related products

052F4031

052F4041

052F4044

052F4054

052F4231

052F4244

052F4261



052F2132

EBI CABLE, 320 mm. SPECIAL HOUSING

EBI CABLE, 320 mm. SPECIAL HOUSING

Related products

052F4031

052F4044

052F4054

052F4231

052F4244

052F4261



052F0064

BUSH AND PLUG FOR IGNITION UNIT TYPE EBI

BUSH AND PLUG FOR IGNITION UNIT TYPE EBI

Related products

052F4030

052F4031

052F4041

052F4044

052F4054

052F4064

052F4066

052F4230

052F4231

052F4238

052F4240

052F4241

052F4242

052F4243

052F4244

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5056

EBI CABLE L=200

EBI CABLE L=200

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5052

EBI CABLE L=750

EBI CABLE L=750

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5079

EBI CABLE L=1000

EBI CABLE L=1000

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5039

EBI CABLE, 119 mm. UL

EBI CABLE, 119 mm. UL

Related products

052F4261



052F5051

EBI CABLE L=400

EBI CABLE L=400

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5057

EBI CABLE L=3000

EBI CABLE L=3000

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5070

EBI CABLE L=2000

EBI CABLE L=2000

Related products

052F4030

052F4041

052F4045

052F4064

052F4066

052F4230

052F4238

052F4240

052F4242

052F4243

052F4250

052F4257

052F4259

052F4261

052F4265

052F4268



052F5054
EBI CABLE L=500
EBI CABLE L=500

Related products

- 052F4030
- 052F4041
- 052F4045
- 052F4064
- 052F4066
- 052F4230
- 052F4238
- 052F4240
- 052F4242
- 052F4243
- 052F4250
- 052F4257
- 052F4259
- 052F4261
- 052F4265
- 052F4268



052F5050
EBI CABLE L=300
EBI CABLE L=300

Related products

- 052F4030
- 052F4041
- 052F4045
- 052F4064
- 052F4066
- 052F4230
- 052F4238
- 052F4240
- 052F4242
- 052F4243
- 052F4250
- 052F4257
- 052F4259
- 052F4261
- 052F4265
- 052F4268

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.

Spare parts code numbers



052F0067
**BUSH FOR IGNITION UNIT
TYPE EBI**
BUSH FOR IGNITION UNIT TYPE
EBI

Related products

- 052F4045



052F0060
**BUSH FOR IGNITION UNIT
TYPE EBI**
BUSH FOR IGNITION UNIT TYPE
EBI

Related products

- 052F4045



052F0064
**BUSH AND PLUG FOR
IGNITION UNIT TYPE EBI**
BUSH AND PLUG FOR IGNITION
UNIT TYPE EBI

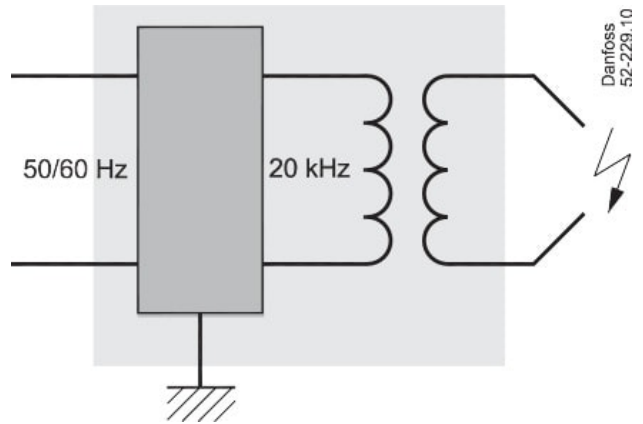
Related products

- 052F4045

Functions

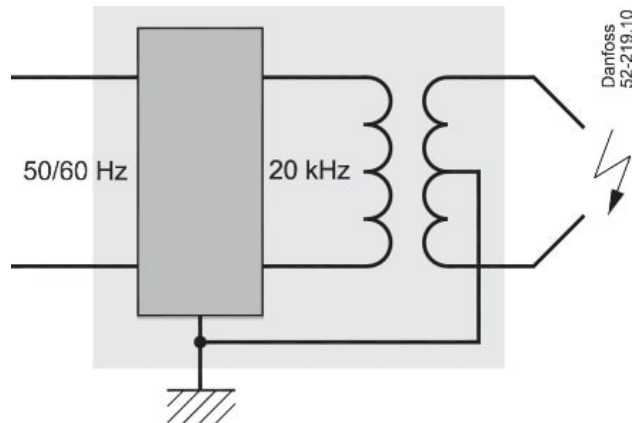
EBI4

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



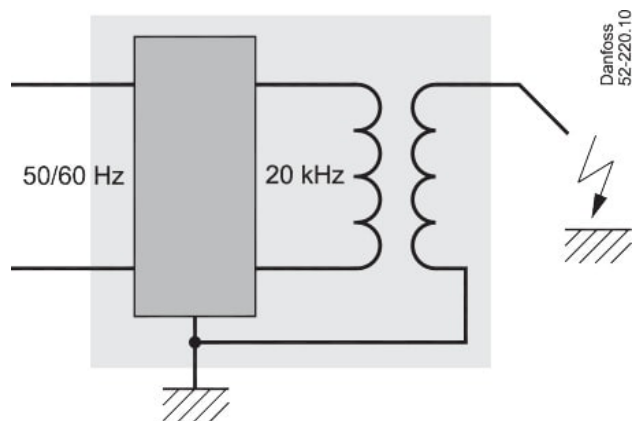
EBI4 M

- 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



Product details

General data

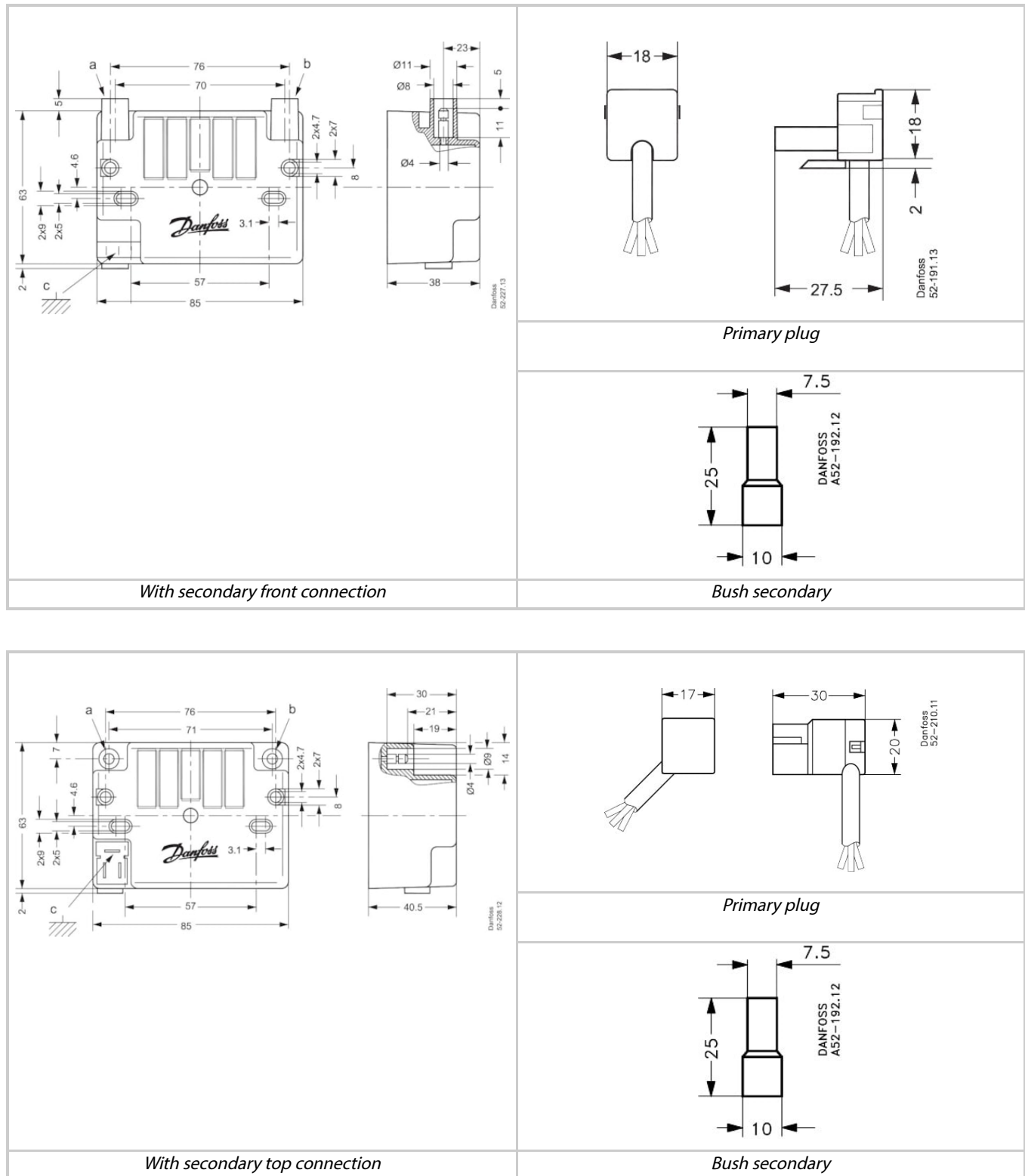
Type	EBI4	EBI4 M	EBI4 1P
Mains connection	230 V - 0.25 A - 50/60 Hz - 60 VA		
Working range	187 - 255 V		
Main fuse	max. 10 A		
Secondary connection*	15 kV amp.	2 × 7.5 kV amp.	12 kV amp.
Short circuit current	40 mA (rms)	40 mA (rms)	40 mA (rms)
Frequency	20 kHz	20 kHz	20 kHz
ED in 3 minutes (cutting 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)		
Primary connection	• 3 × 0.5 mm ² cable with special plug • 3 × 0.75 mm ² 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.

Design

EBI4	EBI4 M	EBI4 1P	a: Left terminal b: Right terminal c: Earth connection
a+b+c	a+b+c	a+b	

Dimensions & weights



Weight	EBI4		EBI4 M	EBI4 1P
	Gross weight	0.248 kg	0.248 kg	0.252 kg
	Net weight	0.247 kg	0.24 kg	0.251 kg
	Volume	0.402 Liter	0.281 Liter	0.402 Liter

Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Manufacturer's Declaration	Danfoss MD MA 052F.08	Danfoss	EU RoHS
Export Control Declaration	Ignition units	Danfoss	
EU-UK Declaration	Danfoss EU-UK 052F.07	Danfoss	LVD
Mechanical Safety Certificate	UL MH61343	UL - Underwriters Laboratories inc.	

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



The Danfoss Design center

Discover the Design Center, our advanced digital platform that streamlines product selection. With integrated tools and enhanced type pages, it's simpler than ever to access product information and documentation, and to select the right products. Check the availability of Danfoss products at partner locations and enjoy seamless transitions from selection to purchase with our basket-to-basket functionality. Whether you're buying from our distributors or directly from the Product Store, the Design Center simplifies your experience. Learn more at: designcenter.danfoss.com.



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