

EFD21 RANGE

Ex d IIC



Local control range
Single rotary switch control units

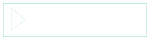


EFD21-LP RANGE

Ex d IIC



Local control range
Single or double pushbuttons and/or pilot lights control units



EFD21-F RANGE

Ex d IIC



Local control range
Single mushroom pushbutton control units



EFD21-VR RANGE

Ex d IIC



Local control range
Emergency mushroom pushbutton control units with breaking glass



Release date 2013-09-22 T164874

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Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

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Description:

The EFD21 enclosure is made of aluminium alloy. It has a rectangular base and a cylindrical joint cover and is equipped with a switch, a selector switch or a deviator switch. It is usually supplied with an engraved circular label and an electrical part (rear cover type) too.

Application:

The EFD21 switch is designed for the control and signalling for electrical circuits. Its mounting is very easy thanks to the small dimensions.

Material:

Body and cover: copper free aluminium alloy.
Screws: stainless steel.
External handle: plastic material.

Features:

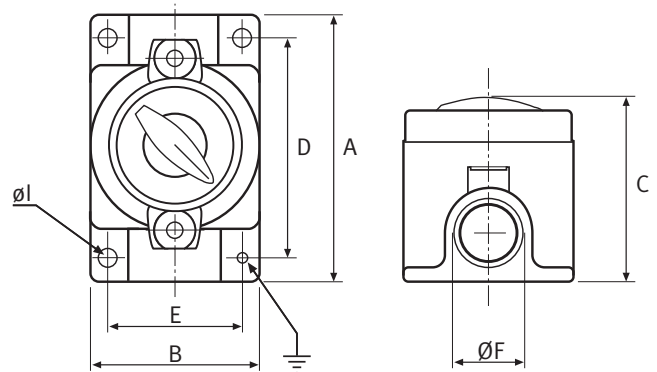
Type of Protection: II 2GD EEx d IIC.
Class of Temperature: T6 / T85 °C, T5 / T100 °C.
Protection Degree: IP65 / IP67*.
Certificate: INERIS 05ATEX0030.
Ambient Temp.: -20 / +60 °C (+40 °C).
Zones: 1 – 21 – 2 – 22.

Threads:

NPT (ANSI B1.20.1).

Inhibiting treatments:

Standard epoxy painting RAL 7005.

Drawing EFD21**Legend:**

- A - Maximum external dimension.
- B - Maximum external dimension.
- C - Maximum external dimension with external handle.
- D - Fixing holes wheel base.
- E - Fixing holes wheel base.
- Ø F - Cable entry diameter.
- Ø I - Fixing holes diameter.

Grounding:

External: M6 grounding point.
Internal: M5 grounding point.

On request:

- *IP67 protection with o-ring.
- Special contacts diagram.
- Special selector with spring return.
- External metallic handle.
- Padlockable version.
- External protection guard.
- Different configuration of electric contacts.
- Other epoxy painting colours different from the standards.
- Special inhibiting treatment.
- Other type of threads [ISO7/1 (UNI6125), Metric x 1.5 (ISO 261)].
- Cable glands for armoured or non armoured cable.

EFD21 - Data Table

Dimensions [mm] and approx. Weight [kg]

Type	Description	Poles	Dimensions			Entries	Fixation			Weight
			A	B	C	Ø F [NPT]	D	E	Ø I	
EFD21/R 216	Switch "0 - 1"	2	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/R 316	Switch "0 - 1"	3	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/R 416	Switch "0 - 1"	4	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/C 116	Selector switch "1 - 0 - 2"	1	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/C 216	Selector switch "1 - 0 - 2"	2	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/D 116	Selector switch "1 - 2"	1	125	80	115	2 x 3/4"	102	58	3 x 6	1
EFD21/D 216	Selector switch "1 - 2"	2	125	80	115	2 x 3/4"	102	58	3 x 6	1

Note: Maximum rated current: 16 A.

Description:

The EFD21-LP enclosure is made of aluminium alloy, it has a rectangular base and a cylindrical joint cover. It is available in different configurations with either one 1" component installed, or a pushbutton or a pilot light, or with two ½" components installed, being 2 pushbuttons, 2 pilot lights or 1 pushbutton and 1 pilot light.

Mounting is easy thanks to the small dimensions.

Application:

The EFD21-LP pushbutton is designed for the control and signalling for electrical circuits.

Material:

Body and cover: copper free aluminium alloy.
Screws: stainless steel.

Certification characteristics:

Type of Protection: II 2GD EEx d IIC.
Class of Temperature: T6 / T85 °C, T5 / T100 °C.
Protection Degree: IP65 / IP67*.
Certificate: INERIS 05ATEX0030.
Ambient Temperature: -20 / +60 °C (+40 °C).
Zones: 1 – 21 – 2 – 22.

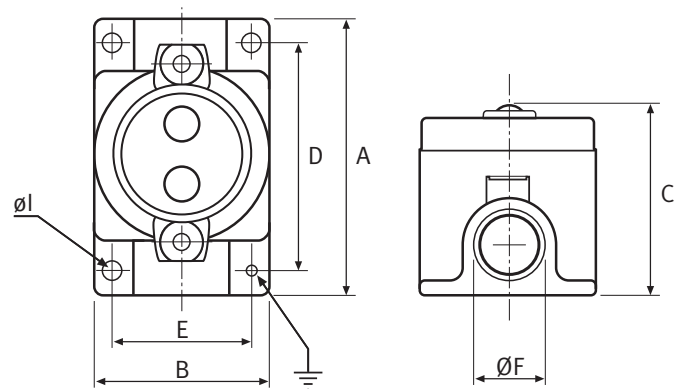
Threads:

NPT (ANSI B1.20.1).

Inhibiting treatments:

Standard epoxy painting RAL 7005.

Drawing EFD21-LP



Legend:

- A - Maximum external dimension.
- B - Maximum external dimension.
- C - Maximum external dimension.
- D - Fixing holes wheelbase.
- E - Fixing holes wheelbase.
- Ø F - Cable entry diameter.
- Ø I - Fixing holes diameter.

Grounding:

External: M6 grounding point.
Internal: M5 grounding point.

On request:

- *IP67 only with pilot lights.
- Lamp or led with different voltage.
- Different configuration and colours of pushbuttons and pilot lights.
- Other epoxy painting colours different from the standards.
- Special inhibiting treatment.
- Other type of threads [ISO7/1 (UNI6125), Metric x 1.5 (ISO 261)].
- Cable glands for armoured or non armoured cable.

EFD21-LP - Data Table

Dimensions [mm] and approx. Weight [kg]

Type	Description	Contact	Lampholder	Dimensions			Entries Ø F [NPT]	Fixation			Weight
				A	B	C		D	E	Ø I	
EFD21/2L	n. 2 Pilot lights ½"	-	Ba9s	125	80	115	2 x 3/4"	102	58	3x6	1,1
EFD21/1L-1P	P. light ½" + P. button ½"	N.O or N.C.	Ba9s	125	80	115	2 x 3/4"	102	58	3x6	1,1
EFD21/2P	n. 2 Pushbuttons	N.O and/or N.C.	-	125	80	115	2 x 3/4"	102	58	3x6	1,1
EFD21/1P	n. 1 Pushbutton 1"	N.O and/or N.C	-	125	80	115	2 x 3/4"	102	58	3x6	1,1
EFD21/1L	n. 1 Pilot light 1"	-	E14	125	80	115	2 x 3/4"	102	58	3x6	1,1

- Note: 1) Maximum lamp voltage and power: 240 V – 3 W.
2) Rated current and voltage: 6 A – 240 Vac or 10A – 24 Vac.
3) With 1" pushbutton (RP1) - Max. n. 2+2 contacts installed in parallel;
with ½" pushbutton (RP2) - Max. n. 2 contacts in series.

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Description:

The EFD21-F enclosure is made of aluminium alloy. It has a rectangular base and a cylindrical joint cover and is equipped with a red emergency mushroom pushbutton (RPFB) with pushing lock function and twist reset, circular label with yellow background and is usually supplied with electric contact.

Application:

The EFD21-F Emergency Mushroom Pushbutton is designed for the emergency shutdown of electric circuits.

Material:

Body and cover: copper free aluminium alloy.
Screws: stainless steel.
External ring nut: nickel plated brass.
Actuator: plastic material.

Certification characteristics:

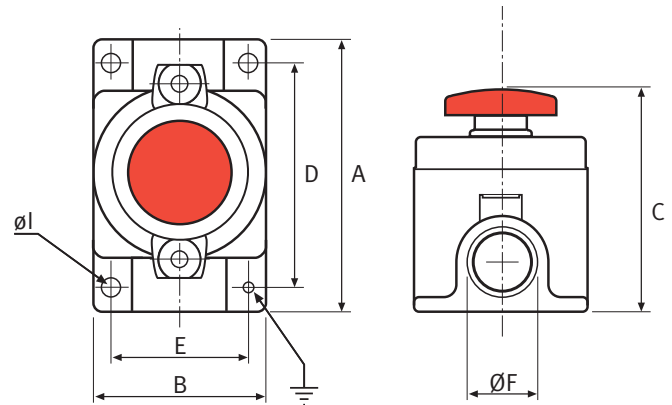
Type of Protection: II 2GD EEx d IIC.
Class of Temperature: T6 / T85 °C, T5 / T100 °C.
Protection Degree: IP65.
Certificate: INERIS 05ATEX0030.
Ambient Temp.: -20 / +60 °C (+40 °C).
Zones: 1 – 21 – 2 – 22.

Threads:

NPT (ANSI B1.20.1).

Inhibiting treatments:

Standard epoxy painting RAL 7005.

Drawing EFD21-F**Legend:**

A - Maximum external dimension.
B - Maximum external dimension.
C - Maximum external dimension.
D - Fixing holes wheelbase.
E - Fixing holes wheelbase.
Ø F - Cable entry diameter.
Ø I - Fixing holes diameter.

Grounding:

External: M6 grounding point.
Internal: M5 grounding point.

On request:

Different configuration of electric contacts.
Key mushroom pushbutton (red or black).
Mushroom pushbutton without lock function.
Other epoxy painting colours different from the standards.
Special inhibiting treatment.
Other texts of labels (as "STOP – EMERGENCY").
External protection guard.
Other type of threads [ISO7/1 (UNI6125), Metric x1.5 (ISO 261)].
Cable glands for armoured or non armoured cable.

EFD21-F - Data Table

Dimensions [mm] and approx. Weight [kg]

Type	Description	Contact	Dimensions			Entries Ø F [NPT]	Fixation			Weight
			A	B	C		D	E	Ø I	
EFD21-FB.01	Emergency Mushroom Pushbutton with mechanical block	1NC	125	80	155	2 x 3/4"	102	58	3x6	1,7
EFD21-FB.10	Emergency Mushroom Pushbutton with mechanical block	1NO	125	80	155	2 x 3/4"	102	58	3x6	1,7
EFD21-FB.11	Emergency Mushroom Pushbutton with mechanical block	1NO+1NC	125	80	155	2 x 3/4"	102	58	3x6	1,7
EFD21-FBCH.01	Emergency Mushroom Pushbutton with Key & mechanical block	1NC	125	80	155	2 x 3/4"	102	58	3x6	1,7
EFD21-FBCH.10	Emergency Mushroom Pushbutton with Key & mechanical block	1NO	125	80	155	2 x 3/4"	102	58	3x6	1,7
EFD21-FBCH.11	Emergency Mushroom Pushbutton with Key & mechanical block	1NO+1NC	125	80	155	2 x 3/4"	102	58	3x6	1,7

Note: 1) RPFB rated current and voltage: 6 A – 240 Vac or 10 A – 24 Vac.
2) EFD21-F: Max. n. 2+2 contacts installed in parallel.
3) _CH = with key; _B = with block (see table above).

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Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

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Description:

The EFD21-VR enclosure is made of aluminium alloy. It has a rectangular base and a cylindrical joint cover with breaking glass in case of emergency. The product comes complete with ½" red push button, circular label with red background, electric contact, a hammer and a chain.

Application:

The EFD21-VR emergency mushroom pushbutton with breaking glass is designed for special application in the emergency shutdown of electric circuits.

Material:

Body and cover: copper free aluminium alloy.
Screws: stainless steel.
Glass: tempered glass.

Certification characteristics:

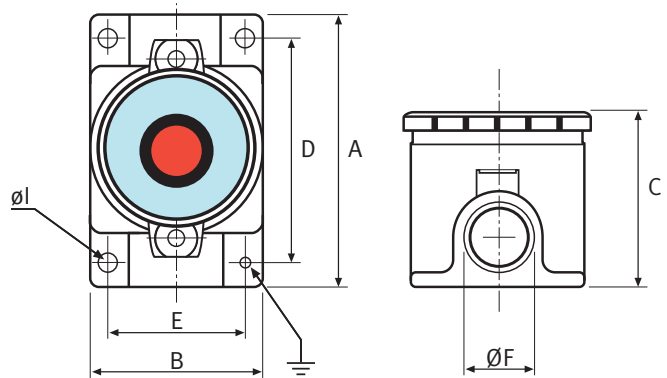
Type of Protection: II 2GD EEx d IIC.
Class of Temperature: T6 / T85 °C, T5 / T100 °C.
Protection Degree: IP65.
Certificate: INERIS 05ATEX0030.
Ambient Temp.: -20 / +60 °C (+40 °C).
Zones: 1 – 21 – 2 – 22.

Threads:

NPT (ANSI B1.20.1).

Inhibiting treatments:

Standard epoxy painting RAL 7005.
Red ring-cover (RAL3000).

Drawing EFD21-VR**Legend:**

A - Maximum external dimension.
B - Maximum external dimension.
C - Maximum external dimension.
D - Fixing holes wheelbase.
E - Fixing holes wheelbase.
Ø F - Cable entry diameter.
Ø I - Fixing holes diameter.

Grounding:

External: M6 grounding point.
Internal: M5 grounding point.

On request:

“Pressing” type function or “release” type function.
Other epoxy painting colours different from the standards.
Special inhibiting treatment.
Other type of threads [ISO7/1 (UNI6125), Metric x 1.5 (ISO 261)].
Cable glands for armoured or non armoured cable.

EFD21-VR - Data Table

Dimensions [mm] and approx. Weight [kg]

Type	Contact	Dimensions			Entries Ø F [NPT]	Fixation			Weight
		A	B	C		D	E	Ø I	
EFD21-VR.01	1 NC	125	80	117	2 x 3/4"	102	58	3 x 6	1,25
EFD21-VR.02	2 NC	125	80	117	2 x 3/4"	102	58	3 x 6	1,25
EFD21-VR.11	1NO + 1NC	125	80	117	2 x 3/4"	102	58	3 x 6	1,25
EFD21-VR.10	1 NO	125	80	117	2 x 3/4"	102	58	3 x 6	1,25
EFD21-VR.20	2 NO	125	80	117	2 x 3/4"	102	58	3 x 6	1,25

Note: EFD21-VR rated current and voltage: 6 A – 240 Vac or 10 A – 24 Vac.