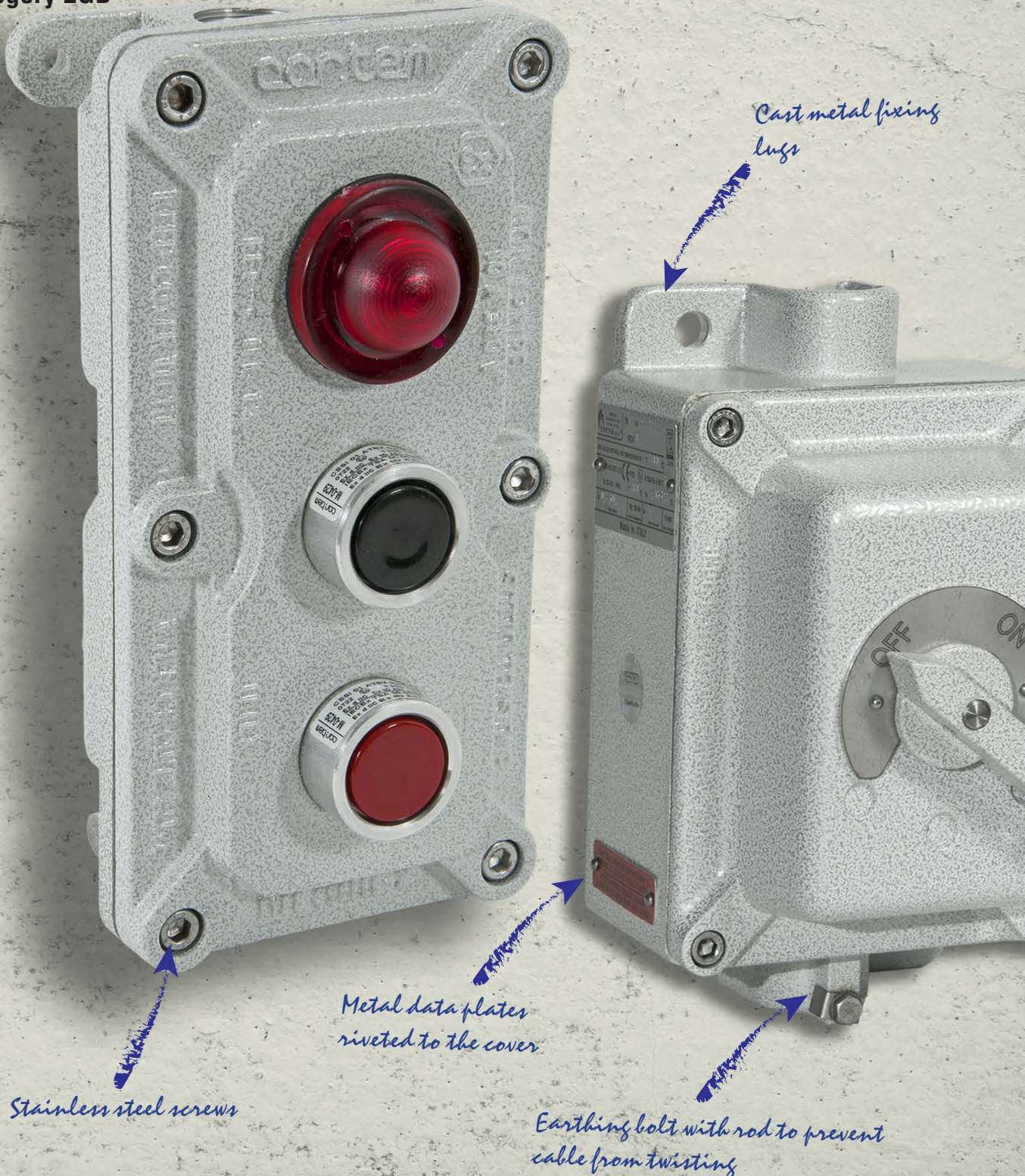


# CSE, EFD

## Command and control stations

- Group IIB
- Zone 1, 2, 21, 22
- Aluminium alloy housings
- Category 2GD



# CSE Series... Control and signalling station

The Ex d IIB stations and controllers are suitable for the control and signalling of devices installed both "on board" the machine and remotely (P.E on a field control column). They are easily installed using wall mount lugs and have threaded entries for connection by means of a cable gland or metal pipe.  
Used specifically in offshore and onshore environments, the chemical, petrochemical and pharmaceutical industries, and all locations which require an explosion proof system.

Cortem Group labels its products with a non-removable adhesive label featuring a hologram and an alphanumerical univocal code, as a safety measure against the illegal sale of fakes so that all the products are guaranteed as original. Non-compliance with the International standards entails serious risks for the environment, especially for those working daily on the plants.



## Sectors of application:



Petroleum refineries



Chemical and petrochemical plants



Onshore plants



Offshore plants



Petroleum loading/unloading pontoons



Low temperatures



Mining operations



100% produced by Cortem

## CERTIFICATION DATA

### Classification:

Group II

Category 2GD

### Installation: EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

### Marking:

CE 0722 Ex II 2 GD; Ex d IIB T6; Ex tD A21 T85°C

CE 0722 Ex II 2 GD; Ex d IIB T5; Ex tD A21 T100°C

### Certificate:

ATEX [CESI 03 ATEX 172](#)

TR CU [AVAILABLE](#)

For all IEC Ex and TR CU certification data, download the certificate from [www.cortemgroup.com](http://www.cortemgroup.com)

### Standards:

CENELEC EN 60079-0: 2012, EN 60079-1:2007, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 2014/34/EU  
RoHS Directive 2002/95/EC.

### Temperature class:

T6 (Ta +40°C)

T5 (Ta +55°C)

### Temp. Temperature:

-20 °C +55 °C

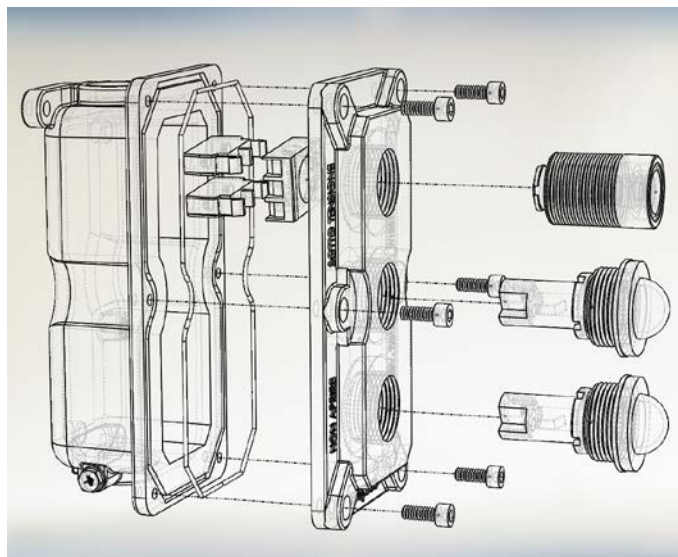
-20 °C +40 °C

### Degree of protection:

IP66

## CSE Series... Control and signalling station

### EXPLODED VIEW



### MECHANICAL FEATURES OF ENCLOSURES

<b>Body and lid:</b>	Low copper content aluminium alloy, complete with wall fastening lugs.
<b>Gaskets:</b>	Acid, hydrocarbon and high temperature resistant silicon positioned between the body and the cover
<b>Certification label:</b>	Adhesive affixed to external surface
<b>Screws:</b>	Stainless steel
<b>Earth screw:</b>	Internal and external stainless steel
<b>Coating:</b>	Polyester RAL 7035 (Light grey)
<b>Threaded entries:</b>	One upper and one lower $\varnothing$ 3/4"
<b>Resistenza alla corrosione:</b>	The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot-humid cycles) and EN60068-2-11 (salt fog test)

### MECHANICAL FEATURES OF CONTROL AND SIGNALLING DEVICES

<b>Pushbutton:</b>	Coloured nylon
<b>Illuminated pushbutton:</b>	Clear coloured polycarbonate
<b>Outer body:</b>	Aluminium
<b>Internal bushing and pin:</b>	Stainless steel
<b>Gaskets:</b>	Acid and hydrocarbon resistant NBR
<b>Station assembly:</b>	Screwed onto cover
<b>Contact assembly:</b>	snap action on a dedicated flange to ensure the quick connection of entire contacts block to the station
<b>External body lens:</b>	Impact and UV resistant polycarbonate lens, coloured or transparent

### ELECTRICAL FEATURES

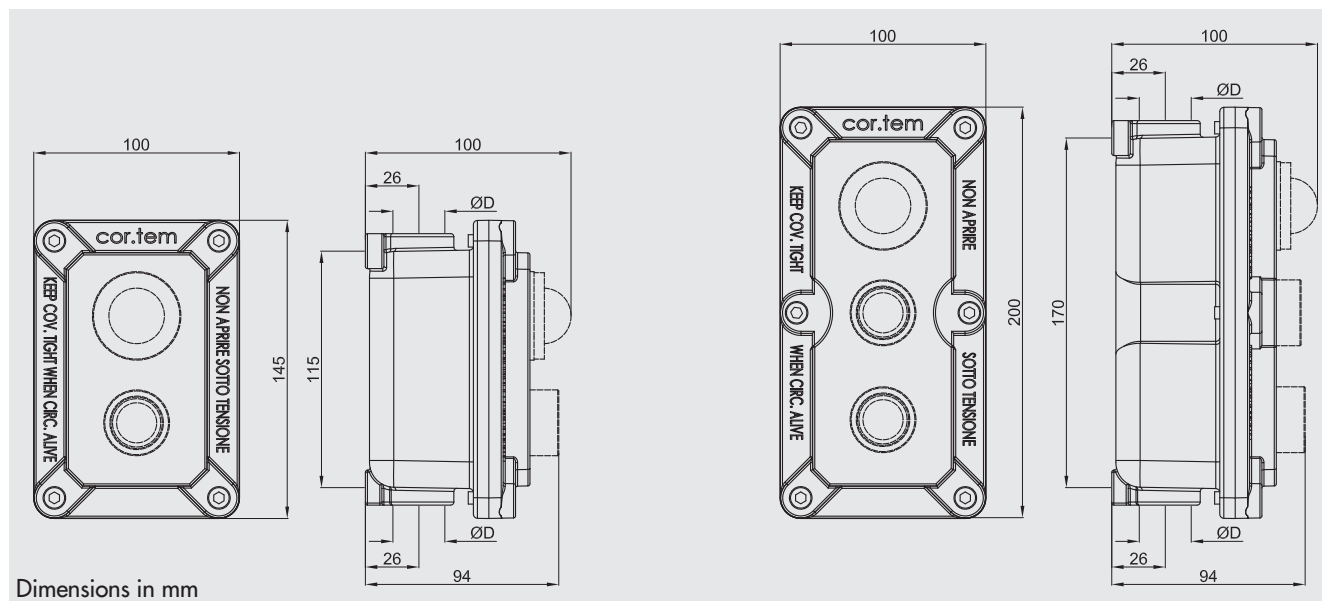
<b>Contacts for pushbuttons:</b>	Max. 25A 600 V
<b>Indicator lights:</b>	24/250V, 3W

### ACCESSORIES UPON REQUEST / SPECIAL REQUESTS

RAL 2004 (Pure orange) internal anti-condensation coating  
External polyester coatings in various colours (specify RAL colour)  
Cablegland / fittings

# CSE Series... Control and signalling station

## DIMENSIONAL DRAWING







## CODE SELECTION TABLE

Illustration	Entry ØD	Description	Diagram	Weight Kg	Codes
	3/4" IS07/1	Unit with single indicator light		1.01	CSE-L
	3/4" NPT				CSE-LN
	3/4" IS07/1	Unit with double indicator light		1.12	CSE-LL
	3/4" NPT				CSE-LLN
	3/4" IS07/1	Unit with three indicator light		1.53	CSE-LLL
	3/4" NPT				CSE-LLLN
	3/4" IS07/1	Single pushbutton unit		0.97	CSE-P
	3/4" NPT				CSE-PN
	3/4" IS07/1	Unit with double pushbutton		1.05	CSE-PP
	3/4" NPT				CSE-PPN
	3/4" IS07/1	Three pushbutton unit		1.42	CSE-PPP
	3/4" NPT				CSE-PPPN

# CSE Series... Control and signalling station

## SELECTION TABLE

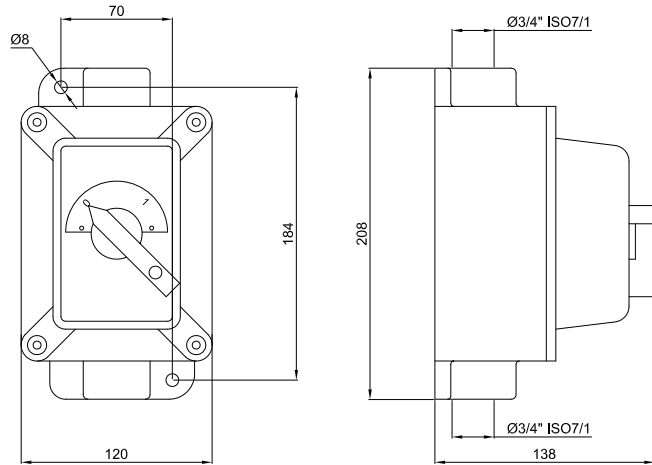
Illustration	Entry ØD	Description	Diagram	Weight Kg	Codes
	3/4" IS07/1 3/4" NPT	Pushbutton unit and indicator light		1.09	CSE-PL CSE-PLN
	3/4" IS07/1 3/4" NPT	Pushbutton unit plus two indicator lights		1.50	CSE-PLL CSE-PLLN
	3/4" IS07/1 3/4" NPT	Unit with two pushbuttons plus indicator light		1.60	CSE-PPL CSE-PPLN
	3/4" IS07/1 3/4" NPT	Break glass emergency pushbutton		1.50	CSEPEA-2 CSEPEA-2N
	3/4" IS07/1 3/4" NPT	Break glass emergency pushbutton with hammer		1.55	CSEPEA-2M CSEPEA-2MN
	3/4" IS07/1 3/4" NPT	Emergency mushroom head pushbutton		1.00	CSEPEP-2 CSEPEP-2N

Note:  
For non-standard arrangements, contact the Sales Office.

# EFD3 Series... Breakers



## DIMENSIONAL DRAWING



## DESCRIPTION

EFD3 series three pole, magnetothermic breakers are used for control (start - stop) and protection of three-phase motors. Circuit breaker with adjustable magnetothermic protection and external control handle.

## MECHANICAL FEATURES

- Body and lid:** Rectangular casing constructed from low copper content aluminium alloy, complete with wall fastening lugs.
- Gaskets:** Acid, hydrocarbon and high temperature resistant silicon positioned between the body and the cover
- Control levers:** Coated aluminium alloy
- ON - OFF plate:** Stainless steel
- Certification label:** Adhesive affixed to external surface
- Screws:** Stainless steel
- Earth screw:** Internal M5 on body and lid connected to each other with a 2.5 mm<sup>2</sup> wire
- Coating:** Polyester RAL 7035 (Light grey)
- Threaded entries:** One upper and one lower Ø 3/4"

### Resistenza alla corrosione :

The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot-humid cycles) and EN60068-2-11 (salt fog test)

## CODE SELECTION TABLE

Illustration	Rated current (A)	Temperature range (A)	Weight Kg	Codes
	0.25	0.16 0.25	2.25	EFD3-02
	0.40	0.25 0.40	2.25	EFD3-04
	0.60	0.40 0.60	2.52	EFD3-06
	1.00	0.60 1.00	2.52	EFD3-10
	1.60	1.00 1.60	2.52	EFD3-16
	2.50	1.60 2.50	2.52	EFD3-25
	4.00	2.50 4.00	2.52	EFD3-40
	6.00	4.00 6.00	2.52	EFD3-63
	10.00	6.00 10.00	2.52	EFD3-100
	16.00	10.00 16.00	2.52	EFD3-160
	20.00	16.00 20.00	2.52	EFD3-200
	25.00	20.00 25.00	2.52	EFD3-250