

Features

- Aluminum enclosure
- Ex d certified, some variants Ex tD A21
- Installation in Zone 1 and Zone 2
- Gas group IIB or gas group IIB+H₂
- Integration of electrical components and operating elements in Ex d enclosures as per specification
- Customizable configuration as per specification
- Various enclosure size and design variants
- Thermo-resistant tempered glass window
- Degree of protection IP66



Function

The enclosures of the F* CP series are specifically designed for power distribution applications. They can accommodate a busbar chassis of up to 48 poles in one single enclosure.

The series consists of 6 enclosure variants manufactured from marine grade aluminum. Several enclosures can be assembled to form a complete, fully engineered control and distribution panel. After thorough testing and documentation each solution will reach its operation site fully certified and ready for commissioning.

A choice of windows allows viewing of integrated monitoring functions. Electrical components can be integrated as per customer specification.



Type Code / Model Number

Enclosure type

- F enclosure Ex d IIB and Ex tD A21
- FH enclosure Ex d IIB+H₂

Material

copper-free aluminum

Enclosure size

xx see data table

Variant number

-Yxxxxxx

FH		160	-Yxxxxxx
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Example: Control panel Ex d IIB+H₂ size 160 in aluminum

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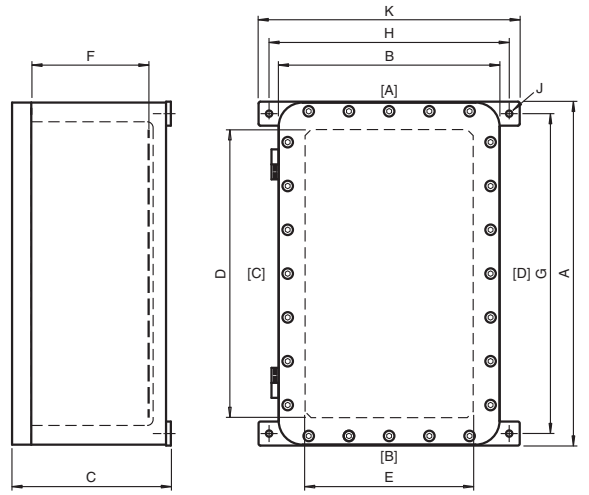
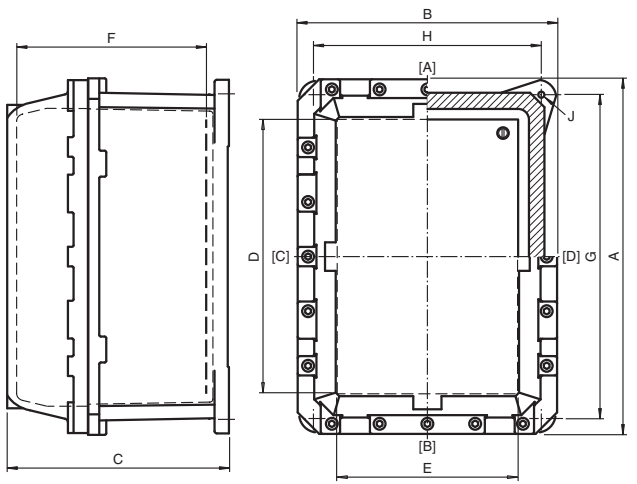
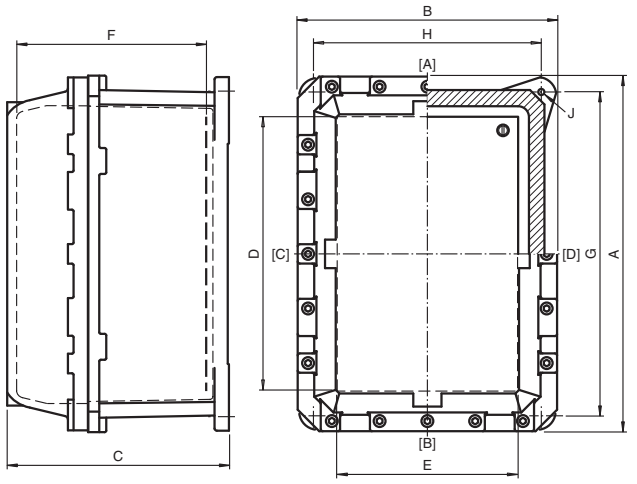
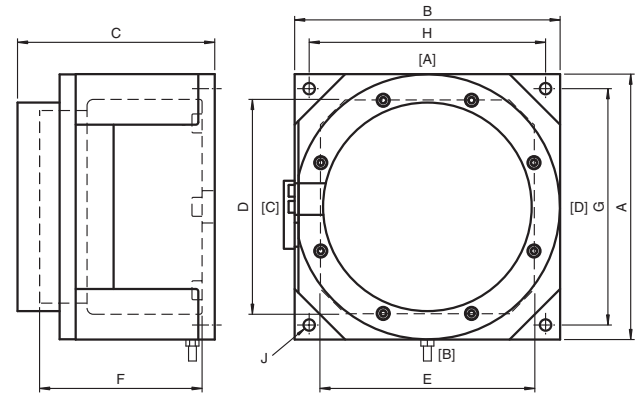
Technical Data	
Electrical specifications	
Operating voltage	application-specific
Operating current	application-specific
Mechanical specifications	
Dimensions	see data table values might differ slightly due to casting and manufacturing tolerances
Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Enclosure cover	detachable , optional hinges
Cover fixing	stainless steel socket cap head screws
Screws	see data table
Cover seal	chloroprene
Degree of protection	IP66
Cable entry	see data table
Grounding	M6 external grounding points
Mass	see data table valid for empty enclosure, will increase according to integrated components
Material	
Enclosure	Aluminum alloy
Finish	epoxy coated RAL 7032
Flamepath grease	Fluid film grade AR
Glass	thermo-resistant tempered glass
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F) depending on integrated components
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	see data table
Maximum power dissipation	see data table maximum power dissipation at T4/+40 °C enclosure without window
International approvals	
IECEx approval	see data table
Conformity	
Degree of protection	EN60529
CE marking	0102
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
Ordering information	This solution will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.

Dimensions

Legend	
A	Height
B	Width
C	Depth
D	Internal height
E	Internal width
F	Internal depth to surface mounting plate
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension of the mounting brackets
[A] ... [D]	Cable entry faces

Dimension values see data table. Real values might differ slightly due to casting and manufacturing tolerances. Images and drawings are generic for these enclosure types and may deviate from the specific variant.

upper drawing: F7
 middle drawing: FH150
 lower left: FH160 / FH560 / FH24/2
 lower right: FH400



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Dimensions and Enclosure Details

Type	External dimensions [mm]				Internal dimensions [mm]			Mounting [mm]			Mass approx. [kg]	Cover screws			
	A	B	C	K	D	E	F	G	H	J		Mx	qty.	Min. yield stress [N/mm ²]	Torque [Nm]
F7	210	210	156	-	170	170	125	187	187	9	8	M6	8	450	3
FH150	490	358	208	-	381	254	164	452	318	8.5	34	M10	20	1115	18
FH160	490	358	277	-	381	254	230	452	318	8.5	38	M10	20	1115	18
FH400	570	368	261	435	480	280	199	533	400	10.5	15.5	M10	24	450	18
FH560	600	500	224	-	510	410	170	574	474	10.5	54	M10	26	450	18
FH24/2	775	470	280	-	698	394	190	750	445	13	85	M10	34	700	18

Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

Data for application in connection with hazardous areas

Type	EU-Type Examination Certificate	Marking	IECEX approval	Max. power dissipation [W]
F7	SIRA 07 ATEX 1134	Ex II 2 GD Ex d IIB T* Ex tD A21 T6/T80 °C @ Ta +60 °C	IECEX TSA 07.0029	59
FH150	SIRA 07 ATEX 1135X		IECEX SIR 12.0108 IECEX TSA 06.0054	160
FH160	SIRA 07 ATEX 1136X		IECEX TSA 07.0040	160
FH400	SIRA 07 ATEX 1138X	Ex II 2 G Ex d IIB+H ₂ T* Gb T6 @ Ta +40 °C / +55 °C / +60 °C	IECEX SIM 07.0005X	153
FH560	SIRA 07 ATEX 1137X		IECEX SIR 12.0091	205
FH24/2	SIRA 10 ATEX 1341X		IECEX SIR 12.0090X	260

Cable Entries max. Quantity per Size

Type	Faces A and B						Faces C and D					
	M20	M25	M32	M40	M50	M63	M20	M25	M32	M40	M50	M63
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
F7	6	5	3	2	-	-	6	5	3	2	-	-
FH150	12	8	6	5	3	-	26	18	12	8	6	-
FH160	12	8	6	5	3	-	26	18	12	8	6	-
FH400	20	17	9	7	5	3	34	28	14	12	8	6
FH560	26	24	10	7	5	4	31	29	12	10	6	5
FH24/2	22	12	11	5	4	3	39	23	21	10	8	5

For details please refer to individual product datasheet
For further configurations please contact Pepperl+Fuchs