

**Features**

- Stainless Steel enclosure
- Various enclosure size and design variants
- Installation in Zone 21 and Zone 22
- Ex tD certified
- Degree of protection IP65 / IP66
- Customizable configuration of operators, cable entry quantities and cable gland types as per specification
- Wide range of labels and accessories available
- Integration of electrical components and operating elements in Ex tD enclosures as per customer specification
- Product available for Australia and New Zealand only

**Function**

The DS enclosure series are used as interface cabinets, control stations and terminal boxes. The enclosures are manufactured from painted or unpainted stainless steel fabricated construction, having either a bolt-on or hinged cover with securing hexagon head screws or quarter turn locks respectively. The enclosures may be fitted with separately certified operating elements such as pushbuttons, control switches, indicators and other equivalent separately certified devices, as well as round or square viewing windows for integrated monitoring equipment. The enclosures may also be fitted with general type electrical equipment such as motor starters, circuit breakers, transformers, isolators, PLCs and other electrical equipment.



**Type Code / Model Number**

**Enclosure type**

DS enclosure Ex tD

**Material**

stainless steel

**Enclosure size**

xx see dimensions data table

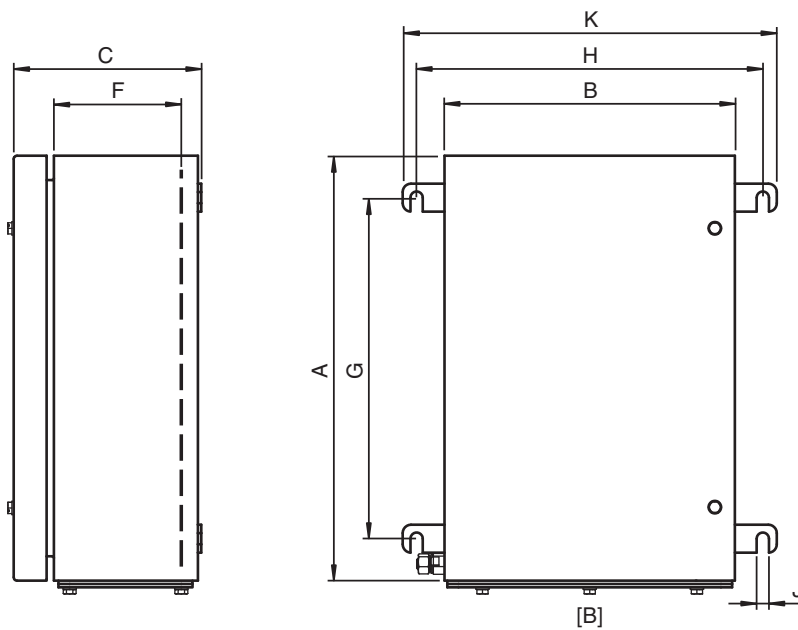
**Variant number**

-Yxxxxxx

DS	6090	-Yxxxxxx
Example: Control cabinet size 6090 in stainless steel		

<b>Technical Data</b>	
<b>Electrical specifications</b>	
Operating voltage	690 V max.
Operating current	application-specific
Function	multiple functions as per specification
Terminal capacity	application-specific
<b>Mechanical specifications</b>	
Dimensions	see data table
Enclosure cover	fully detachable
Cover fixing	Stainless steel hexagonal head screws
Yield stress	min. 450 N/mm <sup>2</sup>
Degree of protection	IP65/66
Mass	see data table valid for empty enclosure, will increase according to integrated components
Number of rails	see data table
Number of terminals per rail	see data table
Cable entry	see data table cable glands as per specification
<b>Material</b>	
Enclosure	1.5 mm 316L, (1.4404) stainless steel
Finish	electropolished or powder coated
Cover seal	chloroprene
Material of screws	stainless steel
Gland plate	3 mm 316L, (1.4404) stainless steel
Gland plate on face(s)	as per specification
Grounding	M6 internal/external brass grounding bolt
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F) depending on integrated components
<b>International approvals</b>	
IECEX approval	IECEX SIM 09.0001X
IECEX marking	Ex tD A21 T80 °C @ Ta +55 °C
<b>Conformity</b>	
Degree of protection	EN 60529
CE marking	0102
<b>General information</b>	
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .
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
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
[B]	Cable entry face

Dimension values see data table.  
Image and drawing are generic for this device type and may deviate from the specific variant.

## Dimensions and Enclosure Details

Type	External dimensions [mm]				Internal dimensions [mm]	Mounting [mm]			Mass approx. [kg]	Cover screws			Max. power dissipation at T6/+40 °C [W]
	A	B	C	K	F	G	H	J		Mx	qty.	Torque [Nm]	
DS1110*	106	116	75	146	62	-	126	8.5	1.2	M6	4	3	10
DS1511*	121	156	85	156	63	136	100	8.5	1.7	M6	4	3	12
DS2315*	156	236	121	196	97	176	180	8.5	2.7	M6	4	3	15
DS3030*	300	300	200	352	135	180	325	8.5	7.2	M6	2	3	24
DS4050*	500	400	200	452	135	380	425	8.5	12	M6	4	3	43
DS5060*	600	500	200	552	135	480	525	8.5	15.8	M6	4	3	67
DS6090*	900	600	200	652	135	780	630	8.5	31.7	M6	8	3	80
DS8013*	1300	800	300	852	235	1180	825	8.5	53.5	(1)	-	-	210

(1) Quarter-turn key locks only

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

## Terminal Configurations with Standard Terminals

Type	DIN-Rails vertical				DIN-Rails horizontal				Terminal type	Terminal capacity [mm <sup>2</sup> ]
	Number of rails	Usable length per rail [mm]	Terminals per rail	Terminals total	Number of rails	Usable length per rail [mm]	Terminals per rail	Terminals total		
DS1110*	1	50	10	10	1	30	6	6	WDU	2.5
DS1511*	1	95	18	18	1	65	12	12	WDU	2.5
DS2315*	1	170	32	32	1	105	20	20	WDU	2.5
DS3030*	1	230	45	45	1	230	45	45	WDU	2.5
DS4050*	2	415	80	160	2	320	60	120	WDU	2.5
DS5060*	2	510	100	200	3	415	80	240	WDU	2.5
DS6090*	3	810	158	474	5	510	100	500	WDU	2.5
DS8013*	4	1176	230	920	7	676	132	924	WDU	2.5

For other terminal types and terminal capacities please contact Pepperl+Fuchs

## Cable Entries max. Quantity per Size

Type	Faces A and B					Faces C and D				
	M20	M25	M32	M40	M50	M20	M25	M32	M40	M50
DS1110*	2	2	1	-	-	2	2	1	-	-
DS1511*	3	2	1	-	-	2	2	1	-	-
DS2315*	8	5	3	2	2	4	3	1	1	1
DS3030*	17	14	8	6	3	17	14	8	6	3
DS4050*	26	20	12	10	4	32	26	14	12	5
DS5060*	32	26	14	12	5	40	32	18	16	6
DS6090*	41	22	19	13	7	62	33	30	20	12
DS8013*	95	60	42	33	22	155	100	68	54	38

Cable gland standard type: polyamide Ex e cable glands

For other types of cable glands and combinations of different gland sizes please contact Pepperl+Fuchs