Ex terminal boxes
Bespoke configuration

type HTB1P

Design features

Sturdy, thick walls not only provide high structural rigidity of the box, but also accommodate threads with many turns, further enhancing the reliability of the device. The cover comes with a silicone seal that effectively protects the interior of the housing against moisture and dirt. Cover screws made of AISI 316L stainless steel guarantee durability and resistance to harmful external factors. On the other hand, internal corrosion-resistant mounting screws significantly increase the durability and life of the entire structure.

HTB1P terminal boxes, made of reinforced polyester glass fiber (GRP), were designed for use in explosion hazard zones 1, 2 (gases) and 21, 22 (dust). They feature high resistance to corrosion and UV radiation, ensuring durability even in harsh industrial conditions. The enclosures are best suited for heavy industry, especially chemical,

Certificates

HTB1P enclosures comply with safety standards, as confirmed by ATEX (FIDI 22 ATEX 0065X) and IECEx (IECEx FIDI 22.0008X) certificates. They meet the requirements of Directive 2014/34/EU for equipment used Ex zones, making them an excellent choice for use in explosive environments.

Versatility

An extensive portfolio of housings is available in various sizes, from small junction boxes to larger distribution boxes. This allows for precise adjustment of the solution to your individual needs and accommodates versatile applications.

DS_HTB1P_ALL_1/02/2025

Technical data

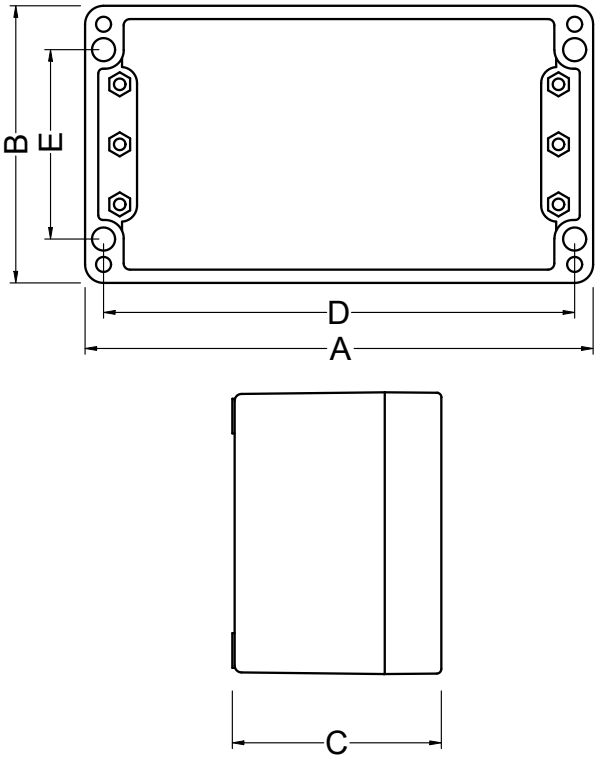
Technical data	
Marking according to 2014/34/EU	Ex II 2 G Ex eb IIC/IIB T6...T4 Gb Ex II 2 D Ex tb IIIC T85°C...T135°C Db
EC-Type Examination Certificate	FIDI 22 ATEX 0065X
IECEx Certificate of Conformity	IECEx FIDI 22.0008X
IECEx marking	Ex eb IIC/IIB T6...T4 Gb Ex tb IIIC T85°C...T135°C Db
Permissible ambient temperature	from -20°C to +40°C from -50°C to +60°C optional
Maximum voltage	up to 690 V AC
Rated current	up to 350 A
Protection class according to EN 60529	IP66
Enclosure material	glassfiber reinforced polyester (GRP)
Enclosure color	black

Applications:

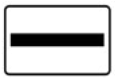
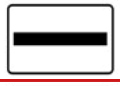
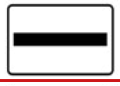
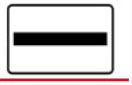
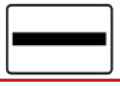
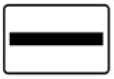
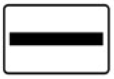
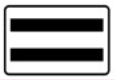
- Ex-e
- For intrinsically safe circuits Ex-i
- Ex-e / Ex-i

Dimensions of enclosures

	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
HTB1P 080806	80	75	56	69	45
HTB1P 081106	110	75	55	99	45
HTB1P 121209	122	120	90	106	82
HTB1P 122209	220	120	90	204	82
HTB1P 161609	160	161	90	140	110
HTB1P 162609	260	160	90	240	110
HTB1P 163609	360	160	90	340	110
HTB1P 252612	255	250	120	235	200
HTB1P 252616	255	250	160	235	300
HTB1P 254012	400	250	120	380	200
HTB1P 254016	400	250	160	380	200
HTB1P 256012	600	250	120	580	200
HTB1P 414012	400	405	120	380	355

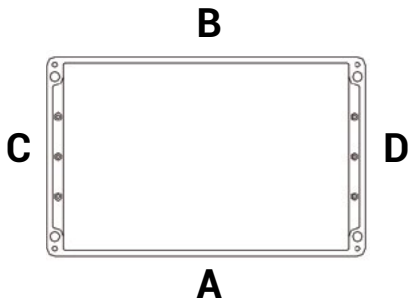


Selection of DIN rails and cable glands

Product type	DIN rail system (diagram)	Length of DIN rails [mm]	Quantity of DIN rails	Maximum number of connection terminals												
				Diameter [mm²]												
				2,5	4	6	10	16	35	50	70	95	120	150	185	240
HTB1P 080806		68	1	6	5	-	-	-	-	-	-	-	-	-	-	-
HTB1P 081106		98	1	12	10	-	-	-	-	-	-	-	-	-	-	-
HTB1P 121209		110	1	13	11	8	-	-	-	-	-	-	-	-	-	-
HTB1P 122209		205	1	32	27	20	-	-	-	-	-	-	-	-	-	-
		110	1	18	15	11	8	7	-	-	-	-	-	-	-	-
HTB1P 161609		144	1	21	17	12	10	8	-	-	-	-	-	-	-	-
HTB1P 162609		245	1	40	33	25	20	15	-	-	-	-	-	-	-	-
		145	1	25	21	16	13	10	7	-	-	-	-	-	-	-
HTB1P 163609		345	1	59	49	37	29	25	-	-	-	-	-	-	-	-
		145	2	2 x 25	2 x 21	2 x 16	13	10	7	-	-	-	-	-	-	-
HTB1P 252612		240	2	2 x 39	2 x 32	2 x 24	19	16	12	-	-	-	-	-	-	-
HTB1P 252616		240	2	2 x 39	2 x 32	2 x 24	19	16	12	-	-	-	-	-	-	-
HTB1P 254012		385	2	2 x 66	2 x 56	2 x 41	33	28	21	-	-	-	-	-	-	-
		235	2	2 x 42	2 x 35	2 x 26	21	17	13	10	10	-	-	-	-	-
HTB1P 254016		385	2	2 x 66	2 x 56	2 x 41	33	28	21	-	-	-	-	-	-	-
		235	2	2 x 42	2 x 35	2 x 26	21	17	13	10	10	-	-	-	-	-
HTB1P 256012		560	2	2 x 106	2 x 88	2 x 66	53	44	33	-	-	-	-	-	-	-
		208	2	2 x 42	2 x 35	2 x 26	21	17	13	9	9	7	5	5	5	5
HTB1P 414012		385	3	3 x 66	3 x 56	3 x 41	3 x 33	28	21	17	16	13	-	-	-	-

Cable glands selection: maximum quantity

	Walls	Gland size							
		M12	M16	M20	M25	M32	M40	M50	M63
HTB1P 080806	A/B	6	2	2	1	-	-	-	-
	C/D	2	1	1	1	-	-	-	-
HTB1P 081106	A/B	8	3	3	2	2	-	-	-
	C/D	1	1	1	1	-	-	-	-
HTB1P 121209	A/B	15	12	6	3	2	1	1	-
	C/D	9	6	4	2	1	1	1	-
HTB1P 122209	A/B	30	24	12	9	4	3	3	-
	C/D	9	6	4	2	1	1	1	-
HTB1P 161609	A/B	24	15	8	6	2	2	2	-
	C/D	15	12	6	3	2	1	1	-
HTB1P 162609	A/B	48	27	14	12	5	4	3	-
	C/D	15	12	6	3	2	1	1	-
HTB1P 163609	A/B	68	39	22	18	7	5	4	-
	C/D	15	12	6	3	2	1	1	-
HTB1P 252612	A/B	55	36	21	12	10	4	3	2
	C/D	50	32	18	10	8	3	2	2
HTB1P 252616	A/B	55	36	21	12	10	4	3	2
	C/D	50	32	18	10	8	3	2	2
HTB1P 254012	A/B	95	60	36	20	16	6	5	4
	C/D	50	32	18	10	8	3	2	2
HTB1P 254016	A/B	95	60	36	20	16	6	5	4
	C/D	50	32	18	10	8	3	2	2
HTB1P 256012	A/B	150	96	57	32	26	10	8	6
	C/D	50	32	18	10	8	3	2	2
HTB1P 414012	A/B	95	60	36	20	16	6	5	4
	C/D	90	56	33	18	15	6	5	4



Cable glands

Material

- polyamid
- stainless steel
- nickel plated brass
- brass

Type

- for armoured cables
- for non-armoured cables

Grounding

- internal grounding plate
- earth tag

Cable bedding	
Cable glands	Range [mm]
M12	5 -7
M16	7 - 10
M20	5,5 - 13
M25	8 - 17,5
M32	14 - 17,5
M40	19 - 28
M50	24 - 35
M63	29 - 48

Standard gland ranges, other gland models available on request.