

KLEEV USA

ENCLOSURE

Ex eb / Ex tb



KLEEV USA INC

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KLEEV USA INC Ex-Enclosure offer and diverse solution whether you want terminal boxes, control stations or control panels.

Stainless steel or Mild Steel Enclosure has been manufactured as per the requirements of EN/IEC 60079-0, EN/IEC 60079-7 & EN/IEC 60079-31 and satisfies requirements of ATEX.

The enclosures consist of a Lid and Base or MSHex screw with washer and a sealing system which ensures Ingress Protection rating of IP 66 in accordance with IEC 60529.



TECHNICAL SPECIFICATIONS

Material: Stainless Steel or Mild Steel

Surface: Natural, brushed and Painted

Gasket: Silicone

Ingress Protection: IP 66 in acc. With IEC 60529

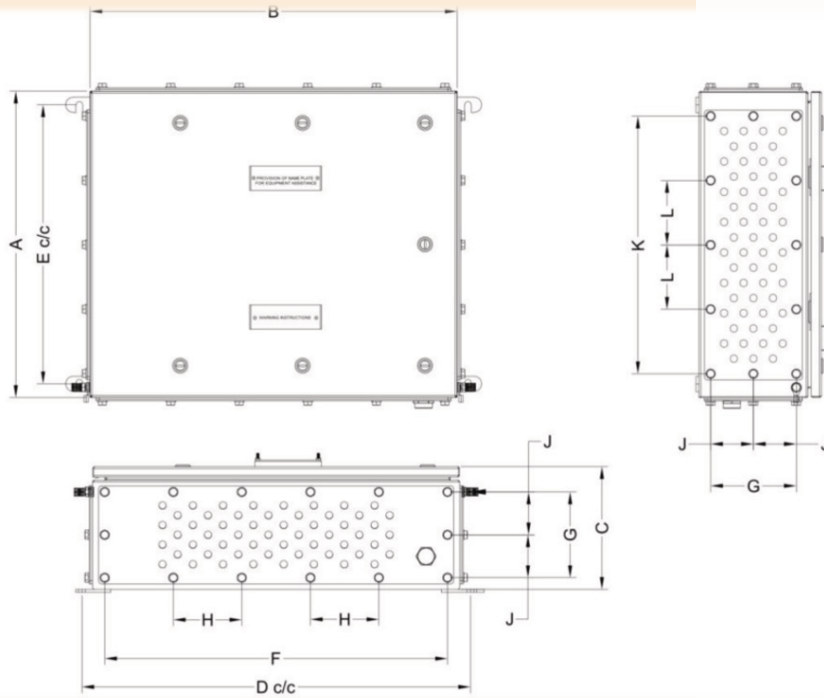
Operating Temperature: -35°C ~ 160°C

Area Classification: Zone 1 / 2 / 21 / 22

Accessories: Gland Plate, Mounting Plate, Breather / Drain Plug

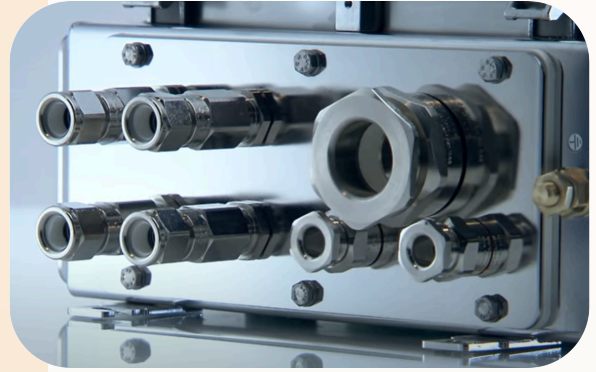
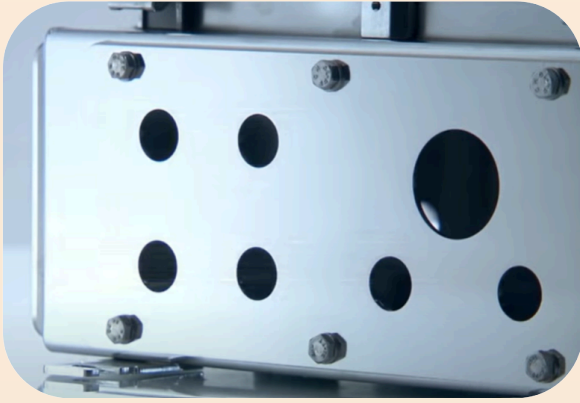


ENCLOSURE DIMENSIONS



Sr. No.	Type	A	B	C	D	E	F	G	H	J	K	L
1	KPE XXE N0200150150	200	150	150	185	155	110	90	-	-	120	-
2	KPE XXE N0260260150	260	260	150	295	215	220	90	110	-	180	90
3	KPE XXE N0260260200	260	260	200	295	215	220	140	110	70	180	90
4	KPE XXE N0300200150	300	200	150	235	255	160	90	80	-	220	110
5	KPE XXE N0300200200	300	200	200	235	255	160	140	80	70	220	110
6	KPE XXE N0380380150	380	380	150	415	335	340	90	113	-	300	100
7	KPE XXE N0380380200	380	380	200	415	335	340	140	113	70	300	100
8	KPE XXE N0400500150	400	500	150	535	355	460	90	115	-	320	107
9	KPE XXE N0400500200	400	500	200	535	355	460	140	115	70	320	107
10	KPE XXE N0500600200	500	600	200	635	455	560	140	112	70	420	105
11	KPE XXE N0600450200	600	450	200	485	555	410	140	103	70	520	104
12	KPE XXE N0760500200	760	500	200	535	715	460	140	115	70	680	113
13	KPE XXE N0900600300	900	600	300	635	855	560	240	112	120	820	117
14	KPE XXE N1000500300	1000	500	300	535	955	460	240	115	120	920	115
15	KPE XXE N1500800500	1500	800	500	835	1455	760	440	109	110	1420	118
16	KPE XXE N2000800800	2000	800	800	835	1955	760	740	109	106	1920	120

- * Values might differ slightly due to manufacturing tolerances.
- * For customize size of enclosure please contact **KLEEV USA INC**



ENCLOSURE CABLE ENTRIES MAX. FROM BOTTOM OR TOP SIDE

Sr. No.	Type	M12	M16	M20	M25	M32	M40	M50	M63	M75	M90	M100
1	KPE XXE N0200150150	6	4	2	1	-	-	-	-	-	-	-
2	KPE XXE N0260260150	14	8	8	4	3	2	-	-	-	-	-
3	KPE XXE N0260260200	25	13	13	8	5	2	-	-	-	-	-
4	KPE XXE N0300200150	10	6	6	3	2	2	-	-	-	-	-
5	KPE XXE N0300200200	17	10	8	6	4	4	-	-	-	-	-
6	KPE XXE N0380380150	22	14	14	7	7	4	-	-	-	-	-
7	KPE XXE N0380380200	38	23	20	14	8	5	-	-	-	-	-
8	KPE XXE N0400500150	32	18	20	9	6	6	-	-	-	-	-
9	KPE XXE N0400500200	56	30	30	18	12	7	-	-	-	-	-
10	KPE XXE N0500600200	56	38	28	22	14	9	7	5	3	2	-
11	KPE XXE N0600450200	49	28	25	16	9	6	5	4	2	2	-
12	KPE XXE N0760500200	-	-	30	18	12	7	5	4	2	2	-
13	KPE XXE N0900600300	-	-	63	35	24	22	14	8	3	2	2
14	KPE XXE N1000500300	-	-	63	35	24	22	14	8	3	2	2
15	KPE XXE N1500800500	-	-	63	35	24	22	14	8	3	2	2
16	KPE XXE N2000800800	-	-	63	35	24	22	14	8	3	2	2

ENCLOSURE CABLE ENTRIES MAX. FROM LEFT OR RIGHT SIDE

Sr. No.	Type	M12	M16	M20	M25	M32	M40	M50	M63	M75	M90	M100
1	KPE XXE N0200150150	6	4	4	1	-	-	-	-	-	-	-
2	KPE XXE N0260260150	12	6	6	3	2	2	-	-	-	-	-
3	KPE XXE N0260260200	18	10	10	6	4	2	-	-	-	-	-
4	KPE XXE N0300200150	14	8	8	4	3	2	-	-	-	-	-
5	KPE XXE N0300200200	21	10	10	6	3	2	-	-	-	-	-
6	KPE XXE N0380380150	20	12	12	6	4	4	-	-	-	-	-
7	KPE XXE N0380380200	35	20	18	12	8	4	-	-	-	-	-
8	KPE XXE N0400500150	20	12	12	6	4	4	-	-	-	-	-
9	KPE XXE N0400500200	35	20	18	12	8	4	-	-	-	-	-
10	KPE XXE N0500600200	49	28	28	16	11	6	5	4	2	2	-
11	KPE XXE N0600450200	56	35	30	20	14	8	6	5	3	2	-
12	KPE XXE N0760500200	-	-	30	20	14	8	6	5	3	2	-
13	KPE XXE N0900600300	-	-	32	20	15	10	6	5	2	2	2
14	KPE XXE N1000500300	-	-	32	20	15	10	6	5	2	2	2
15	KPE XXE N1500800500	-	-	32	20	15	10	6	5	2	2	2
16	KPE XXE N2000800800	-	-	32	20	15	10	6	5	2	2	2

- * Min. Rating of cable gland is Ex eb IIC Gb IP66
- * For combination of different size and types of cable gland please contact **KLEEV USA INC**
- * For details of maximum permitted power dissipation please contact **KLEEV USA INC**



TECHNICAL DETAILS

Technical Specification

Material	Stainless Steel or Mild Steel
Material Grade	ASTM A240 Gr.304 ASTM A240 Gr.304L ASTM A240 Gr.316 ASTM A240 Gr.316L EN 10025-2 Gr. S275JR
Enclosure Material Thickness	1.2 to 4 mm
Gland plate Material Thickness	1.2 to 6 mm
Gasket	Silicone
Degree of protection	IP66 as per IEC 60529
Enclosure cover	Fully detachable
Gland plate on face(s)	Bottom Side (Optional for all other side)
Surface Finish	Natural / Brushed / Painted
Painting Specification	DFT 150~300 as per Material Grade and Requirement
Door Fixing	Quarter-turn key locks
Grounding	M6 internal stainless steel grounding bolt welded to enclosure body M6 internal stainless steel grounding bolt welded to Door M6/M8/M10 internal/external stainless steel grounding bolt welded to enclosure body
Mounting	Mounting brackets enclosed see data table for dimensions on page 2
Area Classification	Zone 1, Zone 2, Zone 3 and Zone 4
Terminal	International brand of explosion-proof terminal blocks
Ambient temperature	-35 to 90°C depending on the installed components
Cable entry	see data table on page 3
Breather/Drain Plug	Optional
Cable Gland	Optional

Approvals

IECEX approval	IECEX KLCS 23.0020U IECEX KLCS 23.0021X IECEX KLCS 23.0023X
ATEX approval	ICQC 23 ATEX 0496 ICQC 23 ATEX 0497 X ICQC 23 ATEX 0498 X

Conformity to Standards

IEC Standards	IEC 60079-0 IEC 60079-31 IEC 60079-7 EN/IEC 60079-11
EN Standards	EN 60079-0 EN 60079-31 EN 60079-7 EN 60079-11

TECHNICAL DETAILS

Ex Marking

Ex-Enclosure

Ex-Enclosure with
Terminal Block

Ex-Local Control Panel (LCP)

Ex eb IIC Gb
 Ex tb IIIC Db IP 66
 Ex eb IIC T6...T3 Gb
 Ex ia IIC T6...T3 Ga
 Ex eb ia IIC T6...T3 Gb
 Ex ec IIC T6...T3 Ga
 Ex ec ia IIC T6...T3 Ga
 Ex tb IIIC T85°C...T200°C Db IP66
 Ex eb IIC T* Gb / Ex eb ia IIC T* Gb
 Ex db eb IIC T* Gb / Ex db eb ia IIC T* Gb
 Ex eb mb IIC T* Gb / Ex eb ia mb IIC T* Gb
 Ex db eb mb IIC T* Gb / Ex db eb mb ia IIC T* Gb
 Ex ec IIC T* Gc / Ex ec ia IIC T* Gc
 Ex db ec IIC T* Gb / Ex db ec ia IIC T* Gc
 Ex ec mb IIC T* Gb / Ex ec ia mb IIC T* Gc
 Ex db ec mb IIC T* Gb / Ex db ec mb ia IIC T* Gc
 Ex tb IIIC T*Db IP66

SELECTION OF TYPE/MODEL NO.

Type of Enclosure / Junction Box

Ex-Enclosure

K P E

Kleev
Products

X X

Material Grade
 01 - ASTM A240 Gr. 304
 02 - ASTM A240 Gr. 304L
 03 - ASTM A240 Gr. 316
 04 - ASTM A240 Gr. 316L
 05 - EN 10025-2 Gr. S275JR

E X

Enclosure

X X X X

Height (mm)

X X X

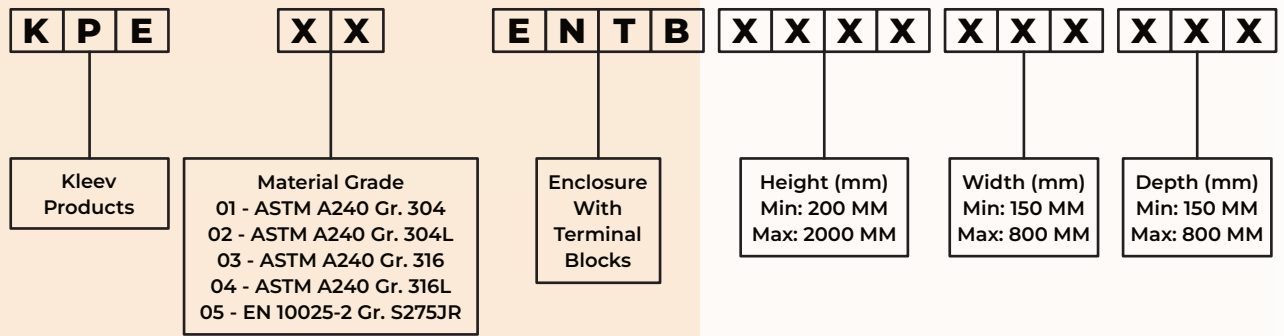
Width (mm)

X X X

Depth (mm)

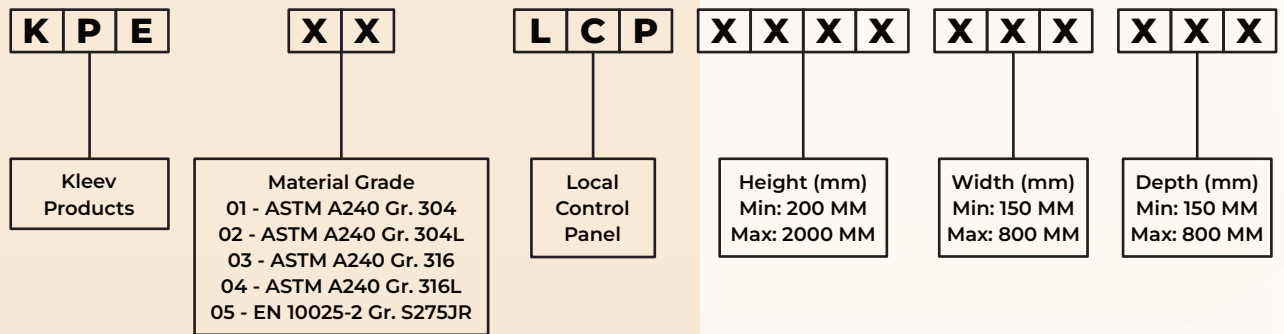
Type of Enclosure / Junction Box

Ex-Enclosure with Terminal Block



Type of Enclosure / Junction Box

Ex-Local Control Panel (LCP)



Size (HxWxD) in MM	Ex-Enclosure	Ex-Enclosure with Terminal Block	Ex-Local Control Panel (LCP)
200x150x150	KPEXXEN0200150150	KPEXXENTB0200150150	KPEXXLCP0200150150
260x260x150	KPEXXEN0260260150	KPEXXENTB0260260150	KPEXXLCP0260260150
260x260x200	KPEXXEN0260260200	KPEXXENTB0260260200	KPEXXLCP0260260200
300x200x150	KPEXXEN0300200150	KPEXXENTB0300200150	KPEXXLCP0300200150
300x200x200	KPEXXEN0300200200	KPEXXENTB0300200200	KPEXXLCP0300200200
380x380x150	KPEXXEN0380380150	KPEXXENTB0380380150	KPEXXLCP0380380150
380x380x200	KPEXXEN0380380200	KPEXXENTB0380380200	KPEXXLCP0380380200
400x500x150	KPEXXEN0400500150	KPEXXENTB0400500150	KPEXXLCP0400500150
400x500x200	KPEXXEN0400500200	KPEXXENTB0400500200	KPEXXLCP0400500200
500x600x200	KPEXXEN0500600200	KPEXXENTB0500600200	KPEXXLCP0500600200
600x450x200	KPEXXEN0600450200	KPEXXENTB0600450200	KPEXXLCP0600450200
760x500x200	KPEXXEN0760500200	KPEXXENTB0760500200	KPEXXLCP0760500200
900x600x300	KPEXXEN0900600300	KPEXXENTB0900600300	KPEXXLCP0900600300
1000x500x300	KPEXXEN1000500300	KPEXXENTB1000500300	KPEXXLCP1000500300
1500x800x500	KPEXXEN1500800500	KPEXXENTB1500800500	KPEXXLCP1500800500
2000x800x800	KPEXXEN2000800800	KPEXXENTB2000800800	KPEXXLCP2000800800