

DIAMOND SERIES EXPROOF TERMINAL ENCLOSURES



Operating Manual & Safety Instructions



IMPORTANT!



This manual provides safety and operating instructions for Diamond Series Terminal Enclosures which are designed to be used in potentially explosive areas. Please read these instructions carefully before proceeding to use the equipment purchased.



Only trained & certified electricians / persons are allowed and authorized to mount and use these products, according to EN60079-14.



Failure to follow these instructions could result in minor or moderate injury and invalidates the warranty of the product.



Please perform a visual check to ensure that any part of the purchased product is not damaged or missing, before proceed to using. Please get in contact with the seller in case of facing any improper parts.



It is the seller's responsibility to ensure that the end user is aware of these instructions and has access necessary documentation for use.

Please contact the seller company in case of any further information request on Diamond Series Exproof Terminal Enclosures.

CONTENTS:

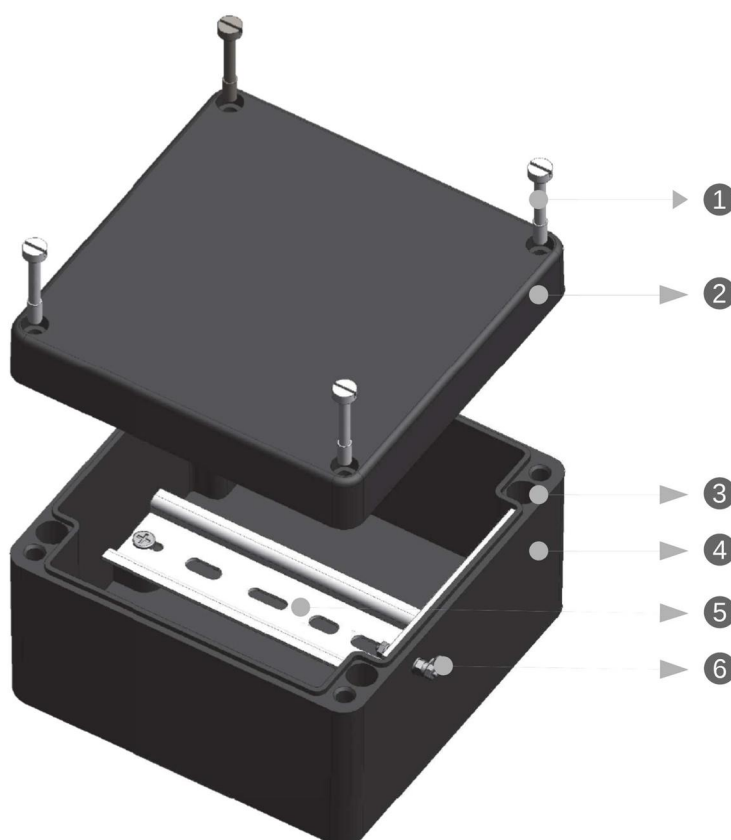
1. General Information.....	4
2. General Arrangement.....	4
3. Mounting / Installation.....	5
4. Safety Instructions.....	6
5. Technical Specifications.....	7

1. GENERAL INFORMATION:

Diamond Series Enclosures are designed and manufactured to be used as a terminal boxes in potentially explosive areas for connection of power & signal cables. These enclosures are made from a glass re-inforced polyester which is self-extinguishing according to UL 94 (V0). As a standart, enclosure is provided without terminals and cable glands which are subject to be chosen specifically for the application. Enclosures with different variations concerning entries, cable glands and terminals are available upon request. **IMPORTANT: Only certified electrician according to EN60079-14 are authorized for drilling cable entries.**

2. GENERAL ARRANGEMENT:

1. Cover Screw
2. Enclosure Cover
3. Mounting Screw Slot
4. Enclosure Body
5. DIN Rail
6. Equipotential Earthing Point



3. MOUNTING & INSTALLATION:

Before proceed, please ensure that enclosure body, cover and seal are not damaged. This is a prior requirement to achieve intended IP and explosion protection.

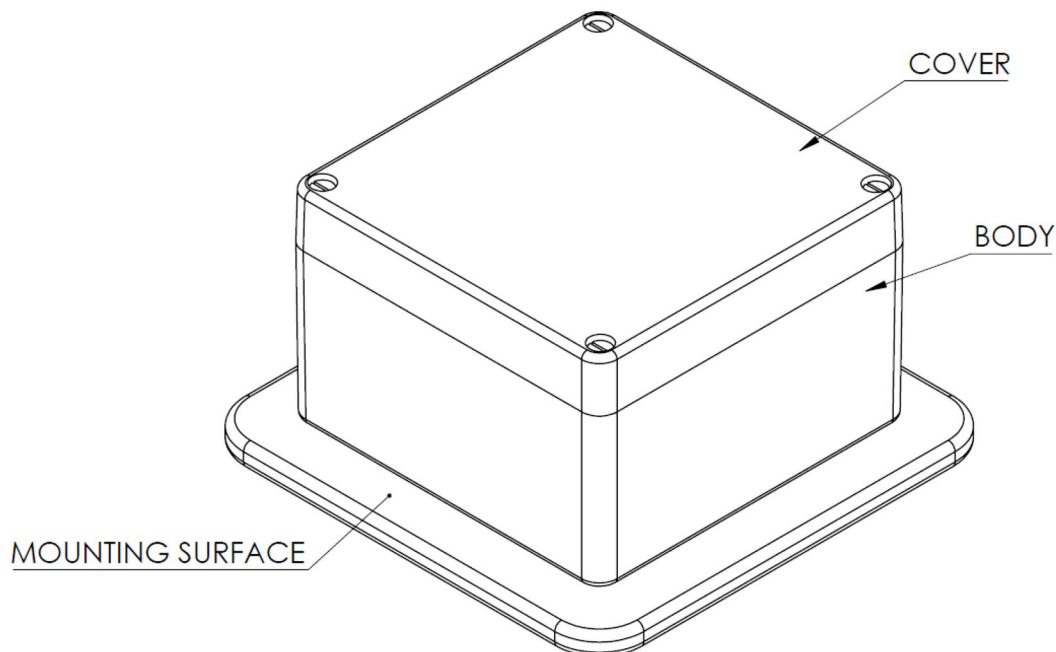
Mounting work must be performed only by qualified and trained electricians. Improper installation and operation of enclosures which are explosions proof may result in the loss of enclosure protection.

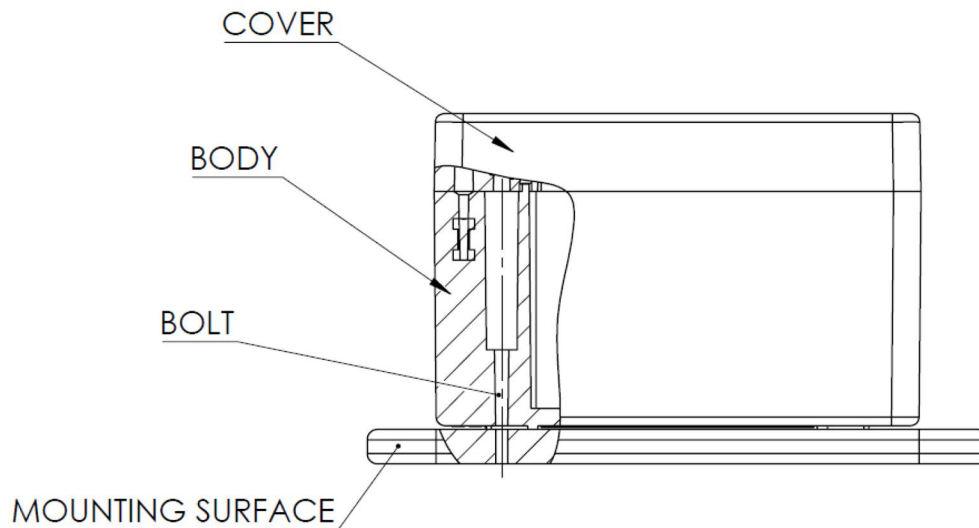
Electrical connection and the earthing of the enclosure must be carried out according to EN/IEC 60079-0. Diamond Series Enclosures always provide equipotential conductor (internal & external) and earthing plates inside for metal glands which are all in integration with each other and with the DIN rail.

Please be informed that only certified electricians are allowed and authorized to drill these enclosures and tapping the holes. Any drilling and tapping process performed by un-certified people invalidates the enclosure certificate and may result in the loss of enclosure protection.

Providing the cable entry with a cable gland which has a lower protection than the enclosure, will result in the loss of enclosure's protection level. Therefore, please ensure that cable glands would have min. IP66 protection to achieve the max protection.

Please see below mounting details before proceed.





Always ensure that any foreign materials are not left in the enclosure after the completion of installation.

4. SAFETY INSTRUCTIONS:



It is the installer's responsibility to provide the cable entries with using of an explosion proof cable glands in hazardous areas. Only the enclosure's certification would not satisfy the EU regulations in case of non-certified cable glands are used.

Always ensure that the power supply is already disconnected before opening the enclosure cover.


This enclosure is manufactured only for the purpose of cable connections. Please do not use for out of this purpose.

Please be informed that the dielectric test was performed under 600V.

This enclosure is "Eex e" certified to be used in hazardous areas in Zone 1, Zone 2, Zone 21, Zone 22, only if the terminals used inside the enclosure are also "EEx e" type and certified. Using the enclosure in hazardous areas without certified terminals is not permitted.

In case of using earth terminals on the DIN rail inside the enclosure, always ensure that the earth terminal is in contact with the external earthing conductor which must be connected to the equipotential earthing conductor.

5. TECHNICAL SPECIFICATIONS:

Enclosure	:	Glass Re-Inforced Polyester, Flame Retardant, V0
Dimensions	:	<u>DMD141</u> 141 x 141 x 91mm (outer) 131 x 131 x 81mm (inner)
		<u>DMD21</u> 211 x 151 x 111mm (outer) 201 x 141 x 101mm (inner)
Protection	:	IP66
Area Usage	:	Indoor / Outdoor
Certification	:	 II 2G Ex eb IIC T3-T6 Gb
Ambient Temp	:	-40°C / + 70°C

Number of Max. Gland Entry							
Type	Drilling Side	M16	M20	M25	M32	M40	M50
DMD14	A-B	3	2	2	1	-	-
	C-D	6	5	3	2	1	-
DMD21	A-B	8	6	3	2	1	-
	C-D	12	8	6	3	2	2