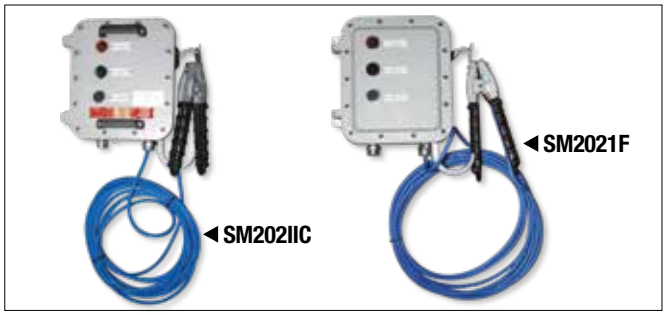


Installation: hazardous areas - Zone 1 / 2 (Gases)
Classification: Group II - Category 2G

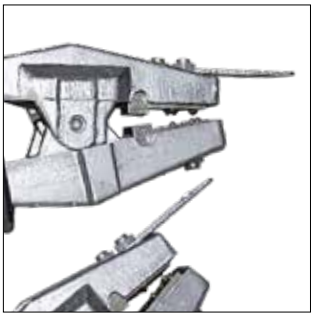
Certificate NEMA Type 4X

REFERENCE STANDARDS

SM2021F ELECTRONIC SYSTEM	
Directive 2014/34/EU	
EXECUTION	(Ex) II 2 G) Ex db IIA or IIB or IIB+H2 T6…T3 (Ex) II 2 G) Ex db [ia/ib IIA or IIB or IIC Ga] IIA or IIB or IIB+H2 T6 (Ex) II 2 D) Ex tb IIIC T85°C…T200°C (Ex) II 2 D) Ex tb [ia Da/ib] IIIC T85°C
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 13 ATEX 0022X
PROTECTION DEGREE	IP66
AMBIENT TEMPERATURE	-60°C ÷ +80°C
OTHER AVAILABLE CERTIFICATES	Component: INERIS 13 ATEX 9019U
	IECEx: IECEx INE 13_0070X
	INMETRO: CEPEL 12.2139
	EAC: TC RU C-IT.ГБ02.B.00689/18
	RINA: ELE18111CS_012
	RUSSIAN MARINE CERTIFICATE (RMRS): 19.02523.280
	NEC 505: UL 20141204-E302348 - Type rating NEMA 1, 12, 4 and 4X

SM2021IIC ELECTRONIC SYSTEM	
Directive 2014/34/EU	
EXECUTION	(Ex) II 2 G Ex db IIC T6...T3 (Ex) II 2 G Ex db [ia/ib/ic IIA or IIB or IIC Ga/Gc] IIC T6...T3 (Ex) II 2 D Ex tb IIIC T85°C…T200°C (Ex) II 2 D Ex tb [ia Da/ib/ic Dc] IIIC T85°C…T200°C
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31;
EC Type-Examination Certificate	INERIS 13 ATEX 0023X
PROTECTION DEGREE	IP66
AMBIENT TEMPERATURE	-60°C ÷ +80°C
OTHER AVAILABLE CERTIFICATES	Component: INERIS 13 ATEX 9019U
	IECEx: IECEx INE 13.0071X
	Component: IECEx INE 13.0085U
	INMETRO: CEPEL 12.2137
	EAC: TC RU C-IT.ГБ02.B.00689/18
	RUSSIAN MARINE CERTIFICATE (RMRS): 19.02523.280

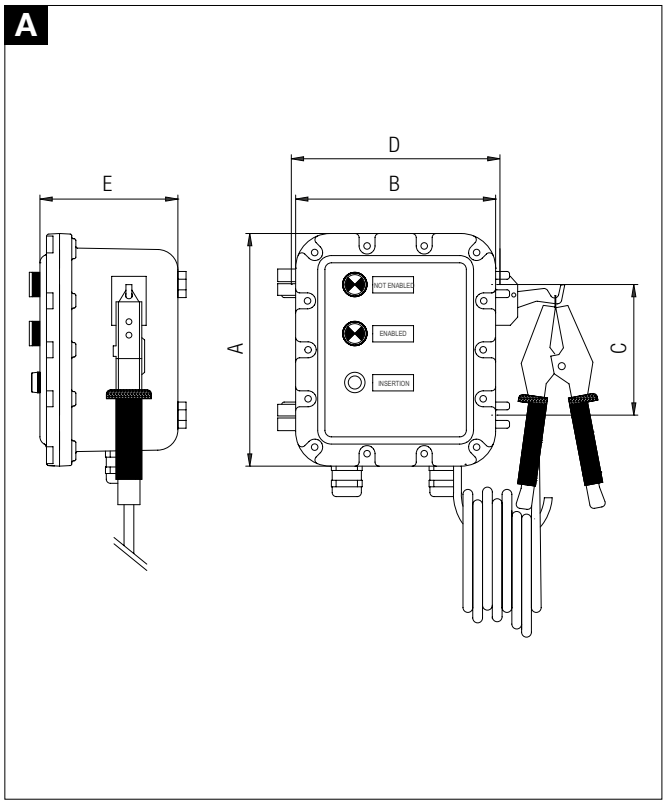
Mechanical characteristics	
Body	marine grade copper free aluminum light alloy
Cover	marine grade copper free aluminum light alloy
Screws	stainless steel
Internal plate	hot dip galvanized steel
External Painting	epoxy powders RAL-9006 Grey coloured
Hinges	casted on enclosure's body and cover (SM2021F)



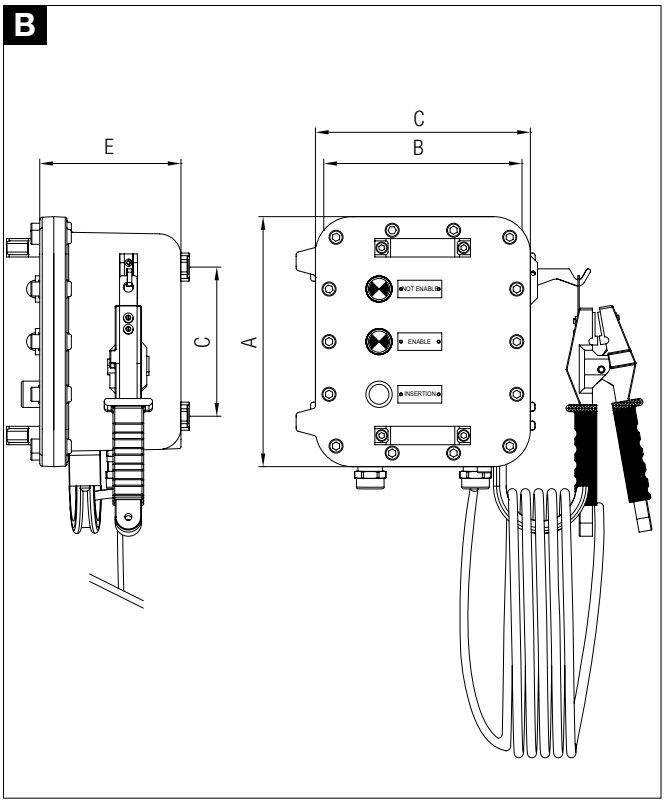
Technical Features

CODE	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	WEIGHT [Kg]	DETAIL
SM2021F	285	245	160	276	169	12	A
SM2021IIC	285	245	169	226	170	13	B

Reference Details



Reference Details



APPLICATIONS

They are used to control grounding continuity during thanks loading and unloading operations.
Thanks normally arrive electrostatically loaded, and an imperfect earthing might cause fire originated by a spark in presence of gas.
The earthing control system is composed of a marine grade copper free aluminium enclosure, as above described, inside fitted with the earthing control electronic circuit SM-2001, which is normally set at 20 ohm, and authorize thanks loading/unloading when resistance is less than 20 ohm.

An intrinsically safety barrier placed inside the equipment and connected via the included cable clamp kit to the electronic system allows the on and only verification of the correct / perfect ground connection of the tank.
The tank ground connection is to made only with proper grounding clamp series IT (not included).
Enclosure is provided with: NOT AVAILABLE red light – AVAILABLE green light - INSERTION push button.
Red electronic system SM.. pilot light remain lit till grounding clamp IT series (not included) is perfect connected to vehicle's earthing bar.
Insertion push button is pressed for at least 2sec.
If the resistance measured by electronic circuit is less than 20ohm, SM electronic system allows for loading and unloading operations.
Earthing clamp for verification is normally complete with 8m of cable.

FOR GROUNDING TANKS CONNECTIONS, PLEASE USE EARTHING CLAMPS IT.. SERIES SHOWED ON PREVIOUS BULLETIN

REMARK:
Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.