SWITCHED INTERLOCKED SOCKET OUTLETS



The switched interlocked socket outlets with non-sparking switch (Ex db eb) in the ADVANCE-GRP[GD] Series are suitable for installation in environments with classification Ex zone 1/Gb -2/Gc (due to the presence of gases, vapours and mists in group IIC) and/or zone 21/ Db - 22/Dc (due to the presence of the combustible dust in group IIIC). The use of a GRP material (Glass-fibre Reinforced Polyester) combined with the substantial thickness of the enclosure walls guarantees excellent mechanical resistance and a long life. This material is highly resistant to contamination and corrosion and is suitable for applications requiring the use of components with a low smoke emission and no halogens (LSOH low smoke zero halogen).

The material is charged with "carbon black", which helps reduce the surface resistivity of the material and consequently eliminate the risk of ignition due to the formation of sparks by static electricity.

ADVANCE-GRP[GD] interlocked sockets are used exclusively with plugs in the OPTIMA-EX[GD] Series.

With switch-disconnector

PRODUCTS FOR USE IN A POTENTIALLY EXPLOSIVE ENVIRONMENT

Scame offers products suitable for installation into environments under potential risk of explosion identified as Zone 1/2 and 21/22 and that enter into the field of application for the ATEX Directive (European Directive 94/9/CE).

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Acids Solvents Bases UV Saline Mineral solution oil rays Concentrated Diluted Concentrated Diluted Hexane Benzol Acetone Alcohol Limited Limited Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistance Resistance

Resistance values to chemical agents have to be considered indicative.

For further information and specific substances, contact the technical service.

REFERENCE STANDARDS

ATEX IECEX	IEC/EN 60079-0 Electrical apparatus for potentially explosive atmospheres. <i>Part 0: General requirements.</i>
ATEX IECEX	IEC/EN 60079-1 Electrical apparatus for potentially explosive atmospheres. Part 1: equipment protection by flameproof enclosures "d".
ATEX IECEX	IEC/EN 60079-7 Electrical apparatus for potentially explosive atmospheres. Part 7: equipment protection by increased safety "e".
ATEX IECEX	IEC/EN 60079-31 Electrical apparatus for potentially explosive atmospheres. Part 31: Protection by enclosures "t".
LVD	IEC/EN 60309-1 Plugs, socket outlets and couplers for industrial purposes. <i>Part 1: general requirements.</i>
LVD	IEC/EN 60309-2 Plugs, socket outlets and couplers for industrial purposes. Part 2: dimensional interchangeability requirements for pin and contact-tube accessories of harmonised configurations.
LVD	IEC/EN 60309-4 Plugs, socket-outlets and couplers for industrial purposes. Part 4: Switched socket-outlets and connectors with or without interlock.



ATEX-IECEx-EAC Ex [🚯 II 2GD]

TECHNICAL CHARACTERISTICS

Rated current:	16A-32A-63A-125A
Rated voltage:	50÷690V~
Frequency:	50÷60Hz
Insulating voltage:	690V~
Ambient temperature:	16-32A: -50°C ≤Ta ≤+60°C 63A: -35°C ≤Ta ≤+60°C 125A: -35°C ≤Ta ≤+40°C
Protection degree:	IP66
Impact Resistance:	7J
Switched socket outlets with interlock material:	Dissipative Thermosetting (GRP)
Colour:	Black RAL9005

Ex CHARACTERISTICS

ATEX Category:	🐼 II 2GD
Ex Protection type:	Ex db eb IIC T3,T4, T5, T6 Gb Ex tb IIIC T80°C Db
Surface temperature class DUST:	T80°C
Temperature class GAS:	T3, T4, T5, T6
ATEX Certificate	
16A-32A-63A-125A:	INERIS 15ATEX0017X
IECEx Certificate	
16A-32A-63A-125A:	IECEx INE 15.0033X
EAC Ex Certificate:	НАНИО ЦСВЭ № ТС RU C-IT.AA87.B.00870

WIRING OPERATIONS

Rated current (A)	Cable entry	Cable section (max).
16A	1xM25 (*)	12/18
32A	1xM32 (*)	16/25
63A	1xM40 (*)	22/32
125A	1xM50 (*)	28/38,5

(*) You can request the customised configuration of the cable input for the entire series of the ADVANCE-GRP[GD] socket.

ELECTRICAL FEATURES SWITCH DISCONNECTORS

Rated Current In	16/32A	63A	CZ0513-180A	
Rated insulation voltage Ui	VAC	690	690	690
	415V	-	-	-
AC22A Mixed resistive and inductive loads, including moderate overloads	500V	-	-	-
winder residing and indective loade, including moderate eventedas	690V	32	63	125
	415V	-	-	-
AC23A Rated operational power (°)	500V	32	-	-
	690V	-	63	125
AC3	415V	-	-	-
Squirrel-cage motor: starting, switching off motor during running	500V	25	50	-
(3 phase / 3 pole)	690V	-	-	125

(°) This values are given for guidance and may vary according to the specifics provided by the motor manufacturer.



ELECTRICAL PARAMETERS - AUXILIARY CONTACT

ATEX/IECEx Certification – Auxiliary Contact

Туре	V _{max} - I _{max}	Mode of protection (Nm)	ATEX Certificate	Ambient Temperature
Ex-TECH Solution				
ZBWE	415V – 4A	Ex db eb IIC Gb	INERIS 02 ATEX 9007U	-50°C / +75°C
ZBWE	415V – 4A	Ex db eb IIC Gb	IECEx INE13.0063U	-50°C/+75°C

DRILLING AREA

Drilling Area		Socket Cable gland	Clearance Max.				
	Dimensions	Size	size	а	b	drill holes	
A	80x45mm	16/32A A=A	20mm 25mm 32mm	21mm 26mm 33mm	39mm 46mm 56mm	2 2 1	Gland
A	110x55mm	63A A=A	25mm 32mm 40mm	26mm 33mm 41mm	46mm 56mm 70mm	2 2 1	
A A	196x72mm	125A lato superiore (A)	25mm 32mm 40mm 50mm	26mm 33mm 41mm 51mm	46mm 56mm 70mm 78mm	5 3 2 2	b Clearance
B	72x72mm	125A lato inferiore B=B	25mm 32mm 40mm 50mm	26mm 33mm 41mm 51mm	46mm 56mm 70mm 78mm	1 1 1	

SCAME

CROSS SECTIONAL AREAS CONDUCTORS & TORQUE

TERMINALS CONTACTS - TORQUE					
Туре	Cross Sectional	Tightoning Torque (Nm)			
	Min.	Max.	Tightening Torque - (Nm)		
16A	4 mm ²	10 mm ²	0.8		
32A	6 mm²	10 mm ²	0.8		
63A	16 mm ²	25 mm²	2.5		
125A	50 mm²	70 mm ²	3.5		

EARTH TERMINALS

EARTH TERMINALS CONTACTS - TORQUE						
Type Cross Sectional Areas Conductors (mm²) Tightening Torque - (Nm)						
16/32A	10/16mm ²	1.2				
63A	Weidmuller Ex e terminal type WPE35 35mm ²	3.5				
125A	50/70mm ²	3.5				