

OPTIMA-EX[GD] Series

Ex ATEX-IECEX-EAC Ex II 2GD

PLUGS



Plugs in the OPTIMA-EX[GD] Series (Ex eb) are suitable for use 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). They are compatible with the interlocked sockets in the ADVANCE-GRP[GD] Series, but can be connected, when in a “safe zone”, to any socket compliant with the industrial standard IEC/EN 60309 having the same polarity.

VERSIONS



Plugs

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
Plugs material:	PA6 - Dissipative
Colour:	Black RAL9011

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. <i>Part 1: equipment protection by flameproof enclosures “d”.</i>
ATEX IECEX	IEC/EN 60079-7 Electrical apparatus for potentially explosive atmospheres. <i>Part 7: equipment protection by increased safety “e”.</i>
ATEX IECEX	IEC/EN 60079-31 Electrical apparatus for potentially explosive atmospheres. <i>Part 31: Protection by enclosures “t”.</i>
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. <i>Part 2: dimensional interchangeability requirements for pin and contact-tube accessories of harmonised configurations.</i>

Ex CHARACTERISTICS

ATEX Category:	Ex II 2GD
Ex Protection type:	Ex 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:	НАННО ЦСВЭ № TC RU C-IT.AA87.B.00870

BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

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

Resistance values to chemical agents have to be considered indicative.
For further information and specific substances, contact the technical service.

ELECTRICAL FEATURES OPTIMA-EX[GD] SERIES

Rated Current	Maximun Current			Max. Cable Entry Temperature when Ta +60°C
	Ta 40°C	Ta 50°C	Ta 60°C	
16A	16A	16A	16A	80°C (*)
32A	32A	32A	32A	85°C (*)
63A	63A	63A	63A	90°C (*)
125A	100A	112A	125A	-

(*) **WARNING:** the cable entry can be reach high temperature; suitable cable can be used.

APPLICATION EXAMPLES



OPTIMA-EX[GD] Series



TECHNICAL FEATURES

OPTIMA-EX[GD] SERIES	Unit	Value				
		16A	32A	63A	125A	
Rated Current						
Code		219.16...	219.32...	219.63...	219.125...	
Cable section L1 – L2 – L3 – N Ground cable section	(mm ²)	4	6	16	50	
Power Supply Terminals - Tightening-Torque	(Nm)	1	1.5	2	4	
Cable size accepted by Cable-Clamp (eg.H07RN-F) Do not use armoured cable	(mm)	2P+E	14	16	21	30
		3P+E				
		3P+N+E				
Cable Gland/Cable-Clamp Tightening-Torque	(Nm)	2P+E	5,6	10	10	25
		3P+E				
		3P+N+E				
Cable-Gland/Cable-Clamp (Screw) - Tightening-Torque	(Nm)	0.8	0.8	0.8	0.8	
Handle Screws – Tightening-Torque	(Nm)	1	1	1,2	1,5	