

HLSW-PB20-PB.SG-3PSW-ESTP

Non-Metallic Explosion Proof Switch — C1D2/C2D2

Product ID: 320701

Important Notice: Supporting documentation (certificates, CAD files, dimensional drawings, nameplate diagrams, and wiring diagrams) is available upon request. Images represent standard form factors and may vary slightly from exact custom specifications. Please order based on listed technical specifications.

TECHNICAL SPECIFICATIONS

Listing	NRTL Listed (US, CA, Intl); ATEX Rated	Operating Temp	-50°C to +60°C
Switch Type	Non-metallic Switch	Housing Material	Glass Reinforced Anti-static Polycarbonate (PA6)
Dimensions	3.95" W × 5.47" H × 4.16" D	Housing / Plate	Black Housing / Silver Legend Plate
Voltage Rating	690V AC, 20A, 50-60Hz	Ratings	UV Protection: f1 Flame: V-0
Horsepower	2 HP	Gasket Material	Silicone
Button Configuration	Start/Stop Double Push Button; Mushroom Head Emergency Stop	Contact Blocks	(2) Normally Open
Button Colors	Green (Start), Red (Stop), Red (E-Stop)	Mounting Type	DIN Rail Mount
Selector Switch	3-Position, Maintained Contact	Wiring Hub	(1) 1/2" NPT Hub
Contacts	(2) NO & (2) NC		

RATINGS & REGULATORY APPROVALS

Class I, Division 2, Groups A, B, C, D	II 2 G Ex de IIC T4/T5/T6 Gb
Class I, Zone 1, AEx de IIC T4/T5/T6 Gb	II 2 D Ex tb IIIC T4/T5/T6 Db IP66
Class II, Division 2, Groups E, F, G	NEMA 3, 4, 4X, 12, 13
Class II, Zone 2, AEx tb IIIC T4/T5/T6 Db IP66	Export Control Classification (ECCN): EAR99
Class III, Divisions 1 & 2	

PRODUCT OVERVIEW

The **HLSW-PB20-PB.SG-3PSW-ESTP** is a heavy-duty, non-metallic explosion-proof switch rated for hazardous environments classified under Class I Division 2 (Groups A, B, C, D), Class II Division 2 (Groups E, F, G), and Class III (Divisions 1 & 2). Engineered for reliable control in extreme operating conditions, this 20-amp rated unit incorporates a start/stop double push button, an emergency stop push button, and a 3-position maintained contact selector switch within a compact enclosure.

Designed for DIN rail installation in flammable or volatile environments, this switch is ideally suited for deployment across petroleum refineries, chemical processing plants, petrochemical facilities, and industrial manufacturing sites. The operational interface features a side-by-side green (Start) and red (Stop) push button, positioned above a prominent red mushroom-head Emergency Stop button. The unit's explosion-protected contact blocks support system operating voltages up to 690V AC, with a 20A switching capacity and a 2 HP rating.

CONSTRUCTION & ARCHITECTURE

The unit is enclosed in a high-strength PA6 glass-reinforced anti-static housing designed to resist high impacts, hazardous chemical exposure, and outdoor weathering. The enclosure maintains an f1 UV resistance classification and a V-0 flame retardant rating. Internally, silver alloy contacts with gold flashing ensure optimal electrical conductivity and oxidation resistance over extended operation.

Full silicone gasketing throughout the assembly ensures tight sealing against moisture, dust, and environmental contaminants, meeting NEMA 3, 4, 4X, 12, and 13 protection standards. The unit operates reliably across a wide ambient temperature envelope ranging from -50°C to +60°C and integrates seamlessly with motor starters or contactors for remote equipment management.

INSTALLATION & HARDWARE SPECS

Hub Specification:

Equipped with a single 1/2" NPT threaded hub, fully sealed with silicone gasketing for secure conduit connection.

Mounting Configuration:

Standard DIN rail mounting layout for straightforward integration into industrial control panels and field enclosures.

DOCUMENTATION & CERTIFICATES

The following supporting resources and reference files are maintained for this model series:

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| • High-Resolution Product Photographs (Views 1–8) | • CAD Models & Dimensional Drawings |
| • ISO 9001 Quality Certification Documentation | • Wiring Diagrams & Name Plate Schematics |