EDS Factory Sealed Tumbler Switches

Explosionproof, Dust-Ignitionproof

UNILETS™ for Use with Threaded Metal Conduit.

NEC/CEC:
Class I, Division 1 and 2, Groups B◆, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 3, 7 B◆CD, 9EFG

Applications

- Designed to prevent arcing of enclosed switches in ignitable atmospheres during connect and disconnect operation of lighting and light power loads.
- For use in classified areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in:
  - — Chemical plants
  - — Petrochemical plants
  - — Refineries
  - — Other process industries

Features

- Enclosures have external mounting lugs for ease of mounting.
- Smooth, rounded integral bushing in each hub protects conductor insulation.
- Enclosures furnished with internal ground screw.
- 20 Amp and 30 Amp units available for use with 120-277 Vac.
- Factory sealed switches are designed to a UL Standard so that any arcing devices are contained within an explosionproof labyrinth switch (standard switch and sealing chamber on select models). Tumbler switch devices are approved for installation without additional external sealing fittings.
- 1/2" and 3/4" 1-gang units suitable for Class I, Group B, in addition to Class I, Groups C and D; Class II, Groups E, F and G; and Class III.
- 20 Amp 4-way and all 30 Amp models utilize a switch enclosed in separate sealing chamber. Smooth double-face, accurately ground surfaces on sealing chamber flange mate with cover and body to provide positive flame-tight construction.
- Sealing chamber has prewired factory sealed pigtail leads to switch.
- Corrosion resistant, strong stainless steel hex head cap screws attach cover/body/sealing chamber assembly for approved flame-tight construction.
- Threaded stainless steel operating handle provides positive Corrosion resistant operation.
- Choice of front-operating or side rocker arm handle—each may be locked in ON or OFF position.

Standard Materials

- Body and cover: malleable iron
- Sealing chamber (on select models): copperfree (4/10 of 1% max.) aluminum
- Handle: nylon 6/6
- Optional nameplate mounting bracket: corrosion resistant stainless steel

Standard Finishes

- Tumbler switches: triple-coat—(1) zinc electroplate, (2) chromate, and (3) epoxy powder coat



Front Operated



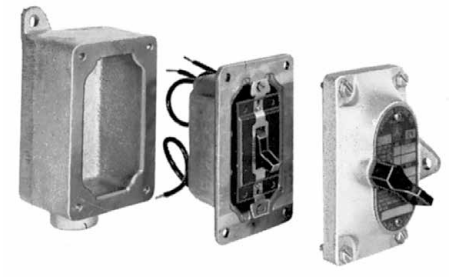
Rocker Arm Operated

Illustrated Features





Handles may be locked in ON or OFF position



Separate sealing chamber and switch construction.
Used on 20 Amp 4–way and all 30 Amp models.



Explosionproof Labyrith Switch
Used on all 20 Amp models excluding 4–way.

◆ *Indicates items which are suitable for Class I, Group B, as well as Class I, Groups C and D; Class II, Groups E, F, G; and Class III. See product selection pages for suitable items.*

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Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 3, 7 B◆CD, 9EFG

Options

- 1- or 2-gang copperfree (4/10 of 1% max.) aluminum bodies and covers ① available. Add suffix – **A**.
- **NPBRKT** nameplate mounting bracket to make circuit description/identification easy.
  - — Pre-drilled holes in bottom of bracket allow direct mounting to control stations with existing cover bolts.
  - — Pre-drilled holes in middle of bracket allow mounting of customer's circuit identification nameplate; epoxy glue may also be used for mounting (phenolic nameplate not included).
  - — Bracket eliminates costly field installation of drilling and tapping to accommodate circuit identification nameplate.
  - — Brackets fit side-by-side on 2-, 3- and 4-gang boxes and 3-devices.

Standard Materials

- Body and cover: malleable iron

NEC/CEC Certifications and Compliances

- UL Standards: UL 894, UL 1203
- UL Listed: E10523, E81751
- cUL Listed: E81751, E810523

Ordering Information for "Custom" Units

- Devices, covers and bodies may be ordered separately so that a *different* EDS chamber/switch assembly may be used in *each* gang.
- Order components separately as follows:
  (1) select mounting body catalog number,
  (2) select cover catalog number with desired switch operation (1-pole, 2-pole, 3-way or 4-way).

How to Order Hub Arrangements

- Simply send sketch indicating sizes and locations for brazed hubs on body or bodies selected from catalog listings. Orient sketch so that cover opening faces front and mounting lugs face upward and downward (box wall opposite cover should be referred to as the *back* of box).

Bodies and Hubs Available

- Tumbler switches may be ordered in single thru five gang deep malleable iron blank bodies with brazed hubs as specified at any location.
- Tumbler switches may be ordered with tandem malleable iron boxes with additional brazed hubs as specified.
- Standard malleable iron single and 2-gang tumbler switches may be ordered with additional brazed hubs as specified.
- Single and 2-gang tumbler switches may be ordered with aluminum boxes with additional brazed hubs as specified.

Related Products

- For classified-location push button, pilot light and selector switch control stations, see *EFD/EFDB and EDS Control Stations and Pilot Lights.*

◆ *Indicates items which are suitable for Class I, Group B, as well as Class I, Groups C and D; Class II, Groups E, F, G; and Class III. See product selection pages for suitable items.*

① *Aluminum rocker arm cover is not available.*

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EDS Factory Sealed Tumbler Switches

Explosionproof, Dust-Ignitionproof

Malleable Iron Body and Cover. Furnished with Internal Ground Screw.

NEC/CEC:
Class I, Division 1, Groups B◆, C, D
Class I, Division 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 3, 7CD, 9EFG

	Hub Size (Inches)	Switch	Catalog Number ① Dead–End	Feed–Thru
1-Gang — Front Operated				
	20 Amp — 120-277 Vac ②			
	1/2	1-Pole	**EDS150-F1**	**EDSC150-F1**
	1/2	2-Pole	**EDS150-F2**	**EDSC150-F2**
	1/2	3-Way	**EDS150-F3W**	**EDSC150-F3W**
	1/2	4-Way	**EDS150-F4W ④**	**EDSC150-F4W ④**
	3/4	1-Pole	**EDS175-F1**	**EDSC175-F1**
	3/4	2-Pole	**EDS175-F2**	**EDSC175-F2**
	3/4	3-Way	**EDS175-F3W**	**EDSC175F3W**
Dead–End	3/4	4-Way	**EDS175-F4W ④**	**EDSC175F4W ④**
	1	1-Pole	**EDS110-F1**	**EDSC110-F1**
	1	2-Pole	**EDS110-F2**	**EDSC110-F2**
	1	3-Way	**EDS110-F3W**	**EDSC110-F3W**
	1	4-Way	**EDS110-F4W ④**	**EDSC110-F4W ④**
	30 Amp — 120-277 Vac ③			
	3/4	1-Pole	**EDS175-F13 ④**	**EDSC175-F13 ④**
	3/4	2-Pole	**EDS175-F23 ④**	**EDSC175-F23 ④**
Feed–Thru	3/4	3-Way	**EDS175-F3W3 ④**	**EDSC175-F3W3 ④**
	1	1-Pole	**EDS110-F13 ④**	**EDSC110-F13 ④**
	1	2-Pole	**EDS110-F23 ④**	**EDSC110-F23 ④**
	1	3-Way	**EDS110-F3W3 ④**	**EDSC110-F3W3 ④**
2-Gang — Front Operated				
	20 Amp — 120-277 Vac ②			
	1/2	1-Pole	**EDS250-F1**	**EDSC250-F1**
	1/2	2-Pole	—	**EDSC250-F2**
	1/2	3-Way	—	**EDSC250-F3W**
	1/2	4-Way	—	**EDSC250-F4W ④**
	3/4	1-Pole	**EDS275-F1**	**EDSC275-F1**
Dead–End	3/4	2-Pole	—	**EDSC275-F2**
	3/4	3-Way	**EDS275-F3W**	**EDSC275-F3W**
	3/4	4-Way	—	**EDSC275-F4W ④**
	1	1-Pole	**EDS210-F1**	**EDSC210-F1**
	1	2-Pole	**EDS210-F2**	**EDSC210-F2**
	1	3-Way	**EDS210-F3W**	**EDSC210-F3W**
Feed–Thru	1	4-Way	**EDS210-F4W ④**	**EDSC210-F4W ④**

*① For aluminum backbox and cover, add suffix -**A**.*
② 20 Amp — 1 HP at 120 Vac and 2 HP at 240 Vac.
③ 30 Amp — 2 HP at 120 Vac or 240 Vac.
④ Contains standard switch and sealing chamber.

◆ Shaded area indicates items suitable for Class I, Group B, as well as Class I, Groups C and D; Class II, Groups E, F, G; and Class III.

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