# **EDS / EFS Series Control Stations**

### **FlexStation™ Control Station Components**

Cl. I, Div. 1 & 2, Groups B (Div. 2 only) C, D
Cl. II, Div. 1 & 2, Groups E, F, G
Cl. III
Zone 1 & 2 Group IIB
NEMA 3R, 7B\* (Div. 2) CD, 9 EFG, 12

### **Applications:**

Five modular components – operators, contact blocks, covers, legend plates, and bodies – are combined to provide a variety of control stations which are:

- For use indoors or outdoors, in areas which are hazardous due to the presence of flammable gases and vapors, or combustible dust.
- Used in conjunction with magnetic starters or contactors for remote control of motors and other electrical apparatus.
- For installation in petroleum refineries, chemical, petrochemical, and other industrial process facilities; grain processing and storage facilities; and other heavy industrial applications where Class I, Class II, or Class III hazards are present.

#### **Features:**

- Momentary contact pushbuttons, maintained contact pushbuttons, and pilots lights offer a choice of functions.
- Selector switches in 2 or 3 position configurations including keyed and spring return options.
- Single-hole, two-hole, and three-hole covers for one, two, or three devices respectively per station.
- Rugged control devices for safe, reliable operation in industrial applications.
- Bodies, with extra room for wire pulling and termination, also include two integral mounting feet for fast, secure installation.
- Bodies have ½", ¾", or 1" dead-end or through-feed conduit hubs with integral bushing for protection of wire insulation.
- Covers and bodies are available in Feraloy® or copper-free aluminum for light weight and corrosion resistance.
- DL legend plates have large lettering to give clear indication of device function.
   Space is available for field markings.

# Certifications and Compliances:

• NEC

Class I, Division 1 & 2, Groups B\* (Div. 2), C, D
Class II, Division 1 & 2, Groups E, F, G
Class III

- Zone 1 & 2 Group IIB\*
- NEMA: 3R, 7B (Div. 2) CD, 9EFG, 12
- UL Standard: 1203



### **Standard Materials:**

- Bodies, covers Feraloy® or copper-free aluminum.
- Pushbuttons and guards Type 6 / 6 nylon.
- Operating shafts, bearings stainless steel.

#### **Standard Finishes:**

- Feraloy® iron alloy electrogalvanized and aluminum acrylic paint.
- Copper-free aluminum natural.
- Stainless steel natural.

### **Options:**

**Description**Copper-free aluminum bodies and

Corro-free<sup>™</sup> epoxy finish for use in severely corrosive environments.

. S752

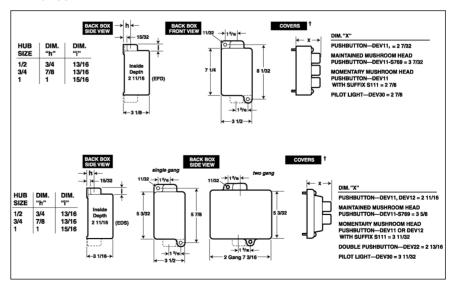
Suffix

SA

# FlexStation covers and bodies. **Electrical Ratings:**

- Pushbuttons and selector switches 600 VAC heavy duty (NEMA A600).
- Pilot lights 120 VAC.

# Dimensions In Inches:



†Covers have same length and width as back boxes.
\*For Class I, Division 1, Group B or Zone 1 Hydrogen applications, use the EFS(C) complete control station catalog numbers see page 528.

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# STEP 1 – Select Operator Pushbutton – front operated, standard black button



Description	Cat. #_
Single button for 1 contact block	DEV11
Single button for 2 contact blocks	DEV12
Double buttons for 2 contact blocks	DEV22



Options	Suffix
Specify color for each pushbutton button (ex: DEV11G, DEV22GR). Color is black if unspecified	ed.
Green button - unmarked	G
Red button - unmarked	R
Momentary red mushroom head (breaks normally closed contacts only, not available with lockout	
or DEV22)	S111
Lockout with bar and chain (available on DEV11 and DEV12)	S153
Maintained red mushroom head (breaks normally closed and makes normally open contacts, push	
to stop, lockout standard, not available with DEV22)	S769



#### Pilot Light - factory sealed, incandescent lamp





Description	Cat. #
Pilot light with red jewel	DEV30 J1
Pilot light with green jewel	DEV30 J3
Pilot light with amber jewel	DEV30 J6
Pilot light with clear jewel	DEV30 J10
Pilot light with blue LED and clear jewel	DEV30 J11 LED
Options	Suffix
Options	Outlix
LED lamps (standard clear jewel with colored lamp)	LED
•	
LED lamps (standard clear jewel with colored lamp)	LED
LED lamps (standard clear jewel with colored lamp) 24 V lamp (not available with transformer feature)	LED S300
LED lamps (standard clear jewel with colored lamp) 24 V lamp (not available with transformer feature) 240 / 120 V pilot light transformer	LED \$300 T2

#### Selector Switch - with standard lockout





Description	Cat. #
2-position (pos. 1 – N.O., pos. 2 – N.C.) for use with 1 or 2 contact blocks	DEV42
3-position (pos. 1 – N.O., pos. 2 – Open, pos. 3 – N.C.) for use with 1 or 2 contact blocks	DEV43
3-position (pos. 1 – N.C., pos. 2 – N.O., pos. 3 – N.O. for Switch A) (pos. 1 – N.O., pos. 2 – N.O., pos. 3 – N.C. for Switch B) for use with 2 contact blocks	DEV44
Options	Suffix
Spring return to center from right (For DEV43 or DEV44 only)	S634
Spring return to center from left (For DEV43 or DEV44 only)	S635
Spring return to center from right and left (For DEV43 or DEV44 only)	S842
Key Operated – removable from all positions	S847 K1*
Key Operated – removable from left position for DEV42 or from center for DEV43 and DEV44	S847 K2*
Key Operated – removable from right position for DEV42 or from left for DEV43 and DEV44	S847 K3*
Key Operated – removable from right position for DEV43 and DEV44	S847 K4*
*Additional key lock housings available; please contact Customer Service.	

# STEP 2 – Select Contact Block (if required). For product details see page 571. Contact Block



_Description	Cat. #
Contact block, 1 NO and 1 NC, 10A, 600VAC, A600 rating	ESWP126

For additional technical information see page 571.

Note - Each control station will accept a maximum of three contact blocks. Select device operators accordingly. DEV12, DEV22 and DEV44 may not be used on a three-operator (DS443-SA) cover. DEV42 and DEV43 may not be used on a three-operator cover when using them with two contact blocks.

# 4C EDS / EFS Series Control Stations

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# STEP 3 – Select Desired Legend Plates

For use wit	h single hole covers	overs For use with 2 or 3 hole covers			
Cat. #	Inscription	Cat. #	Inscription	Cat. #	Inscription
DL101	Blank	DL01	Blank w/no fields	DL32	Open-Close
DL128	Run-Jog	DL02	Blank w/single field	DL33	Up-Down
DL129	Hand-Auto	DL03	Blank w/2 fields	DL35	In-Out
DL130	Forward-Reverse	DL05	Start	DL36	Raise-Lower
DL132	Open-Close	DL06	Stop	DL37	Start-Stop
DL133	Up-Down	DL07	On	DL38	Run-Off-Jog
DL135	In-Out	DL08	Off	DL39	Hand-Off-Auto
DL136	Raise-Lower	DL09	Run	DL40	For-Off-Rev
DL137	Start-Stop	DL10	Jog	DL41	Fast-Off-Slow
DL138	Run-Off-Jog	DL11	Trip	DL42	1-Off-2
DL139	Hand-Off-Auto	DL12	Reset	DL43	Open-Off-Close
DL140	For-Off-Rev	DL13	Test	DL44	Up-Off-Down
DL141	Fast-Off-Slow	DL14	Power On	DL46	Fast
DL142	1-Off-2	DL15	Hand	DL47	Slow
DL143	Open-Off-Close	DL16	Automatic	DL48	Off-On
DL144	Up-Off-Down	DL17	Emer Stop	DL49	Auto-Off-Hand
DL148	Off-On	DL18	Forward	DL65	Slow-Fast
DL149	Auto-Off-Hand	DL19	Reverse	DL85	Safe
DL165	Slow-Fast	DL20	Open	DL86	Safe-Run
DL186	Safe-Run	DL21	Close	DL87	Raise-Off-Lower
DL187	Raise-Off-Lower	DL22	Up	DL88	Slow-Off-Fast
DL188	Slow-Off-Fast	DL23	Down	DL89	Odd-Off-Even
DL189	Odd-Off-Even	DL24	In	DL90	Stop-Start
DL190	Stop-Start	DL25	Out	DL91	On-Off
DL191	On-Off	DL26	Raise	DL92	Fast-Slow
DL192	Fast-Slow	DL27	Lower	DL93	Local-Remote
DL193	Local-Remote	DL28	Run-Jog	DL94	Trip-Reset
DL194	Trip-Reset	DL29	Hand-Auto	DL95	Auto-Manual
DL195	Auto-Manual	DL30	Forward-Reverse	DL96	Start-Emer Stop
DL196	Start-Emer Stop			DL97	Alarm-Silence
DL197	Alarm-Silence			DL98	Maint-Manual
DL198	Maint-Manual			DL99	Test-Reset
DL199	Test-Reset				

Note: For special markings order DL101-"desired markings" or DL01-"desired markings"

## STEP 4 - Select Cover

### Covers



Description	Cat. #
Blank cover with single hole (Single gang)	DS441
Blank cover with 2 holes (Single gang)	DS442
Blank cover with 3 holes (To be used with EFD(C)1491-SA, 2491-SA or 3491-SA series of back boxes)	DS443 SA
Replacement cover plug for unused device operator openings	206765



Options:	Suffix
Aluminum body (mandatory suffix on DS443 must be included in catalog number) Exterior epoxy powder coat finish Interior & exterior epoxy powder coat finish. Not available on three operator cover (DS443-SA)	SA S752 S753
interior a exterior epoxy powder coat iniish. Not available on three operator cover (D5443-5A)	3/33

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Zone 1 & 2 Group IIB

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### STEP 5 – Select Back Box Back Boxes - for use with DS441 and DS442 covers or with 1 gang and 2 gang DS/DSD Series covers



Dead End	Through Feed	Hub Size	Back Box Arrangement
EDS171	EDSC171	1/2"	Single gang back box
EDS271	EDSC271	3/4"	Single gang back box
EDS371	EDSC371	1"	Single gang back box
EDS172	EDSC172	1/2"	Double gang back box
EDS272 EDS372	EDSC272 EDSC372	³/₄" 1"	Double gang back box Double gang back box



Options:	Suffix
Aluminum body	SA
Exterior epoxy powder coat finish Interior & exterior epoxy powder coat finish	S752
Interior & exterior epoxy powder coat finish	S753

### Back Boxes - for use with DS443-SA cover or with 11/2 gang DS511 (3-operator) Series covers



Dead End	Through Feed	Hub Size	Back Box Arrangement
EFD1491 SA EFD2491 SA EFD3491 SA	EFDC1491 SA EFDC2491 SA EFDC3491 SA	1/2" 3/4" <b>1</b> "	1½ gang back box 1½ gang back box 1½ gang back box
Options			Suffix
	powder coat finish or epoxy powder coat f	inish	S752 S753

FlexStation™ Control Station Components

CI. III

Zone 1 & 2 Group IIB

NEMA 3R, 7B\* (Div. 2) CD, 9 EFG, 12

### Back Boxes - for use with DS441 and DS442 covers



Through Feed	Hub Size	<b>Back Box Arrangement</b>
EDSC378	1"	3 gang tandem

#### **Common Cover Assemblies**

Cat. #	Description
DS455 ①	With one pilot light
DS476 ① ②	With one pilot light and transformer
DS456 ① ①	With two pilot lights
DS429§	With one pushbutton

DS454§ With two pushbuttons
DS510 ①§ With one pushbutton and one pilot light

①Add color symbol for each pilot light from table below.

Color	Symbol	Color	Symbol	Color	Symbol
Red	J1	Amber	J6	Blue	J11
Green	J3	Clear	J10		

②Add suffix below for transformer primary voltage:

### Transformers - Voltages above 125

Nom. Volts 50–60Hz Transformer	Primary Voltage Range	Suffix
220 / 110	220–240	T2
440 / 110	440–480	T4
550 / 110	550–600	T5

§ If desired, markings on indicating plates may be added to catalog number. Select from the list of standard markings below:

g ii desired, markings on mulcating plates may be	s added to catalog humber. Select i	noni ine iisi oi sianuaru markings bei	OW.
START	OFF	RESET	LIGHT ON
STOP	RUN	TRIP	HAND
ON	JOG	TEST	AUTOMATIC
EMERGENCY	OPEN	DOWN	RAISE
FORWARD	CLOSE	IN	LOWER
REVERSE	UP	OUT	