

Combination Switch ECS, ESC Series

Wet Locations
NEMA 3,3R,4,4X,7,9



< ECS Series >



< ESC Series >

❖ Application

- Industrial areas such as chemical plants, oil and gas refineries, paint and varnish manufacturing plants, gasoline bulk loading terminals, grain elevators, grain processing industries, coal processing or handling areas where atmospheres may contain hazardous gases or dusts and arcing of enclosed devices must not ignite the surrounding atmosphere.
- Controlling and supplying energy to portable electrical devices such as motor generator sets, compressors, conveyors, portable tools, etc.

❖ Standard Finish

- MUNSELL No. 7.5BG 6/1.5
- If you want another color, contact us please.

❖ Option

- Sunshade Cover

❖ Features

- These are the combinations of meters, pilot lights (Single or double), Cam switches, Selector switches and Push button switches (single or double), the main enclosures of which are fitted to the terminal boxes of two or three gangs.
- This range of all units has complete interchangeability in the joints between the main enclosures and the terminal boxes, so that any combination is available. When a combination other than listed in the tables is required, specify the units to be combined.
- The flameproof enclosure are composed of the main body and cover with four hexagonal headed bolts.

❖ Standard Materials

- Terminal Box : Cast aluminum alloy
- Main Enclosure : Die casting aluminium
- Pole : Steel pipe
- Base : Cast aluminium alloy

Units	Specification	Electrical Ratings
Am-meter Volt-meter	-The Am-meters and Volt-meters are moving iron instruments with an accuracy class 1.5 -Standard overload scales are max.3 times -On Am-meters for 1 and 5 Amp C.T connection	
Pilot Lamp	-The pilot system based on the use of luminescent diodes as the lamp source.	LED : AC 110,220V/20mA max., DC24V Filament Lamp : AC 110,220V/3W
Cam Switch	-Cam Switches max 4 positions are available with conventional contactors or as a contact-free version. -The contact arrangements can be selected, spring return or notched positions can be supplied (refer to contact arrangement on this page).	Contact Ratings AC 110V 15Amp. 300V 10Amp. 440V 3Amp. DC 24V 10Amp. 110V 5Amp. 220V 3Amp.
Selector Switch	-Selector switches max 4 positions are available. -The switching arrangements can be selected, spring return or notched position are available.	AC 250V 5A Contact Rating.
Push Button Switch	-The standard contact block is double pole, 1 NC (Normally closed), and 1 NO (Normally Open contact)	AC 250V 5A Contact Rating.

Suffix No.	For Operating Magnetic Motor Starter		Suffix No.	For ON/OFF or Selective Transfer Operation	
	Handle Positions	Contact Arrangements		Handle Positions	Contact Arrangements
1			7		
2			8		
3			9		
4			10		
5			11		
6			12		

Explanation on Operating Diagrams in the Table

In the operating diagrams in the table above, the longitudinal dotted lines show the operating positions of switch, the small circles on the both ends of lateral line show the terminals, and the figures show the terminal numbers.

The marks showing the conditions of contacts at each operating position are explained as follows:

- The contact between both terminals is closed at this position.
- The contact is closed successively between the two positions.
- ←● The mark of residual contact. The contact is closed when the handle is set to this position and keeps closed after the handle returns. The contact is open at the fine point of the arrow mark when the handle is operated in this direction.
- ↶ A The mark of spring return. The arrow mark shows the direction of automatic spring return form 'A' to the fine point of it.

Rectangular Combination Switch ECS Series

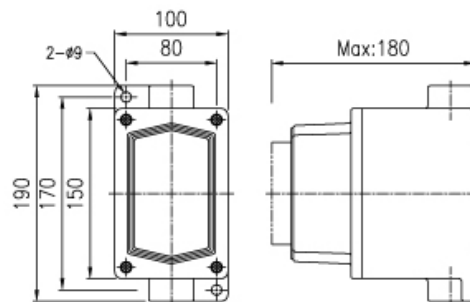
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❖ Type of Explosion-proof
Flameproof (Ex d IIB T6)
Class I Group CD Class II Group EFG

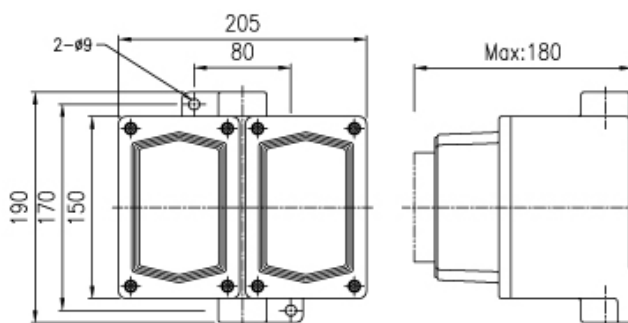
© **Rating** : Max. 250 Volt, Max. 5 Ampere.
▪ EPB Push button and ESS Selector S/W are
UL Listed.

❖ 1 Gang



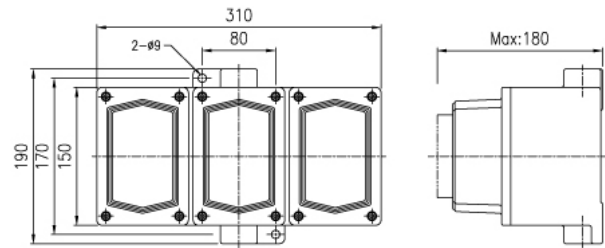
No. of Gangs	Unit Arrangement							Catalog Number	
	Meter	Pilot Lamp		Cam Switch	Selector Switch	Push Button		Wall Mounting	Standing
		Single	Double			Single	Double		
1 Gang	○							ECS 101	ECS 101T
		○						ECS 102	ECS 102T
			○					ECS 103	ECS 103T
				○				ECS 104	ECS 104T
					○			ECS 105	ECS 105T
						○		ECS 106	ECS 106T
							○	ECS 107	ECS 107T

❖ 2 Gang



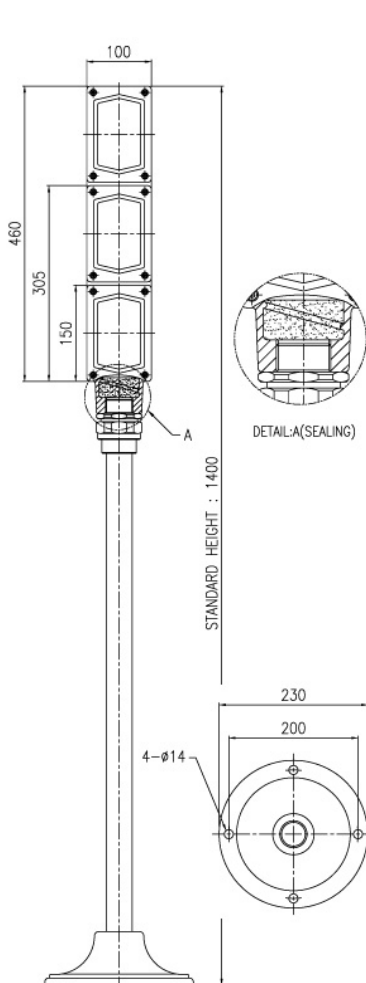
No. of Gangs	Unit Arrangement							Catalog Number		
	Meter	Pilot Lamp		Cam Switch	Selector Switch	Push Button		Wall mounting		Standing
		Single	Double			Single	Double	Horizontal	Vertical	
2 Gang	○		○					ECS 201	ECS 201V	ECS 201T
	○				○			ECS 202	ECS 202V	ECS 202T
	○						○	ECS 203	ECS 203V	ECS 203T
		○			○			ECS 204	ECS 204V	ECS 204T
		○				○		ECS 205	ECS 205V	ECS 205T
		○					○	ECS 206	ECS 206V	ECS 206T
			○		○			ECS 207	ECS 207V	ECS 207T
			○					ECS 208	ECS 208V	ECS 208T
			○○					ECS 209	ECS 209V	ECS 209T
				○		○		ECS 210	ECS 210V	ECS 210T
					○	○		ECS 211	ECS 211V	ECS 211T
					○		○	ECS 212	ECS 212V	ECS 212T
					○○			ECS 213	ECS 213V	ECS 213T
						○		ECS 214	ECS 214V	ECS 214T
							○○	ECS 215	ECS 215V	ECS 215T

❖ 3 Gang

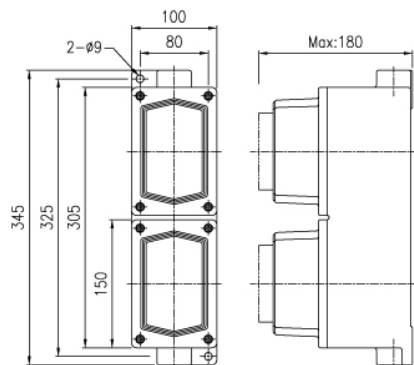


3 Gang Horizontal Type

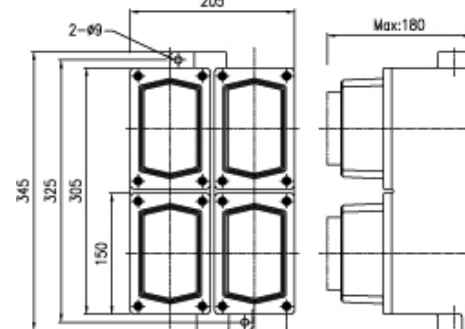
No. of Gangs	Unit Arrangement						Catalog Number			
	Meter	Pilot Lamp		Cam Switch	Selector Switch	Push Button		Wall mounting		Standing
		Single	Double			Single	Double	Horizontal	Vertical	Vertical
3 Gang	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>			ECS 301	ECS 301V	ECS 301T
	<input type="radio"/>	<input type="radio"/>					<input type="radio"/>	ECS 302	ECS 302V	ECS 302T
	<input type="radio"/>		<input type="radio"/>		<input type="radio"/>			ECS 303	ECS 303V	ECS 303T
	<input type="radio"/>			<input type="radio"/>			<input type="radio"/>	ECS 304	ECS 304V	ECS 304T
	<input type="radio"/>				<input type="radio"/>		<input type="radio"/>	ECS 305	ECS 305V	ECS 305T
		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	ECS 306	ECS 306V	ECS 306T
		<input type="radio"/>			<input type="radio"/>	<input type="radio"/>		ECS 307	ECS 307V	ECS 307T
		<input type="radio"/>			<input type="radio"/>		<input type="radio"/>	ECS 308	ECS 308V	ECS 308T
			<input type="radio"/>		<input type="radio"/>		<input type="radio"/>	ECS 309	ECS 309V	ECS 309T
			<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	ECS 310	ECS 310V	ECS 310T



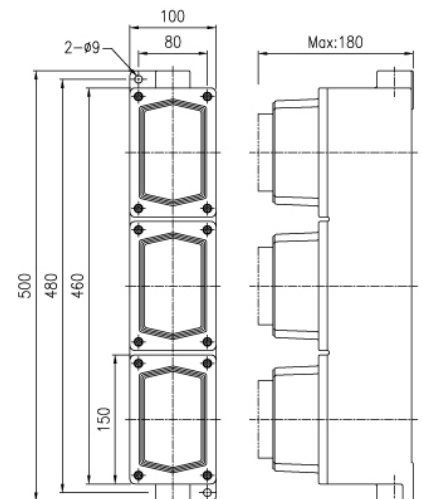
Standing Type



<2 Gang Vertical Type>



<4 Gang Type>



<3 Gang Vertical Type>

* ECS 4 Gang is order made.
Contact us please.

❖ Ordering Information

ECS	2	14	T
①	②	③	④

① Flameproof ECS Combination Stations

③ Combination Type

② Gang number

④ Style Type

100 Series : 1 Gang

None : Wall Mounting Horizontal Type

200 Series : 2 Gang

V : Wall Mounting Vertical Type

300 Series : 3 Gang

T : Standing Vertical Type

400 Series : 4 Gang (Order made)