

ACSEW Cast Control Centers

Explosionproof, Dust-Ignitionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG
Zone 1 and 2 – 21 and 22
Ⓔ II 2 GD

ATEX / IEC
IP66 – IK10

Application

- Explosionproof control centers are used where hazardous materials are handled or stored.
- Grouping push buttons, switches, pilot devices and glass lenses in one enclosure will satisfy a wide range of control applications. This is most beneficial when having areas with minimum space or needing to centralize all controls in one area.

Features

- Precision machined flame path between body and cover.
- Bolt on stainless steel slotted mounting feet.
- Flexible hinge mounting on either side, (hinges standard on 121206 and above).
- External flange maximizes internal space.
- Wall thickness suitable for minimum of five full threads.
- Factory assembled and wired to specifications.
- Operators are spaced on 2-1/2" centers.
- All push buttons and selector switches have stainless steel shafts.
- Push button and selector switches are rated 10 Amp 600 Vac
- Pilot lights are rated 6 Vac up to 600 Vac with transformer.
- Round windows available in a wide range of sizes.
- Provision for mounting pan.
- Ground lug package and installation instructions for termination of ground wires enclosed.
- O-ring gasket insures watertight integrity.

Standard Materials

- Bodies and covers: sand cast copperfree (4/10 of 1% max.) aluminum
- Cover bolts and mounting feet: stainless steel
- O-Ring: neoprene

Standard Finish

- Bodies and covers: shot blast finish

Options

- Custom drilling and tapping.
- Gray epoxy powder coat available to provide NEMA 4X rating. Add suffix **-G2**.
- ATEX complete product certification add suffix **-X**.
- ATEX U Component certification add suffix **-XU**.
- For window installed option, contact your local representative for maximum number of operators.

Certifications and Compliances

- UL Standards: UL 1203
- UL Classified: E77137
- UL Listed: Control Operators E87975
- CSA Standards: C22.2 No. 14-M, C22.2 No. 24, C22.2 No. 30
- CSA Certified: 042130



Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

- Certification Type JBEW U2
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: CE 0081 Ⓔ II 2 G
 - ATEX/IEC Protection: Ex d IIB + H₂
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: CE 0081 Ⓔ II 2 D
 - ATEX/IEC Protection: Ex tD A21
 - Ambient Temperature: -40 °F/-40 °C to 131 °F/55 °C
 - CE Declaration of Conformity: 5C239
 - ATEX Certificate: LCIE 06 ATEX 0010U
 - IECEx Certificate: IECEx LCI 08.001X
 - Internal Volume: > 2dm³ (2 liters)
- Ingress Protection (solid and liquid): IP66
- Impact Resistance (shock): IK10
- Ex Standards: EN/IEC 60079-0; 60079-1; 61241-0; 61241-1
- Other Standards: EN/IEC 60529 (IP), 62262 (IK)

ACSEW Cast Control Center Dimensions

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II 2 GD

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Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Catalog Number	Dimensions in Inches/Millimeters											
	Overall Dimensions				Mounting Dimensions			Inside Dimensions				
	F	E	G	A	AA	B	BB	W	H	Db	Dc	
ACSEW050903	8.94/227.1	13.50/342.9	6.13/155.7	4.00/101.6	N/A	11.00/279.4	N/A	5.06/128.5	9.50/241.3	3.50/88.9	1.13/28.7	
ACSEW060804	10.40/264.2	12.40/315.0	6.50/165.1	4.56/115.8	9.13/231.9	10.56/268.2	4.50/114.3	6.00/152.4	8.00/203.2	3.75/95.3	0.75/19.1	
ACSEW061004	10.63/270.0	15.25/387.4	6.75/171.5	5.50/139.7	N/A	13.13/333.5	N/A	6.13/155.7	10.75/273.1	3.81/96.8	1.44/36.6	
ACSEW061204	10.63/270.0	16.63/422.4	6.38/162.1	N/A	9.13/231.9	N/A	8.50/215.9	6.13/155.7	12.13/308.1	4.06/103.1	1.00/25.4	
ACSEW061604	11.00/279.4	20.50/520.7	6.88/174.8	6.00/152.4	N/A	18.00/457.2	N/A	6.50/165.1	16.00/406.4	4.13/104.9	1.38/35.1	
ACSEW071106	12.25/311.2	15.88/403.4	10.00/254.0	6.38/162.1	N/A	13.50/342.9	N/A	7.38/187.5	11.38/289.1	5.88/149.4	2.50/63.5	
ACSEW080806	12.25/311.2	12.25/311.2	8.25/209.6	4.50/114.3	10.75/273.1	10.75/273.1	4.50/114.3	8.00/203.2	8.00/203.2	5.75/146.1	0.75/19.1	
ACSEW081006	12.50/317.5	14.50/368.3	8.50/215.9	7.00/177.8	10.75/273.1	12.50/317.5	6.50/165.1	8.00/203.2	10.00/254.0	5.75/146.1	0.75/19.1	
ACSEW081307	12.50/317.5	17.44/443.0	10.38/263.7	N/A	10.00/254.0	N/A	8.50/215.9	8.00/203.2	13.06/331.7	3.50/88.9	3.50/88.9	
ACSEW091105	13.88/352.6	15.50/393.7	8.69/220.7	7.25/184.2	11.82/300.2	13.13/333.5	8.56/217.4	9.38/238.3	11.13/282.7	4.81/122.2	1.88/47.8	
ACSEW091504	14.25/362.0	20.44/519.2	8.50/215.9	7.25/184.2	11.81/300.0	17.88/454.2	13.31/338.1	9.50/241.3	15.56/395.2	4.75/120.7	1.75/44.5	
ACSEW101006	14.81/376.2	14.81/376.2	9.13/231.9	6.50/165.1	N/A	13.00/330.2	N/A	10.25/260.4	10.25/260.4	5.75/146.1	1.50/38.1	
ACSEW101406	14.50/368.3	18.50/469.9	8.44/214.4	7.00/177.8	13.00/330.2	16.63/422.4	10.63/270.0	10.00/254.0	14.00/355.6	5.88/149.4	0.75/19.1	
ACSEW101408	14.50/368.3	18.50/469.9	9.63/244.6	N/A	13.00/330.2	N/A	10.63/270.0	10.00/254.0	14.00/355.6	7.75/196.9	0.75/19.1	
ACSEW112005	16.38/416.1	25.13/638.3	7.50/190.5	10.25/260.4	14.50/368.3	22.63/574.8	16.88/428.8	11.38/289.1	20.00/508.0	4.88/124.0	1.50/38.1	
ACSEW112406	15.75/400.1	29.38/746.3	10.19/258.8	8.50/215.9	14.13/358.9	27.13/689.1	20.00/508.0	10.75/273.1	24.38/619.3	6.00/152.4	1.63/41.4	
ACSEW113006	16.38/416.1	35.00/889.0	10.25/260.4	9.50/241.3	15.13/384.3	32.88/835.2	27.25/692.2	11.25/285.8	29.88/759.0	6.19/157.2	1.88/47.8	
ACSEW121206	17.38/441.5	17.38/441.5	9.25/235.0	8.63/219.2	15.63/397.0	15.63/397.0	8.63/219.2	12.25/311.2	12.25/311.2	5.75/146.1	1.50/38.1	
ACSEW121208	17.38/441.5	17.38/441.5	11.50/292.1	8.63/219.2	15.63/397.0	15.63/397.0	8.63/219.2	12.25/311.2	12.25/311.2	7.75/196.9	1.50/38.1	
ACSEW121806	17.00/431.8	23.00/584.2	9.13/231.9	7.00/177.8	15.75/400.1	21.00/533.4	14.13/358.9	12.25/311.2	18.25/463.6	5.75/146.1	1.50/38.1	
ACSEW121808	17.00/431.8	23.00/584.2	11.13/282.7	7.00/177.8	15.75/400.1	21.00/533.4	14.13/358.9	12.25/311.2	18.25/463.6	8.75/222.3	1.50/38.1	
ACSEW122408	16.75/425.5	28.75/730.3	11.13/282.7	N/A	15.75/400.1	N/A	18.38/466.9	12.00/304.8	24.00/609.6	7.75/196.9	1.00/25.4	
ACSEW123608	16.75/425.5	40.75/1035.1	11.88/301.8	N/A	15.75/400.1	N/A	29.00/736.6	12.00/304.8	36.00/914.4	7.75/196.9	1.50/38.1	
ACSEW133806	18.00/457.2	42.50/1079.5	10.44/265.2	16.13/409.7	11.88/301.8	40.75/1035.1	33.75/857.3	13.63/346.2	37.88/962.2	6.13/155.7	1.50/38.1	
ACSEW141406	19.38/492.3	19.38/492.3	9.56/242.8	9.75/247.7	17.75/450.9	17.75/450.9	9.75/247.7	14.75/374.7	14.75/374.7	5.75/146.1	1.38/35.1	
ACSEW141408	19.38/492.3	19.38/492.3	11.56/293.6	9.75/247.7	17.75/450.9	17.75/450.9	9.75/247.7	14.75/374.7	14.75/374.7	7.75/196.9	1.38/35.1	
ACSEW142408	19.63/498.6	29.00/736.6	12.00/304.8	13.13/333.5	N/A	27.50/698.5	N/A	14.88/378.0	24.25/616.0	8.00/203.2	1.50/38.1	
ACSEW153707	21.25/539.8	43.00/1092.2	12.06/306.3	13.75/349.3	20.00/508.0	41.63/1057.4	32.00/812.8	15.63/397.0	37.25/946.2	7.44/189.0	1.50/38.1	
ACSEW161606	21.00/533.4	21.00/533.4	9.81/249.2	11.00/279.4	19.75/501.7	19.75/501.7	11.00/279.4	16.50/419.1	16.50/419.1	5.75/146.1	1.50/38.1	
ACSEW161608	21.00/533.4	21.00/533.4	12.39/314.7	11.00/279.4	19.75/501.7	19.75/501.7	11.00/279.4	16.50/419.1	16.50/419.1	8.38/212.9	1.50/38.1	
ACSEW161812	21.38/543.1	23.38/593.9	15.06/382.5	12.00/304.8	19.00/482.6	21.00/533.4	14.00/355.6	16.25/412.8	18.25/463.6	11.88/301.8	0.38/9.7	
ACSEW162206	21.50/546.1	27.31/693.7	9.06/230.1	13.00/330.2	19.88/505.0	25.25/641.4	15.50/393.7	16.44/417.6	22.50/571.5	5.75/146.1	1.25/31.8	
ACSEW162408	21.00/533.4	28.00/711.2	12.13/308.1	N/A	19.75/501.7	N/A	18.38/466.9	16.25/412.8	24.25/616.0	8.25/209.6	1.50/38.1	
ACSEW162806	20.75/527.1	32.75/831.9	8.63/219.2	13.00/330.2	N/A	30.75/781.1	N/A	16.25/412.8	28.25/717.6	5.75/146.1	1.50/38.1	
ACSEW181806	23.38/593.9	23.38/593.9	9.94/252.5	13.00/330.2	21.75/552.5	21.75/552.5	13.00/330.2	18.25/463.6	18.25/463.6	5.75/146.1	1.50/38.1	
ACSEW181808	23.38/593.9	23.38/593.9	11.94/303.3	13.00/330.2	21.75/552.5	21.75/552.5	13.00/330.2	18.25/463.6	18.25/463.6	7.75/196.9	1.50/38.1	
ACSEW182408	23.94/608.1	30.00/762.0	12.18/309.4	16.13/409.7	21.75/552.5	27.75/704.9	18.38/466.9	18.25/463.6	24.19/614.4	7.75/196.9	1.50/38.1	
ACSEW182410	23.94/608.1	30.00/762.0	14.18/360.2	16.13/409.7	21.75/552.5	27.75/704.9	18.38/466.9	18.25/463.6	24.19/614.4	9.75/247.7	1.50/38.1	
ACSEW183008	22.63/574.8	34.63/879.6	12.13/308.1	N/A	21.75/552.5	N/A	23.00/584.2	18.25/463.6	30.25/768.4	7.75/196.9	1.50/38.1	
ACSEW183608	23.50/596.9	41.75/1060.5	12.31/312.7	11.00/279.4	21.75/552.5	39.50/1003.3	29.00/736.6	18.25/463.6	36.50/927.1	7.75/196.9	1.50/38.1	
ACSEW183610	23.50/596.9	41.75/1060.5	14.31/363.5	11.00/279.4	21.75/552.5	39.50/1003.3	29.00/736.6	18.25/463.6	36.50/927.1	9.75/247.7	1.50/38.1	
ACSEW184207	23.88/606.6	47.88/1216.2	11.88/301.8	16.00/406.4	23.00/584.2	45.38/1152.7	38.38/974.9	18.63/473.2	42.25/1073.2	7.00/177.8	1.50/38.1	
ACSEW206008	25.00/635.0	65.00/1651.0	12.75/323.9	N/A	23.50/596.9	N/A	50.00/1270.0	20.00/508.0	60.00/1524.0	6.88/174.8	1.50/38.1	
ACSEW242408	29.38/746.3	29.38/746.3	12.31/312.7	18.38/466.9	28.00/711.2	28.00/711.2	18.38/466.9	24.50/622.3	24.50/622.3	7.75/196.9	1.50/38.1	
ACSEW242410	29.38/746.3	29.38/746.3	14.31/363.5	18.38/466.9	28.00/711.2	28.00/711.2	18.38/466.9	24.50/622.3	24.50/622.3	9.75/247.7	1.50/38.1	
ACSEW243008	29.00/736.6	35.00/889.0	13.00/330.2	18.00/457.2	28.00/711.2	34.00/863.6	23.00/584.2	24.00/609.6	30.00/762.0	8.00/203.2	1.94/49.3	
ACSEW243608	30.75/781.1	43.00/1092.2	13.06/331.7	18.25/463.6	28.00/711.2	40.00/1016.0	29.00/736.6	24.25/616.0	36.25/920.8	7.75/196.9	1.63/41.4	
ACSEW243610	30.75/781.1	43.00/1092.2	13.06/331.7	18.25/463.6	28.00/711.2	40.00/1016.0	29.00/736.6	24.25/616.0	36.25/920.8	9.75/247.7	1.63/41.4	
ACSEW303808	36.00/914.4	44.00/1117.6	13.75/349.3	N/A	35.00/889.0	N/A	29.00/736.6	30.00/762.0	38.00/965.2	7.75/196.9	2.00/50.8	
ACSEW303816	36.00/914.4	44.00/1117.6	20.06/509.5	N/A	35.00/889.0	N/A	29.00/736.6	30.00/762.0	38.00/965.2	7.75/196.9	7.75/196.9	

ACSEW Cast Control Center Dimensions

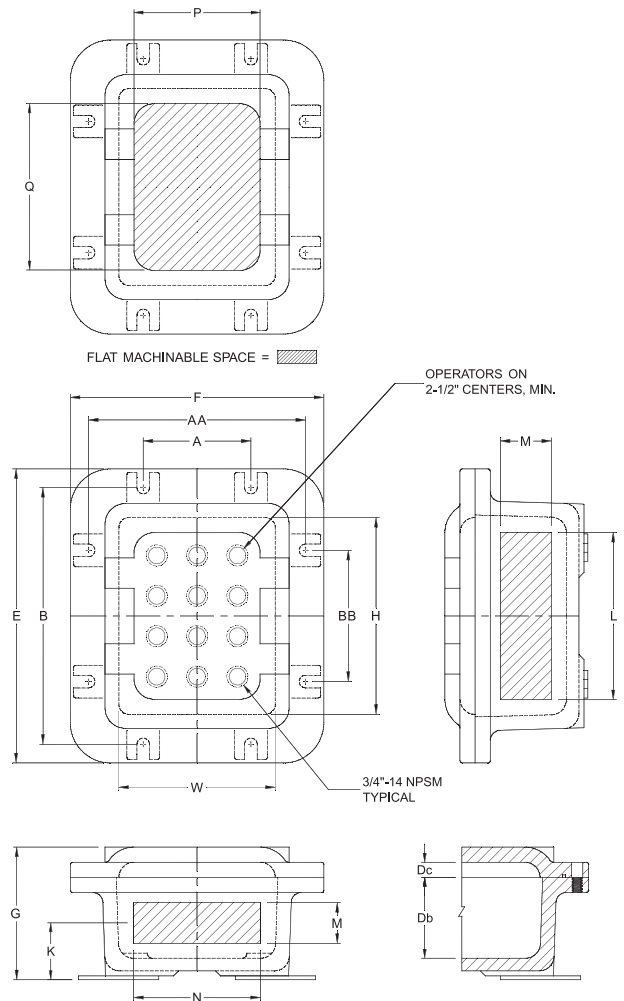
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Dimensions in Inches/Millimeters					
Flat Machine Space		Conduit Area			
Q	P	L	N	M	K
9.13/231.9	4.63/117.6	9.00/228.6	4.56/115.8	2.56/65.0	2.00/50.8
6.25/158.8	4.25/108.0	6.75/171.5	4.75/120.7	2.25/57.2	2.50/63.5
10.38/263.7	5.75/146.1	9.94/252.5	5.38/136.7	2.19/55.6	2.00/50.8
10.13/257.3	4.13/104.9	11.00/279.4	5.00/127.0	2.31/58.7	2.25/57.2
13.06/331.7	5.50/139.7	15.13/384.3	5.63/143.0	2.25/57.2	2.31/58.7
10.94/277.9	7.44/189.0	9.75/247.7	6.25/158.8	4.13/104.9	3.38/85.9
6.25/158.8	6.25/158.8	5.75/146.1	5.75/146.1	3.75/95.3	3.25/82.6
8.25/209.6	6.25/158.8	8.51/216.2	6.25/158.8	4.00/101.6	3.50/88.9
14.19/360.4	9.00/228.6	11.25/285.8	6.31/160.3	1.75/44.5	2.75/69.9
11.13/282.7	9.38/238.3	9.38/238.3	7.63/193.8	3.25/82.6	3.25/82.6
12.38/314.5	6.25/158.8	14.28/362.7	7.88/200.2	3.50/88.9	3.00/76.2
7.19/182.6	7.19/182.6	7.06/179.3	7.06/179.3	3.00/76.2	3.38/85.9
12.75/323.9	8.75/222.3	12.25/311.2	8.25/209.6	3.31/84.1	3.13/79.5
12.75/323.9	8.75/222.3	12.25/311.2	8.25/209.6	6.19/157.2	4.44/112.8
17.06/433.3	8.38/212.9	17.81/452.4	9.38/238.3	2.50/63.5	3.50/88.9
21.38/543.1	7.75/196.9	22.63/574.8	9.13/231.9	4.19/106.4	4.00/101.6
26.25/666.8	7.63/193.8	27.63/701.8	9.06/230.1	4.06/103.1	4.19/106.4
9.25/235.0	9.25/235.0	10.50/266.7	10.50/266.7	3.75/95.3	3.75/95.3
9.25/235.0	9.25/235.0	10.50/266.7	10.50/266.7	6.06/153.9	4.75/120.7
15.25/387.4	9.25/235.0	15.06/382.5	9.06/230.1	3.00/76.2	3.50/88.9
15.25/387.4	9.25/235.0	15.06/382.5	9.06/230.1	5.00/127.0	4.25/108.0
22.00/558.8	10.00/254.0	21.94/557.3	9.75/247.7	5.50/139.7	4.25/108.0
33.25/844.6	9.50/241.3	34.38/873.3	9.38/238.3	5.50/139.7	4.56/115.8
35.13/892.3	10.63/270.0	35.75/908.1	11.50/292.1	3.88/98.6	4.31/109.5
11.00/279.4	11.00/279.4	12.50/317.5	12.50/317.5	3.50/88.9	3.88/98.6
11.00/279.4	11.00/279.4	12.50/317.5	12.50/317.5	5.50/139.7	4.00/101.6
21.25/539.8	11.88/301.8	22.00/558.8	12.63/320.8	6.13/155.7	4.00/101.6
34.00/863.6	15.38/390.7	35.06/890.5	13.38/339.9	4.94/125.5	5.25/133.4
13.25/336.6	13.25/336.6	14.00/355.6	14.00/355.6	3.50/88.9	3.88/98.6
13.25/336.6	13.25/336.6	14.00/355.6	14.00/355.6	6.13/155.7	4.88/124.0
16.75/425.5	14.75/374.7	16.13/409.7	14.00/355.6	9.94/252.5	7.00/177.8
19.00/482.6	13.00/330.2	19.56/496.8	13.56/344.4	2.25/57.2	3.31/84.1
21.25/539.8	13.25/336.6	22.00/558.8	14.00/355.6	6.00/152.4	5.31/134.9
25.25/641.4	13.25/336.6	25.06/636.5	13.06/331.7	1.75/44.5	3.13/79.5
15.25/387.4	15.25/387.4	16.00/406.4	16.00/406.4	3.50/88.9	4.13/104.9
15.25/387.4	15.25/387.4	16.00/406.4	16.00/406.4	5.50/139.7	4.50/114.3
21.25/539.8	15.25/387.4	21.75/552.5	15.75/400.1	5.50/139.7	5.06/128.5
21.25/539.8	15.25/387.4	21.75/552.5	15.75/400.1	7.50/190.5	5.75/146.1
27.25/692.2	15.25/387.4	28.00/711.2	16.00/406.4	5.50/139.7	4.75/120.7
33.50/850.9	14.50/368.3	34.13/866.9	15.81/401.6	5.50/139.7	4.75/120.7
33.50/850.9	14.50/368.3	34.13/866.9	15.81/401.6	7.50/190.5	5.50/139.7
39.25/997.0	15.63/397.0	40.88/1038.4	17.13/435.1	5.00/127.0	5.00/127.0
56.38/1432.1	16.38/416.1	57.50/1460.5	17.50/444.5	5.00/127.0	4.75/120.7
21.25/539.8	21.25/539.8	22.13/562.1	22.13/562.1	5.50/139.7	5.00/127.0
21.25/539.8	21.25/539.8	22.13/562.1	22.13/562.1	7.50/190.5	6.13/155.7
25.88/657.4	19.88/505.0	27.38/695.5	21.38/543.1	5.94/150.9	5.25/133.4
33.25/844.6	21.00/533.4	34.00/863.6	21.00/533.4	5.88/149.4	5.13/130.3
33.25/844.6	21.00/533.4	34.00/863.6	21.00/533.4	7.50/190.5	6.00/152.4
39.88/1013.0	31.88/809.8	34.63/879.6	26.63/676.4	4.75/120.7	6.13/155.7
39.88/1013.0	31.88/809.8	34.63/879.6	26.63/676.4	4.75/120.7	6.13/155.7

Dimensions



Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

ACSEW Cast Control Center

Explosionproof, Dust-Ignitionproof

Class I, Division 1 and 2, Groups B, C, D
 Class II, Division 1 and 2, Groups E, F, G
 Class III
 NEMA 4, 7BCD, 9EFG
 Zone 1 and 2 – 21 and 22
 II 2 GD

ATEX / IEC
 IP66 – IK10

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Catalog Number †	Maximum Window Size Group B, C, D in Inches/Millimeters	Maximum Number of Operators ‡	Number of Rows (Tall) (Wide)		Cover Thickness in Inches/Millimeters	Maximum Conduit Size (NPT)	Approximate Weight (Lbs./Kgs.)	Mounting Hardware Catalog Number
ACSEW050903	N/A	8	4	2	0.50/12.7	1.50	21/9.5	AMH2
ACSEW060804	N/A	6	3	2	0.75/19.1	2.00	20/9.1	AMH2
ACSEW061004	N/A	8	4	2	0.63/16.0	1.50	27/12.2	AMH2
ACSEW061204	N/A	8	4	2	0.63/16.0	2.00	25/15.9	AMH2
ACSEW061604	N/A	10	5	2	0.63/16.0	1.50	32/14.5	AMH2
ACSEW071106	3.00/76.2	12	6	2	0.75/19.1	2.00	35/15.9	AMH2
ACSEW080806	3.00/76.2	9	3	3	0.75/19.1	2.00	30/13.6	AMH2
ACSEW081006	3.00/76.2	9	3	3	0.75/19.1	2.00	36/16.4	AMH4
ACSEW081307	3.00/76.2	15	5	3	0.75/19.1	2.00	30/13.6	AMH2
ACSEW091105	4.00/101.6	16	4	4	0.69/17.5	2.00	22/10.0	AMH2
ACSEW091504	3.00/76.2	15	5	3	0.75/19.1	2.00	33/15.0	AMH2
ACSEW101006	4.00/101.6	9	3	3	0.75/19.1	2.00	44/20.0	AMH2
ACSEW101406	4.00/101.6	20	5	4	0.75/19.1	2.00	55/25.0	AMH4
ACSEW101408	4.00/101.6	20	5	4	0.75/19.1	4.00	60/27.2	AMH2
ACSEW112005	4.00/101.6	21	7	3	0.88/22.4	3.00	85/38.6	AMH8
ACSEW112406	4.00/101.6	27	9	3	0.88/22.4	3.00	72/32.7	AMH8
ACSEW113006	(2) 4.00/101.6	33	11	3	0.88/22.4	3.00	113/51.3	AMH8
ACSEW121206	4.00/101.6	16	4	4	0.75/19.1	3.00	65/29.5	AMH8
ACSEW121208	4.00/101.6	16	4	4	0.75/19.1	3.50	70/31.8	AMH8
ACSEW121806	4.00/101.6	24	6	4	0.75/19.1	4.00	90/40.9	AMH5
ACSEW121808	4.00/101.6	24	6	4	0.75/19.1	4.00	101/45.8	AMH5
ACSEW122408	4.00/101.6	36	9	4	1.00/25.4	4.00	138/62.6	AMH4
ACSEW123608	(3) 5.00/127.0	39	13	3	1.13/28.7	4.00	218/98.9	AMH5
ACSEW133806	(3) 5.00/127.0	56	14	4	1.00/25.4	3.50	190/86.2	AMH8
ACSEW141406	5.00/127.0	16	4	4	0.75/19.1	3.50	98/44.5	AMH8
ACSEW141408	5.00/127.0	16	4	4	0.75/19.1	3.00	105/47.6	AMH8
ACSEW142408	7.00/177.8	40	8	5	1.00/25.4	4.00	131/59.4	AMH6
ACSEW153707	(2) 9.00/228.6	65	13	5	1.13/28.7	4.00	250/113.4	AMH8
ACSEW161606	9.00/228.6	25	5	5	1.00/25.4	3.50	132/59.9	AMH8
ACSEW161608	9.00/228.6	25	5	5	1.00/25.4	4.00	140/63.5	AMH8
ACSEW161812	9.00/228.6	42	7	6	1.25/31.8	4.00	150/68.0	AMH8
ACSEW162206	9.00/228.6	35	7	5	1.25/31.8	3.00	130/59.0	AMH8
ACSEW162408	9.00/228.6	40	8	5	1.06/26.9	4.00	180/81.6	AMH6
ACSEW162806	(2) 9.00/228.6	50	10	5	1.00/25.4	3.00	150/68.0	AMH8
ACSEW181806	9.00/228.6	36	6	6	0.94/23.9	3.50	188/85.3	AMH8
ACSEW181808	9.00/228.6	36	6	6	0.94/23.9	4.00	198/89.8	AMH8
ACSEW182408	9.00/228.6	48	8	6	1.31/33.3	4.00	224/101.6	AMH8
ACSEW182410	9.00/228.6	48	8	6	1.31/33.3	4.00	235/106.6	AMH8
ACSEW183008	(2) 9.00/228.6	66	11	6	1.25/31.8	4.00	265/120.2	AMH5
ACSEW183608	(2) 9.00/228.6	78	13	6	1.13/28.7	4.00	250/113.4	AMH8
ACSEW183610	(2) 9.00/228.6	78	13	6	1.13/28.7	4.00	270/122.5	AMH8
ACSEW184207	(2) 9.00/228.6	90	15	6	1.25/31.8	4.00	310/140.6	AMH8
ACSEW206008	(3) 9.00/228.6	132	22	6	1.00/25.4	4.00	521/236.3	AMH6
ACSEW242408	9.00/228.6	64	8	8	1.13/28.7	4.00	225/102.1	AMH8
ACSEW242410	9.00/228.6	64	8	8	1.13/28.7	4.00	240/108.9	AMH8
ACSEW243008	(2) 7.00/177.8	80	10	8	1.13/28.7	4.00	420/190.5	AMH8
ACSEW243608	(2) 9.00/228.6	104	13	8	1.50/38.1	4.00	420/190.5	AMH5
ACSEW243610	(2) 9.00/228.6	104	13	8	1.50/38.1	4.00	450/204.1	AMH5
ACSEW303808	(4) 9.00/228.6	130	13	10	1.75/44.5	4.00	600/272.1	AMH6
ACSEW303816	(4) 9.00/228.6	130	13	10	1.75/44.5	4.00	800/362.9	AMH6

Due to the nature of the sand cast process, external dimensions are subject to vary +/- 0.125"/3.2 mm.

‡ With window installed contact your local representative for maximum number of operators.

† ATEX complete product certification will bear an **X** suffix. ATEX U Component certification will bear an **XU** suffix.

ACSEW Cast Control Center Options and Accessories

Explosionproof, Dust-Ignitionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG
Zone 1 and 2 – 21 and 22
II 2 GD

ATEX / IEC
IP66 – IK10

Round Windows

Catalog Number	Description
AW5	3" Viewing Area, Round Group B
AW6	4" Viewing Area, Round Group B
AW7	5" Viewing Area, Round Group B
AW10	7" Viewing Area, Round Group B
AW12	9" Viewing Area, Round Group B

Square Windows

Contact your local representative

Circuit Breaker Operators

Catalog Number	Description
AV1W	150AF Circuit Breaker Mechanism
AV2W	250AF Circuit Breaker Mechanism

Options

Factory Installed Suffix	Field Installed Catalog Number	Description
AB	N/A	Set of 4 standoffs 1/2" high
BR	BRTB4X	Breather, NEMA 4X (includes outlet and installation)
DN	DRNB4X	Drain, NEMA 4X (includes outlet and installation)
EGS	N/A	External grounding stud 3/8"-16
G1	N/A	Gray Powder Coat Epoxy (outside)
G2	N/A	Gray Powder Coat Epoxy (inside and outside)
H		Hinges stainless steel
	AHOF12SS	Hinge Kit, 2 light duty SS hinges
	AHOF22SS	Hinge Kit, 2 heavy duty SS hinges
	AHOF23SS	Hinge Kit, 3 heavy duty SS hinges
K *	N/A	Terminal blocks 600 Vac, 30 Amp (example: 5 points = 5K)
NP	N/A	Plastic nameplate, 2" x 4", 1/8" black letters on white surface, 3 lines max, specify legend.
NPSM75	N/A	3/4" NPSM Drill and Tap
Z	See Options and Accessories	Mounting pan

Mounting Hardware

Field Installed Catalog Number	Description
AMH1	1/4" - 20 X 1-1/4" Bolt, 1/4" - 20 Hex Nut, 1/4" Washers
AMH2	3/8" - 16 X 1-1/4" Bolt, 3/8" - 16 Hex Nut, 3/8" Washers
AMH3	7/16" - 14 X 1-3/4" Bolt, 7/16" - 14 Hex Nut, 7/16" Washers
AMH4	1/2" - 13 x 1-3/4" Bolt, 1/2" - 13 Hex Nut, 1/2" Washers
AMH5	1/2" - 13 X 2" Bolt, 1/2" - 13 Hex Nut, 1/2" Washers
AMH6	5/8" - 11 X 2" Bolt, 5/8" - 11 Hex Nut, 5/8" Washers
AMH7	1/2" - 13 X 1-1/4" Bolt, 1/2" - 13 Hex Nut, 1/2" Washers
AMH8	5/8" - 11 X 1-1/4" Bolt, 5/8" - 11 Hex Nut, 5/8" Washers

Drill and Tap Options

Symbol	Conduit Size (Inches – NPT)
A	1/2
B	3/4
C	1
D	1-1/4
E	1-1/2
F	2
G	2-1/2
H	3
J	3-1/2
K	4

Blind Tapped Holes

Suffix	Screw Size
BT1	#6 - 1/4"
BT2	5/16" - 1/2"

* Indicate number of points.

ACSEW Cast Control Center Options and Accessories

Explosionproof, Dust-Ignitionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Operators/Pilot Devices

Factory Installed Suffix	Description
A2X	2-Pos Selector Switch
A3X	3-Pos Selector Switch
A31X	Spring Return From Left to Center
A32X	Spring Return From Right to Center
A33X	Spring Return From Left and Right to Center
A34X	3-Pos Selector Switch - Key Operated
L1	Amber Pilot Light, 120 Vac
L12	Amber Pilot Light, 240 Vac
L14	Amber Pilot Light, 480 Vac
L12G	Amber Pilot Light, 240 Vac, Guarded
L14G	Amber Pilot Light, 480 Vac, Guarded
L1G	Amber Pilot Light, 120 Vac, Guarded
L2	Blue Pilot Light, 120 Vac
L22	Blue Pilot Light, 240 Vac
L24	Blue Pilot Light, 480 Vac
L22G	Blue Pilot Light, 240 Vac, Guarded
L24G	Blue Pilot Light, 480 Vac, Guarded
L2G	Blue Pilot Light, 120 Vac, Guarded
L3	Clear Pilot Light, 120 Vac
L32	Clear Pilot Light, 240 Vac
L34	Clear Pilot Light, 480 Vac
L32G	Clear Pilot Light, 240 Vac, Guarded
L34G	Clear Pilot Light, 480 Vac, Guarded
L3G	Clear Pilot Light, 120 Vac, Guarded
L4	Green Pilot Light, 120 Vac
L42	Green Pilot Light, 240 Vac
L44	Green Pilot Light, 480 Vac
L42G	Green Pilot Light, 240 Vac, Guarded
L42G	Green Pilot Light, 240 Vac, Guarded
L4G	Green Pilot Light, 120 Vac, Guarded
L5	Red Pilot Light, 120 Vac

Factory Installed Suffix	Description
L52	Red Pilot Light, 240 Vac
L54	Red Pilot Light, 480 Vac
L52G	Red Pilot Light, 240 Vac, Guarded
L52G	Red Pilot Light, 240 Vac, Guarded
L5G	Red Pilot Light, 120 Vac, Guarded
LP1X	Amber Lighted Push Button, 120 Vac
LP12X	Amber Lighted Push Button, 240 Vac
LP14X	Amber Lighted Push Button, 480 Vac
LP2X	Blue Lighted Push Button, 120 Vac
LP22X	Blue Lighted Push Button, 240 Vac
LP24X	Blue Lighted Push Button, 480 Vac
LP3X	Clear Lighted Push Button, 120 Vac
LP32X	Clear Lighted Push Button, 240 Vac
LP34X	Clear Lighted Push Button, 480 Vac
LP4X	Green Lighted Push Button, 120 Vac
LP42X	Green Lighted Push Button, 240 Vac
LP44X	Green Lighted Push Button, 480 Vac
LP4X	Green Lighted Push Button, 120 Vac
LP52X	Red Lighted Push Button, 240 Vac
LP54X	Red Lighted Push Button, 480 Vac
PO1	Potentiometer Operator, Short Barrel
PO2	Potentiometer Operator, Long Barrel
RS	Reset Button
S1X	Start Button
S2X	Stop Button
S3X	Start/Stop Button
S4X	Emergency Stop
S5X	Emergency Stop, Maintained
S6X	Black Push Button, NO
S7X	Black Push Button, NC
S8X	Black Push Button, NO/NC

ACSEW Cast Control Center Options and Accessories

Explosionproof, Dust-Ignitionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Mounting Pans

Mounting Pan Catalog Number	Junction Box Catalog Number	Overall Dimensions in Inches/Millimeters	
		W	H
AZ-593	ACSEW050903	3.50/88.9	8.50/215.9
AZ-684	ACSEW060804	4.50/114.3	6.50/165.1
AZ-6104	ACSEW061004	5.00/127.0	10.00/254.0
AZ-6124	ACSEW061204	5.50/139.7	11.00/279.4
AZ-6164	ACSEW061604	5.25/13.4	15.00/381.0
AZ-7116	ACSEW071106	6.50/165.1	10.00/254.0
AZ-886	ACSEW080806	6.50/165.1	6.50/165.1
AZ-8106	ACSEW081006	6.50/165.1	8.50/215.9
AZ-8137	ACSEW081307	6.00/152.4	11.00/279.4
AZ-9115	ACSEW091105	8.25/209.6	10.00/254.0
AZ-9154	ACSEW091504	8.13/206.5	14.75/374.65
AZ-10104/6	ACSEW101006	7.50/190.5	7.50/190.5
AZ-10146/8	ACSEW101406	9.00/228.6	13.00/330.2
AZ-10146/8	ACSEW101408	9.00/228.6	13.00/330.2
AZ-11205	ACSEW112005	10.50/266.7	19.00/482.6
AZ-11246	ACSEW112406	9.88/251.0	23.25/590.6
AZ-11306	ACSEW113006	9.88/251.0	28.50/723.9
AZ-12126/8	ACSEW121206	10.50/266.7	10.50/266.7
AZ-12126/8	ACSEW121208	10.50/266.7	10.50/266.7
AZ-12186/8	ACSEW121806	10.50/266.7	16.50/419.1
AZ-12186/8	ACSEW121808	10.50/266.7	16.50/419.1
AZ-12248	ACSEW122408	10.75/273.1	22.63/574.8
AZ-12368	ACSEW123608	10.00/254.0	34.00/863.6
AZ-13386	ACSEW133806	11.50/292.1	36.38/924.1
AZ-14146/8	ACSEW141406	12.25/311.2	12.25/311.2

Mounting Pan Catalog Number	Junction Box Catalog Number	Overall Dimensions in Inches/Millimeters	
		W	H
AZ-14146/8	ACSEW141408	12.25/311.2	12.25/311.2
AZ-14248	ACSEW142408	14.00/355.6	22.38/568.5
AZ-15377	ACSEW153707	14.50/368.3	35.50/901.7
AZ-16166/8	ACSEW161606	15.00/381.0	15.00/381.0
AZ-16166/8	ACSEW161608	15.00/381.0	15.00/381.0
AZ-161812	ACSEW161812	15.00/381.0	16.00/406.4
AZ-16226	ACSEW162206	14.00/355.6	20.00/508.0
AZ-16248	ACSEW162408	14.75/374.7	22.75/577.9
AZ-16286	ACSEW162806	14.00/355.6	26.00/660.4
AZ-18186/8	ACSEW181806	16.00/406.4	16.00/406.4
AZ-18186/8	ACSEW181808	16.00/406.4	16.00/406.4
AZ-18248/10	ACSEW182408	16.00/406.4	22.00/558.8
AZ-18248/10	ACSEW182410	16.00/406.4	22.00/558.8
AZ-18308	ACSEW183008	16.00/406.4	28.00/711.2
AZ-18368/10	ACSEW183608	17.00/431.8	34.75/882.7
AZ-18368/10	ACSEW183610	17.00/431.8	34.75/882.7
AZ-18427	ACSEW184207	17.00/431.8	40.00/1016.0
AZ-20608	ACSEW206008	18.00/457.2	57.50/1460.5
AZ-24248/10	ACSEW242408	22.00/558.8	22.00/558.8
AZ-24248/10	ACSEW242410	22.00/558.8	22.00/558.8
AZ-24308	ACSEW243008	22.50/571.5	28.00/711.2
AZ-24368/10	ACSEW243608	22.00/558.8	34.00/863.6
AZ-24368/10	ACSEW243610	22.00/558.8	34.00/863.6
AZ-30388	ACSEW303808	28.00/711.2	36.00/914.1
AZ-30388	ACSEW303816	28.00/711.2	36.00/914.1

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

ACSEW Control Operators: Push Button Components

Momentary Contact. Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide

AE
Appleton Explosionproof

P
Push Button

D
Dual Push Button:
Omit for Single Push Button

B
Color:
B - Black
R - Red
G - Green

A
Contact Arrangement:
A - 1 NO
B - 2 NO
C - 1 NC
D - 2 NC
E - 1 NO and 1 NC
F - 2 NO and 2 NC

L
Long Barrel:
Omit for Short Barrel



AEPBA



AEPDGRA

Single Push Buttons

Contacts †	Button Color	Catalog Number	
		Short Barrel	Long Barrel
1 NO	Black	AEPBA	AEPBA-L
1 NO	Red	AEPRA	AEPRA-L
1 NO	Green	AEPGA	AEPGA-L
2 NO	Black	AE PBB	AE PBB-L
2 NO	Red	AE PRB	AE PRB-L
2 NO	Green	AE PGB	AE PGB-L
1 NC	Black	AE PBC	AE PBC-L
1 NC	Red	AE PRC	AE PRC-L
1 NC	Green	AE PGC	AE PGC-L
2 NC	Black	AE PBD	AE PBD-L
2 NC	Red	AE PRD	AE PRD-L
2 NC	Green	AE PGD	AE PGD-L
1 NO and 1 NC	Black	AE PBE	AE PBE-L
1 NO and 1 NC	Red	AE PRE	AE PRE-L
1 NO and 1 NC	Green	AE PGE	AE PGE-L
2 NO and 2 NC	Black	AE PBF	AE PBF-L
2 NO and 2 NC	Red	AE PRF	AE PRF-L
2 NO and 2 NC	Green	AE PGF	AE PGF-L

Dual Push Buttons

Contacts †	Button Color	Catalog Number	
		Short Barrel	Long Barrel
2 NO	Green/Red	AE PDGRB	AE PDGRB-L
2 NO	Black/Black	AE PD BBB	AE PD BBB-L
2 NC	Green/Red	AE PDGRD	AE PDGRD-L
2 NC	Black/Black	AE PD BBD	AE PD BBD-L
1 NO and 1 NC	Green/Red	AE PDGRE	AE PDGRE-L
1 NO and 1 NC	Black/Black	AE PD BBE	AE PD BBE-L
2 NO and 2 NC	Green/Red	AE PDGRF	AE PDGRF-L
2 NO and 2 NC	Black/Black	AE PD BBF	AE PD BBF-L

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.
† NO = Normally Open; NC = Normally Closed.

ACSEW Control Operators: Pilot Light Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide

AE
Appleton Explosionproof

PL
Pilot Light

G
Guard:
Omit for Standard Version
(no guard)

1
Voltage:
1 - 120 Vac Pigtail
2 - 240/120 Vac Transformer
3 - 120/6 Vac Transformer
4 - 480/120 Vac Transformer
5 - 600/120 Vac Transformer
6 - 6 Vac Pigtail
7 - 12 Vac Pigtail
8 - 24 Vac Pigtail
9 - 48 Vac Pigtail

A
Color:
A - Amber
B - Blue
C - Clear
R - Red
G - Green

L
Long Barrel:
Omit for Short Barrel



Standard



Guarded

Voltage	Lens Color	Pilot Light Catalog Number		Guarded Pilot Light Catalog Number	
		Short Barrel	Long Barrel	Short Barrel	Long Barrel
120 Vac/Vdc Pigtail	Amber	AEPL1A	AEPL1A-L	AEPLG1A	AEPLG1A-L
	Red	AEPL1R	AEPL1R-L	AEPLG1R	AEPLG1R-L
	Green	AEPL1G	AEPL1G-L	AEPLG1G	AEPLG1G-L
	Clear	AEPL1C	AEPL1C-L	AEPLG1C	AEPLG1C-L
	Blue	AEPL1B	AEPL1B-L	AEPLG1B	AEPLG1B-L
240 Vac Transformer w/120 Vac Lamp	Amber	AEPL2A	AEPL2A-L	AEPLG2A	AEPLG2A-L
	Red	AEPL2R	AEPL2R-L	AEPLG2R	AEPLG2R-L
	Green	AEPL2G	AEPL2G-L	AEPLG2G	AEPLG2G-L
	Clear	AEPL2C	AEPL2C-L	AEPLG2C	AEPLG2C-L
	Blue	AEPL2B	AEPL2B-L	AEPLG2B	AEPLG2B-L
120 Vac Transformer w/6 Vac Lamp	Amber	AEPL3A	AEPL3A-L	AEPLG3A	AEPLG3A-L
	Red	AEPL3R	AEPL3R-L	AEPLG3R	AEPLG3R-L
	Green	AEPL3G	AEPL3G-L	AEPLG3G	AEPLG3G-L
	Clear	AEPL3C	AEPL3C-L	AEPLG3C	AEPLG3C-L
	Blue	AEPL3B	AEPL3B-L	AEPLG3B	AEPLG3B-L

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Pilot Light Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Voltage	Lens Color	Pilot Light Catalog Number		Guarded Pilot Light Catalog Number	
		Short Barrel	Long Barrel	Short Barrel	Long Barrel
480 Vac Transformer w/120 Vac Lamp	Amber	AEPL4A	AEPL4A-L	AEPLG4A	AEPLG4A-L
	Red	AEPL4R	AEPL4R-L	AEPLG4R	AEPLG4R-L
	Green	AEPL4G	AEPL4G-L	AEPLG4G	AEPLG4G-L
	Clear	AEPL4C	AEPL4C-L	AEPLG4C	AEPLG4C-L
	Blue	AEPL4B	AEPL4B-L	AEPLG4B	AEPLG4B-L
600 Vac Transformer w/120 Vac Lamp	Amber	AEPL5A	AEPL5A-L	AEPLG5A	AEPLG5A-L
	Red	AEPL5R	AEPL5R-L	AEPLG5R	AEPLG5R-L
	Green	AEPL5G	AEPL5G-L	AEPLG5G	AEPLG5G-L
	Clear	AEPL5C	AEPL5C-L	AEPLG5C	AEPLG5C-L
	Blue	AEPL5B	AEPL5B-L	AEPLG5B	AEPLG5B-L
6 Vac/Vdc Pigtail	Amber	AEPL6A	AEPL6A-L	AEPLG6A	AEPLG6A-L
	Red	AEPL6R	AEPL6R-L	AEPLG6R	AEPLG6R-L
	Green	AEPL6G	AEPL6G-L	AEPLG6G	AEPLG6G-L
	Clear	AEPL6C	AEPL6C-L	AEPLG6C	AEPLG6C-L
	Blue	AEPL6B	AEPL6B-L	AEPLG6B	AEPLG6B-L
12 Vac/Vdc Pigtail	Amber	AEPL7A	AEPL7A-L	AEPLG7A	AEPLG7A-L
	Red	AEPL7R	AEPL7R-L	AEPLG7R	AEPLG7R-L
	Green	AEPL7G	AEPL7G-L	AEPLG7G	AEPLG7G-L
	Clear	AEPL7C	AEPL7C-L	AEPLG7C	AEPLG7C-L
	Blue	AEPL7B	AEPL7B-L	AEPLG7B	AEPLG7B-L
24 Vac/Vdc Pigtail	Amber	AEPL8A	AEPL8A-L	AEPLG8A	AEPLG8A-L
	Red	AEPL8R	AEPL8R-L	AEPLG8R	AEPLG8R-L
	Green	AEPL8G	AEPL8G-L	AEPLG8G	AEPLG8G-L
	Clear	AEPL8C	AEPL8C-L	AEPLG8C	AEPLG8C-L
	Blue	AEPL8B	AEPL8B-L	AEPLG8B	AEPLG8B-L
48 Vac/Vdc Pigtail	Amber	AEPL9A	AEPL9A-L	AEPLG9A	AEPLG9A-L
	Red	AEPL9R	AEPL9R-L	AEPLG9R	AEPLG9R-L
	Green	AEPL9G	AEPL9G-L	AEPLG9G	AEPLG9G-L
	Clear	AEPL9C	AEPL9C-L	AEPLG9C	AEPLG9C-L
	Blue	AEPL9B	AEPL9B-L	AEPLG9B	AEPLG9B-L

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Lighted Push Button Components

Momentary Contact. Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide

AE
Appleton Explosionproof

PT
Push Button, Lighted

A
Color:
A - Amber
B - Blue
C - Clear
R - Red
G - Green

A
Contact Arrangement:
A - 1 NO
B - 2 NO
C - 1 NC
D - 2 NC
E - 1 NO and 1 NC
F - 2 NO and 2 NC

L
Long Barrel:
Omit for Short Barrel



Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
1 NO	Amber	AEPTAA	AEPTAA-L
1 NO	Red	AEPTRA	AEPTRA-L
1 NO	Green	AEPTGA	AEPTGA-L
1 NO	Clear	AEPTCA	AEPTCA-L
1 NO	Blue	AEPTBA	AEPTBA-L
2 NO	Amber	AEPTAB	AEPTAB-L
2 NO	Red	AEPTRB	AEPTRB-L
2 NO	Green	AEPTGB	AEPTGB-L
2 NO	Clear	AEPTCB	AEPTCB-L
2 NO	Blue	AEPTBB	AEPTBB-L
1 NC	Amber	AEPTAC	AEPTAC-L
1 NC	Red	AEPTRC	AEPTRC-L
1 NC	Green	AEPTGC	AEPTGC-L
1 NC	Clear	AEPTCC	AEPTCC-L
1 NC	Blue	AEPTBC	AEPTBC-L

Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
2 NC	Amber	AEPTAD	AEPTAD-L
2 NC	Red	AEPTRD	AEPTRD-L
2 NC	Green	AEPTGD	AEPTGD-L
2 NC	Clear	AEPTCD	AEPTCD-L
2 NC	Blue	AEPTBD	AEPTBD-L
1 NO and 1 NC	Amber	AEPTAE	AEPTAE-L
1 NO and 1 NC	Red	AEP TRE	AEP TRE-L
1 NO and 1 NC	Green	AEPTGE	AEPTGE-L
1 NO and 1 NC	Clear	AEPTCE	AEPTCE-L
1 NO and 1 NC	Blue	AEPTBE	AEPTBE-L
2 NO and 2 NC	Amber	AEPTAF	AEPTAF-L
2 NO and 2 NC	Red	AEP TRF	AEP TRF-L
2 NO and 2 NC	Green	AEPTGF	AEPTGF-L
2 NO and 2 NC	Clear	AEPTCF	AEPTCF-L
2 NO and 2 NC	Blue	AEPTBF	AEPTBF-L

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.
† NO = Normally Open; NC = Normally Closed.

ACSEW Control Operators: Mushroom Head Push Button Components

Momentary Contact. Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide

AE
Appleton Explosionproof

P
Push Button

M
Mushroom Head, Momentary

B
Color:
B - Black
R - Red
G - Green

A
Contact Arrangement:
A - 1 NO
B - 2 NO
C - 1 NC
D - 2 NC
E - 1 NO and 1 NC
F - 2 NO and 2 NC

L
Long Barrel:
Omit for Short Barrel



Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
1 NO	Black	AEPMBA	AEPMBA-L
1 NO	Red	AEPMRA	AEPMRA-L
1 NO	Green	AEPMGA	AEPMGA-L
2 NO	Black	AEPMBB	AEPMBB-L
2 NO	Red	AEPMRB	AEPMRB-L
2 NO	Green	AEPMGB	AEPMGB-L
1 NC	Black	AEPMBC	AEPMBC-L
1 NC	Red	AEPMRC	AEPMRC-L
1 NC	Green	AEPMGC	AEPMGC-L

Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
2 NC	Black	AEPMBD	AEPMBD-L
2 NC	Red	AEPMRD	AEPMRD-L
2 NC	Green	AEPMGD	AEPMGD-L
1 NO and 1 NC	Black	AEPMBE	AEPMBE-L
1 NO and 1 NC	Red	AEPMRE	AEPMRE-L
1 NO and 1 NC	Green	AEPMGE	AEPMGE-L
2 NO and 2 NC	Black	AEPMBF	AEPMBF-L
2 NO and 2 NC	Red	AEPMRF	AEPMRF-L
2 NO and 2 NC	Green	AEPMGF	AEPMGF-L

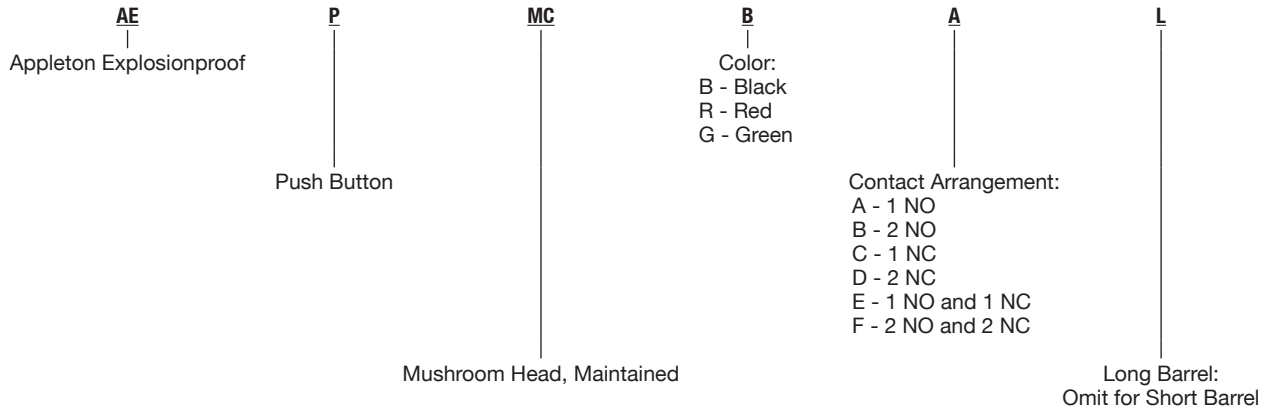
NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.
† NO = Normally Open; NC = Normally Closed.

ACSEW Control Operators: Mushroom Head Push Button Components

Maintained Contact. Explosionproof

Class I, Division 1 and 2, Groups B, C, D
 Class II, Division 1 and 2, Groups E, F, G
 Class III
 NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide



Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
1 NO	Black	AEPMCBA	AEPMCBA-L
1 NO	Red	AEPMCRA	AEPMCRA-L
1 NO	Green	AEPMCGBA	AEPMCGBA-L
2 NO	Black	AEPMCBB	AEPMCBB-L
2 NO	Red	AEPMCRB	AEPMCRB-L
2 NO	Green	AEPMCGB	AEPMCGB-L
1 NC	Black	AEPMCBC	AEPMCBC-L
1 NC	Red	AEPMCRC	AEPMCRC-L
1 NC	Green	AEPMCGC	AEPMCGC-L

Contacts †	Lens Color	Catalog Number	
		Short Barrel	Long Barrel
2 NC	Black	AEPMCBD	AEPMCBD-L
2 NC	Red	AEPMCRD	AEPMCRD-L
2 NC	Green	AEPMCGD	AEPMCGD-L
1 NO and 1 NC	Black	AEPMCBE	AEPMCBE-L
1 NO and 1 NC	Red	AEPMCRE	AEPMCRE-L
1 NO and 1 NC	Green	AEPMCGE	AEPMCGE-L
2 NO and 2 NC	Black	AEPMCBF	AEPMCBF-L
2 NO and 2 NC	Red	AEPMCRF	AEPMCRF-L
2 NO and 2 NC	Green	AEPMCGF	AEPMCGF-L

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
 For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.
 † NO = Normally Open; NC = Normally Closed.

ACSEW Miniature Control Operators

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Features

- Installation centers reduced to 1" centers.
- Allows selection of smaller enclosures.
- 3/8 - 16 thread.
- Stainless steel actuator shaft.
- Solid silver contacts rated 6 Amps at 125 Vac, 3 Amps at 250 Vac.



Contact Configuration	Catalog Number
DPDT Maintained	AEPMOB-3
DPDT Momentary	AEPMOB-4

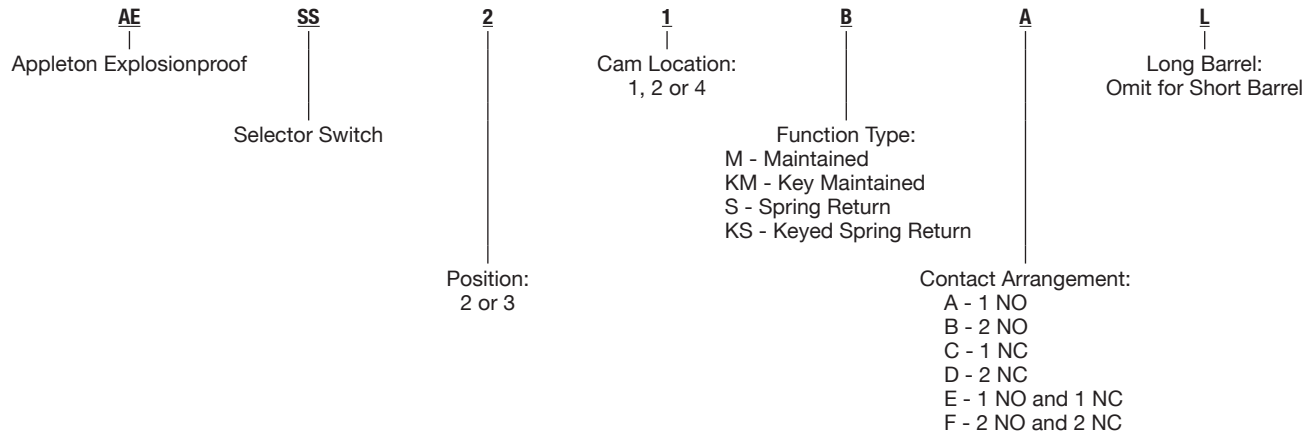
NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. Miniature operators are NOT 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Catalog Numbering Guide



Two Position — Maintained Contact

Contact	Lever Position X=Closed, O=Open		Catalog Number		Contact Block Position		Cam Location
	Left	Right	Standard Bushing	Long Bushing	L	R	
1	O	X	AESS22MG	AESS22MG-L	NO	-	2
1	X	O	AESS22MH	AESS22MH-L	NC	-	2
1	O	X	AESS22ML	AESS22ML-L	NC	NO	2
2	X	O					
1	O	X	AESS22MM	AESS22MM-L	NC	NC	2
2	O	X					
1	X	O	AESS22MR	AESS22MR-L	NOC	NOC	2
2	O	X					
3	X	O					
4	O	X					

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Two Position — Spring Return Right to Center

Contact	Lever Position X=Closed, O=Open		Catalog Number		Contact Block Position		Cam Location
	Left	Right	Standard Bushing	Long Bushing	L	R	
1	O	X	AESS22SG	AESS22SG-L	NO	-	2
1	X	O	AESS22SH	AESS22SH-L	-	NO	2
1	O	X	AESS22SL	AESS22SL-L	NO	NO	2
2	X	O					
1	O	X	AESS22SM	AESS22SM-L	NO	NC	2
2	O	X					
1	X	O	AESS22SR	AESS22SR-L	2NC	2NC	2
2	O	X					
3	X	O					
4	O	X					

Three Position — Maintained Contact

Contact	Lever Position X=Closed, O=Open			Catalog Number		Contact Block Position		Cam Location
	Left	Center	Right	Standard Bushing	Long Bushing	L	R	
1	O	O	X	AESS31MN	AESS31MN-L	NO	NO	1
2	X	O	O					
1	X	O	O	AESS31MQ	AESS31MQ-L	NOC	NO	1
2	O	X	X					
1	O	O	X	AESS34MN	AESS34MN-L	NO	NC	4
2	O	X	O					
1	X	O	O	AESS32MN	AESS32MN-L	NC	NO	2
2	O	X	O					
1	O	O	X	AESS31MS	AESS31MS-L	2NO	2NO	1
2	X	O	O					
3	O	O	X					
4	X	O	O					
1	O	O	X	AESS34MS	AESS34MS-L	2NO	2NC	4
2	O	X	O					
3	O	O	X					
4	O	X	O					
1	X	O	O	AESS32MS	AESS32MS-L	2NC	2NO	2
2	O	X	O					
3	X	O	O					
4	O	X	O					

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
See options page for legend plates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
 Class II, Division 1 and 2, Groups E, F, G
 Class III
 NEMA 4, 7BCD, 9EFG

Three Position — Spring Return — Maintained Contact

Contact	Lever Position X=Closed, O=Open			Catalog Number		Contact Block Position		Cam Location
	Left	Center	Right	Standard Bushing	Long Bushing	L	R	
1	O	O	X	AESS31SN	AESS31SN-L	NC	NC	1
2	X	O	O					
1	X	O	O	AESS31SQ	AESS31SQ-L	-	NOC	1
2	O	X	X					
1	O	O	X	AESS34SN	AESS34SN-L	NC	NC	4
2	O	X	O					
1	X	O	O	AESS32SN	AESS32SN-L	NC	NC	2
2	O	X	O					
1	O	O	X	AESS31SS	AESS31SS-L	2NC	2NC	1
2	X	O	O					
3	O	O	X					
4	X	O	O					
1	O	O	X	AESS34SS	AESS34SS-L	2NC	2NC	4
2	O	X	O					
3	O	O	X					
4	O	X	O					
1	X	O	O	AESS32SS	AESS32SS-L	2NC	2NC	2
2	O	X	O					
3	X	O	O					
4	O	X	O					

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.
 For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Two Position — Key Operated †† — Maintained Contact

Contact	Lever Position X=Closed, O=Open		Catalog Number		Contact Block Position		Cam Location
	Left	Right	Standard Bushing	Long Bushing	L	R	
1	O	X	AESS22KMG	AESS22KMG-L	NO	—	2
1	X	O	AESS22KMH	AESS22KMH-L	—	NO	2
1	O	X	AESS22KML	AESS22KML-L	NO	NO	2
2	X	O					
1	O	X	AESS22KMM	AESS22KMM-L	NO	NC	2
2	O	X					
1	X	O	AESS22KMR	AESS22KMR-L	2NC	2NC	2
2	O	X					
3	X	O					
4	O	X					

Two Position — Key Operated †† — Spring Return Right to Center

Contact	Lever Position X=Closed, O=Open		Catalog Number		Contact Block Position		Cam Location
	Left	Right	Standard Bushing	Long Bushing	L	R	
1	O	X	AESS22KSG	AESS22KSG-L	NO	—	2
1	X	O	AESS22KSH	AESS22KSH-L	—	NO	2
1	O	X	AESS22KSL	AESS22KSL-L	NO	NO	2
2	X	O					
1	O	X	AESS22KSM	AESS22KSM-L	NO	NC	2
2	O	X					
1	X	O	AESS22KSR	AESS22KSR-L	2NC	2NC	2
2	O	X					
3	X	O					
4	O	X					

† Locks are normally provided keyed differently. If keyed-alike locks are required, specify suffix KA1 and a standard type of identical locks will be provided. If a unique set of keyed-alike locks is required, specify and contact your local representative for delivery.

‡ Key removable from one field selectable position only. Contact your local representative for key removable in two positions.

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.

For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
 Class II, Division 1 and 2, Groups E, F, G
 Class III
 NEMA 4, 7BCD, 9EFG

Three Position — Key Operated †† — Maintained Contact

Contact	Left	Lever Position X=Closed, O=Open		Catalog Number		Contact Block Position		Cam Location
		Center	Right	Standard Bushing	Long Bushing	L	R	
1	O	O	X	AESS31KMN	AESS31KMN-L	NC	NC	1
2	X	O	O					
1	X	O	O	AESS31KMQ	AESS31KMQ-L	—	NOC	1
2	O	X	X					
1	O	O	X	AESS34KMN	AESS34KMN-L	NC	NC	4
2	O	X	O					
1	X	O	O	AESS32KMN	AESS32KMN-L	NC	NC	2
2	O	X	O					
1	X	O	O	AESS31KMS	AESS31KMS-L	2NC	2NC	1
2	O	O	X					
3	X	O	O					
4	O	O	X					
1	O	O	X	AESS34KMS	AESS34KMS-L	2NC	2NC	4
2	O	X	O					
3	O	O	X					
4	O	X	O					
1	X	O	O	AESS32KMS	AESS32KMS-L	2NC	2NC	2
2	O	X	O					
3	X	O	O					
4	O	X	O					

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

† Locks are normally provided keyed differently. If keyed-alike locks are required, specify suffix KA1 and a standard type of identical locks will be provided. If a unique set of keyed-alike locks is required, specify and contact your local representative for delivery.

†† Key removable from one field selectable position only. Contact your local representative for key removable in two positions.

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.

For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operators: Selector Switch Components

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Two Position — Key Operated †† — Spring Return

Contact	Lever Position X=Closed, O=Open			Catalog Number		Contact Block Position		Cam Location
	Left	Center	Right	Standard Bushing	Long Bushing	L	R	
1	X	O	O	AESS31KSN	AESS31KSN-L	NC	NC	1
2	O	O	X					
1	X	O	O	AESS31KSQ	AESS31KSQ-L	—	NOC	1
2	O	X	X					
1	O	O	X	AESS34KSN	AESS34KSN-L	NC	NC	4
2	O	X	O					
1	X	O	O	AESS32KSN	AESS32KSN-L	NC	NC	2
2	O	X	O					
1	X	O	O	AESS31KSS	AESS31KSS-L	2NC	2NC	1
2	O	O	X					
3	X	O	O					
4	O	O	X					
1	O	O	X	AESS34KSS	AESS34KSS-L	2NC	2NC	4
2	O	X	O					
3	O	O	X					
4	O	X	O					
1	X	O	O	AESS32KSS	AESS32KSS-L	2NC	2NC	2
2	O	X	O					
3	X	O	O					
4	O	X	O					

† Locks are normally provided keyed differently. If keyed-alike locks are required, specify suffix KA1 and a standard type of identical locks will be provided. If a unique set of keyed-alike locks is required, specify and contact your local representative for delivery.

†† Key removable from one field selectable position only. Contact your local representative for key removable in two positions.

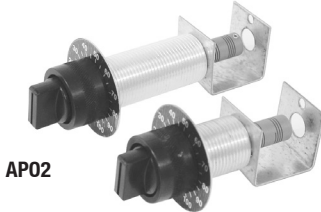
NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch.

For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operator Accessories

Explosionproof

Class I, Division 1 and 2, Groups B, C, D
Class II, Division 1 and 2, Groups E, F, G
Class III
NEMA 4, 7BCD, 9EFG

	Item	Description	Catalog Number
	360° Rotating Shaft Manual operated shaft used for devices requiring external adjustment. The shaft is 1/4" diameter and is provided with a coupling to compensate for misalignment.		ARO250C
	Standard Reset Button Six-inch length can be field modified for specific length. Suitable for use in Class I, Groups B, C and D applications. For long barrel		AEPRS AEPRSL
	Miniature Reset Button Six-inch length can be field modified for specific length. Suitable for use in Class I, Groups B, C and D applications. 3/8 - 16 Threads.		AEPRM
	Weather Cap For Push Button Devices Field attachable weather cap snaps on easily without the use of adhesives. Black Green Red		PBCAPB PBCAPG PBCAPR
	Plug 3/4" NPSM to plug unused openings.		AA-9400
 AP02 AP01	Potentiometer Operator Operator for use with potentiometers having a 1/4" diameter by 7/8" long shaft. The operator is furnished with a control knob and dial plate marked 0 to 100. Long bushing for applications where enclosure cover thickness is greater than 7/8".		AP01 AP02

NOTE: Use long barrel devices on enclosure applications with cover thickness exceeding 7/8 inch. For legend plates, see Options, Accessories and Nameplates. All Operators are 3/4" NPSM.

ACSEW Control Operator Options, Accessories and Nameplates

Explosionproof

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

Optional Features

Item Description	Suffix
Keyed Alike (Selector Switches)	KA1
Additional Keys (Keyed Selector Switches)	441-KEYS

*NOTE: Additional keys may only be purchased when ordering devices.
Keys may not be purchased for devices installed in the field.*

Nameplates

Legend Plate	Catalog Number
Start	A441-01
Stop	A441-02
High	A441-03
Low	A441-04
On	A441-05
Off	A441-06
Forward	A441-07
Reverse	A441-08
Open	A441-09
Close	A441-10
Up	A441-11
Down	A441-12
Reset	A441-13
Run	A441-14
Trip	A441-15
Blank	A441-16
Emergency Stop (Red)	A441-17
Special Engraved Legend Plates (Specify Lettering)	A441-16SP
Off—On	A441-20
Open—Close	A441-21
For—Rev	A441-22
High—Low	A441-23
Start—Stop	A441-24
Up—Down	A441-25
Local—Remote	A441-26
Hand—Off—Auto	A441-30
For—Off—Rev	A441-31
Open—Off—Close	A441-32
Off—Low—High	A441-33
Push to Start—Push to Stop	A441-40

Accessories

Lamp Description	Catalog Number
6 Vac Lamp	A6S6-6V
12 Vac Lamp	A6S6-12V
24 Vac Lamp	A6S6-24V
48 Vac Lamp	A6S6-48V
120 Vac Lamp	A6S6-120V
135 Vac Lamp	A6S6-135V
240 Vac Lamp	A6S6-240V

Pilot Light Replacement Kit — Pilot Lights (120 V)

Catalog Number	Lens Color
Amber	AEPRLAA
Blue	AEPRLAB
Clear	AEPRLAC
Green	AEPRLAG
Red	AEPRLAR

Guarded Pilot Lights (120 V)

Catalog Number	Lens Color
Amber	AEPRLAA-G
Blue	AEPRLAB-G
Clear	AEPRLAC-G
Green	AEPRLAG-G
Red	AEPRLAR-G

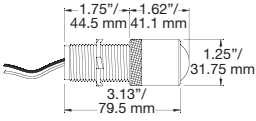
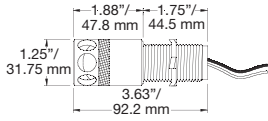
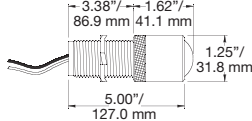
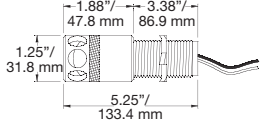
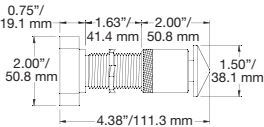
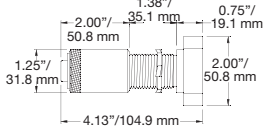
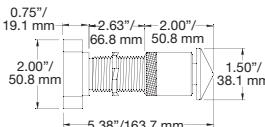
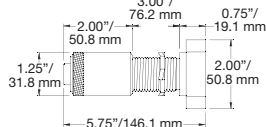
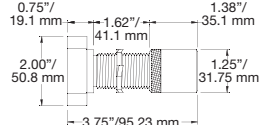
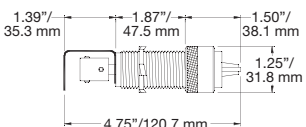
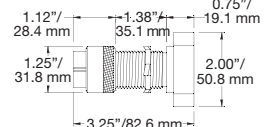
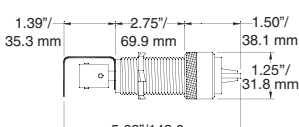
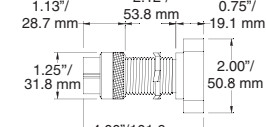
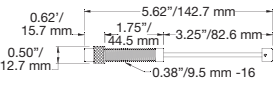
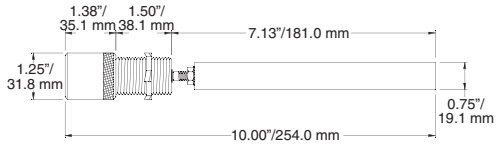
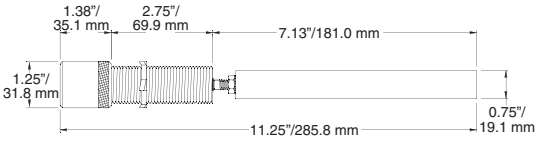
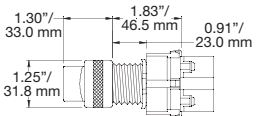
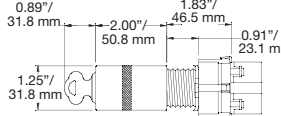
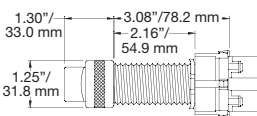
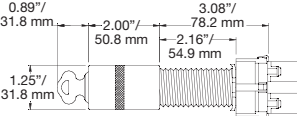
Push-to-Test Pilot Lights (120 V)

Catalog Number	Lens Color
Amber	AEPTRLA-A
Blue	AEPTRLA-B
Clear	AEPTRLA-C
Green	AEPTRLA-G
Red	AEPTRLA-R

Contact Block	Catalog Number
1 NO/1 NC	A9001 KA1
1 NO	A9001 KA2
1 NC	A9001 KA3

ACSEW Control Operator Dimensions

Add 1" to length for Contact Block. Thread Size — 3/4" NPSM.

Short Barrel		Long Barrel	
 Pilot Light	 Guarded Pilot Light	 Pilot Light	 Guarded Pilot Light
 Mushroom Push Button	 Push-To-Test	 Mushroom Push Button	 Push-To-Test
 Push Button			
 Potentiometer Operator	 Dual Push Button	 Potentiometer Operator	 Dual Push Button
 Miniature Reset			
 Standard Reset		 Standard Reset	
 Selector Switch	 Keyed Selector Switch	 Selector Switch	 Keyed Selector Switch

Controls

CONTROLS: HAZARDOUS LOCATION CONTROL STATIONS AND SWITCHES

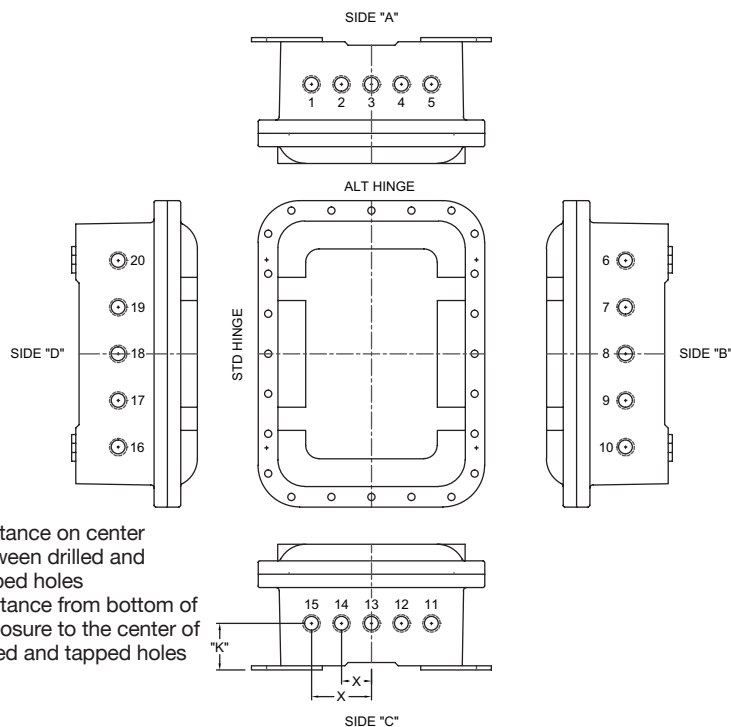
ACSEW Series Drill and Tap Schedule and Hinges and Back Pan Requirement Form

Customer's original purchase order must accompany completed form

Controls

Company Name			
Shipping Address			
Account Number			Purchase Order Number
Part Number			Purchase Order Date
Quantity			Internal Order Number

Position	Conduit Size	Dimension "X"	Dimension "K"
1			
2			
3 CL			
4			
5			
6			
7			
8 CL			
9			
10			
11			
12			
13 CL			
14			
15			
16			
17			
18 CL			
19			
20			



X = distance on center between drilled and tapped holes
K = distance from bottom of enclosure to the center of drilled and tapped holes

	Yes	No
Entries Required:	☐	☐
Standard Hinges Required:	☐	☐
Alternate Hinges Required:	☐	☐
Back Pan Required:	☐	☐
Factory to locate X and K *	☐	☐

* If No is checked, the X and K dimensions must be supplied in Schedule above.

Drilling and Tapping Guidelines

Conduit Size (NPT)	Minimum Spacing For Conduit Centers inches/Millimeters									
	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4
1/2	2.13/54.1	2.13/54.1	2.25/57.2	2.63/66.8	2.81/71.4	3.13/79.5	3.63/92.2	4.00/101.6	4.50/114.3	4.50/114.3
3/4	2.13/54.1	2.13/54.1	2.25/57.2	2.63/66.8	2.81/71.4	3.13/79.5	3.63/92.2	4.00/101.6	4.50/114.3	4.50/114.3
1	2.25/57.2	2.25/57.2	2.38/60.5	2.81/71.4	3.00/76.2	3.25/82.8	3.75/95.3	4.13/104.9	4.50/114.3	4.63/117.6
1-1/4	2.63/66.8	2.63/66.8	2.81/71.4	3.13/79.5	3.31/84.1	3.63/92.2	4.13/104.9	4.50/114.3	4.75/120.7	5.00/127.0
1-1/2	2.81/71.4	2.81/71.4	3.00/76.2	3.31/84.1	3.50/88.9	3.81/96.8	4.31/109.5	4.63/117.6	4.94/125.5	5.25/133.4
2	3.13/79.5	3.13/79.5	3.25/82.8	3.63/92.2	3.81/96.8	4.13/104.9	4.63/117.6	5.00/127.0	5.83/148.1	5.75/146.1
2-1/2	3.63/92.2	3.63/92.2	3.75/95.3	4.13/104.9	4.31/109.5	4.63/117.6	5.13/130.3	3.31/84.1	5.75/146.1	6.13/155.7
3	4.00/101.6	4.00/101.6	4.13/104.9	4.50/114.3	4.63/117.6	5.00/127.0	3.31/84.1	5.75/146.1	6.00/152.4	6.25/158.8
3-1/2	4.50/114.3	4.50/114.3	4.50/114.3	4.75/120.7	4.94/125.5	5.38/136.7	5.75/146.1	6.00/152.4	6.25/158.8	6.50/165.1
4	4.50/114.3	4.50/114.3	4.63/117.6	5.00/127.0	5.25/133.4	5.75/146.1	6.13/155.7	6.25/158.8	6.50/165.1	6.75/171.5