Frontier® ACELA XP

High Performance Explosion Proof Fume Hood

Introduction

The Frontier Acela® XP Series Fume Hood is an explosion proof fume hood designed and fitted with ATEX / IECex Zone 1 rated electrical components. It provides the highest level of chemical containment and almost no possibility of sparks in the workzone.*

Suitable for applications or rooms which have presence of highly flammable or explosive gases and vapours especially in the Oil & Gas industry

Structure

- Esco Resinate Plus internal liner is constructed from high quality Fiber-Reinforced Plastic (FRP) liner which is UL1805 approved for flame spread test
- Customised to fit any models of furnaces flushed to the work surface
- Tri-wall construction for maximum robustness
- Robust chain and sprocket sash support system

Ergonomics

- 5° Angled Front or the Perfect Pitch Profile™ allows users to lean forward and also minimizes glare and reflections. The gentle pitch of the hood profile enhances visibility and maximizes operator comfort.

Safety

- Compliant to both ASHRAE110 and EN14175 standards for fume hood safety
- Perforated lower baffle improves overall containment of the fume hood
- Aerodynamic designs of the airfoil, shaping vanes and sash handle guards the entire perimeter of the sash opening ensuring airflow turbulence is minimized
- Sash stop limits sash movement beyond 457mm (18"), encouraging users to work at safe positions
- Esco's sash Creep-Down mechanism automatically lowers the sash to a safe position whenever it is temporarily raised above the sash height limit of 457mm (18")
- Sash is made from 6mm tempered safety glass with lamination

Energy Efficiency

- Operates safely at face velocities as low as 0.3 m/s (60 fpm)
- Exhaust volume reductions of up to 58% can be achieved without compromising safety.
- Energy savings T5 lighting

Serviceability

- Removable baffle design allows for periodic cleaning of hood's rear wall. This helps eliminate potential clogs in this area that can reduce containment
- Internal access panels on the side walls facilitate access to plumbing connections
- Chain and sprocket sash system requires minimal service

Standard Explosion Proof Accessories

- Explosion Proof Light Fixture
- Explosion Proof Electrical Socket Outlet
- Explosion Proof ON-OFF Light Switch
- Explosion Proof Junction Box

Optional Accessories

- Remote control fixtures for water and special gases
- Large sinks
- Support stand
- Base storage cabinet

Warranty

- The Frontier Acela® High Performance Fume Hood is warranted for 1 year excluding consumable parts and accessories. Contact your local sales representative for specific warranty detail

*Disclaimer: The Frontier Acela® XP Fume Hood not designed or independently tested to comply to any Explosion Proof Rating Standards such as ATEX/IECex at system level. If required, the user is responsible for certification of the fume hood according to the ATEX/IECex rating.

ESCO
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Ordering Code	Description	
EXP-001	**Explosion Proof Light Box – 9E** • Quick release diffuser with isolation switch for • Fast, safe re-lamping • Flush with ceiling fitting reduces dust build up Low running costs due to the 50,000 hour electronic ballast • 1 piece for 4/5 ft, 2 pieces for 6/8 ft	
EXP-002	**Electrical Socket Outlet** • Enclosure made of glass fibre reinforced polyester resin • Fitted with flange sockets according to the order • 1 on left side post and 1 on right side post: total of 2 pcs EO	
EXP-003	**Installation ON-OFF Light Switch - 8030** • 2 pole OFF switch Robust moulded plastic enclosure • Large fluorescent turning handle • Degree of protection IP65 • Only 1 per fume hood	
EXP-004	**Explosion Proof Junction Box & Cable Gland** • Only 1 per fume hood	

Guide to Models

E F A - 4 U D R V W 8 X P

External WidthCode		Internal Depth Code		Internal Liner Code		Sash Type Code		Color Code		Electrical Code	
1220 mm (48.0")	**4U**		**D**	Esco Resinate	**R**	Vertical	**V**	Esco	**W**	230 V, AC, 50 / 60Hz	**8**
1525 mm (60.0")	**5U**					Combination	**C**			110-120 V, AC, 50 / 60Hz	**9**
1830 mm (72.0")	**6U**	900 mm (35.4")									
2440 mm (96.0")	**8U**										

General Specifications, Frontier Acela® XP Series Fume Hood

Model		EFA-4UDR_W-_-XP	EFA-5UDR_W-_-XP	EFA-6UDR_W-_-XP	EFA-8UDR_W-_-XP
Nominal Size		1.2 meters (4')	1.5 meters (5')	1.8 meters (6')	2.4 meters (8')
External Dimensions* (W x D x H)		1220 x 900 x 1521 mm 48.0" x 35.4" x 59.9"	1525 x 900 x 1521 mm 60.0" x 35.4"x 59.9"	1830 x 900 x 1521 mm 72.0" x 35.4"x 59.9"	2440 x 900 x 1521 mm 96.0" x 35.4"x 59.9"
Internal Work Area (W x D x H)		996 x 675x 1230 mm 39.2" x 26.6"x 48.4"	1301 x 675x 1230 mm 51.2" x 26.6"x 48.4"	1606 x 675x 1230 mm 63.2" x 26.6"x 48.4"	2216 x 675x 1230 mm 87" x 26.6"x 48.4"
Maximum Sash Opening		740 mm (29.1")			
Face Velocity	Sash Opening				
0.3 m/s (60 fpm)	457 mm (18.0")	541 cmh at 14.3 Pa 316 cfm at 0.06" WG	777 cmh at 14.6 Pa 457 cfm at 0.06" WG	872 cmh at 19.9 Pa 513 cfm at 0.08" WG	1203 cmh at 14.2 Pa 708 cfm at 0.06" WG
0.4 m/s (80 fpm)		721 cmh at 19.7 Pa 424 cfm at 0.08" WG	942 cmh at 23.7 Pa 554 cfm at 0.10" WG	1163 cmh at 28.8 Pa 684 cfm at 0.12" WG	1604 cmh at 26.4 Pa 944 cfm at 0.11" WG
0.5 m/s (100 fpm)		901 cmh at 31.8 Pa 530 cfm at 0.13" WG	1177 cmh at 34.7 Pa 692.8 cfm at 0.14" WG	1453 cmh at 41.8 Pa 855 cfm at 0.17" WG	2005 cmh at 32.3 Pa 1180 cfm at 0.13" WG
0.3 m/s (60 fpm)	736 mm (29.0")	899 cmh at 22.1Pa 526 cfm at 0.09" WG	1175 cmh at 28.7 Pa 691 cfm at 0.12" WG	1450 cmh at 36.1 Pa 848 cfm at 0.15" WG	1819 cmh at 27.3 Pa 1070 cfm at 0.11" WG
0.4 m/s (80 fpm)		1199 cmh at 36.7 Pa 701 cfm at 0.15" WG	1556 cmh at 49.3 Pa 922 cfm at 0.20" WG	1933 cmh at 61.4 Pa 1138 cfm at 0.25" WG	2668 cmh at 48.3 Pa 1570 cfm at 0.19" WG
0.5 m/s (100 fpm)		1499 cmh at 66.6 Pa 877 cfm at 0.27" WG	1958 cmh at 76.6 Pa 1152 cfm at 0.31" WG	2197 cmh at 94.7 Pa 1285 cfm at 0.38" WG	3335 cmh at 74.3 Pa 1962 cfm at 0.30" WG
Exhaust Outlet Diameter		305 mm (12.0")			
Number of Exhaust Collars		1		2	

When sash is in full open position, total height of fume hood is 1731 mm (68.2"). Please ensure sufficient ceiling height clearance is available.

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Fume Hood • **Frontier® Acela XP**