

EEx p System F-350



Smallest and most advanced (E)Ex p-System worldwide

- The advanced ATEX approved (E)Ex p-System F-350 offers some brand new and unique features:
- Intuitive Wheel-Shuttle[®] Technology for adjusting and parameterization allows quick and easy configuration without reading complex operating manuals.
- Certified according to the newest ATEX95 regulations with a unique working temperature range of $-30^{\circ}\text{C} \dots 60^{\circ}\text{C}$ for heavy industrial environments.
- Built-in intrinsically safe interface to connect e.g. additional pressure and temperature sensors or even a complete remote unit (Type F-411).
- Graphical LCD-display with oversized viewing window for status and error indication
- Duo Tec Fail safe technology with multiprocessor signal processing meets AK4 (according to EN 954-1).
- Very reliable protected built-in sensors for long time operation without maintenance
- Black reinforced GFK fully seawater resistant and anticorrosive case for use even in offshore environments.
- The new and small (E)Ex p System F-350 allows now completely redesigned (E)Ex p protections with smaller components.
- Easy way of installation with only two system components ((E)Ex-p Controller and air inlet group) together with the patented Wheel-Shuttle[®] Technology gives even beginners and inexperienced technicians the possibility for installing (E)Ex-p protected components.
- The (E)Ex p System F-350 is part of a complete series of (E)Ex p controllers and components to provide the user with the optimal technical solution.
- On request we take responsibility of the complete evaluation process for an (E)Ex p cabinet. This includes:
 - Construction and built of pressurized cabinets
 - Mounting of non-ex equipment inside the cabinet
 - Use of other kinds of ex-protection (e.g. (E)Ex-d or (E)Ex-i components)
 - Complete validation with test report in our company
- Now also available according to EN 60079-xx standards (3. amendment of the certificate)

Internet: <http://www.elb.de>

Technical Data F-350		Rev. 1.8
General	Mounting	in Ex Area 1 or 2 (Cat. 2 and 3 accord. to ATEX 95)
	Ex-Protection	II 2G EEx em [p] [ia] IIC T4 or II 2G EEx d m [p] [ia] IIC T4
	EN 500xx : EN 60079-xx (amendment 3) :	II 2 G Ex mb e ia [px] [ia] IIC T4 or II 2 G Ex mb d ia [px] [ia] IIC T4
	IP Protection class	IP 65 (for air outlet on request)
	Ambient temperature	operating: - 30° C ... + 60° C, without condensation
Enclosure of control unit	Dimensions	H x W x D: 94.5 mm x 120 mm x 122 mm
	Material	GRP, epoxy resin, black, antistatic, seawaterresistant
Electrical specifications	Current consumption	30 mA at 230 VAC / 300 mA at 24 VAC
	Mains voltage	12VDC, 24VDC, 24VAC, 110VAC, 120VAC, 230VAC, 250 VAC, 48 ...62 Hz
	Max. contact load terminals 4, 5, 6, 7	AC: U = 250VAC, I = 12 A (6 A for amendment 3) / cos φ =1 DC: U = 30VDC, I = 3 A
	4 x (E)Ex Cable glands	2 x M20 for cable Ø = 7-13 mm, 2 x M16 for cable Ø = 4.5-10 mm
	Intrinsically safe connector (5-pole)	Intrinsically safe supply for external temperatur sensor F-460, Remote unit F-411 or Bypass- keyswitch F-480
Pneumatic	Pressure range	0...25 mbar (other ranges on request)
	Flow measure range	(0.2 l/sec – 12 l/sec in 3 ranges)
	relief valve	patent. completely maintenance-free air outlet with integrated ex-proofed particle barrier
Security class	Duo-tec technology	Fail safe , meets AK 4 (according to EN 954 – 1, Cat. 3)
Parameterize	Wheel shuttle Technology	intuitive Wheel-Shuttle Technology for quick and easy adjusting and configuration
	Configuration	with easy accessible menu on LC-Display, different languages selectable :German, English
Display LCD - Display high reflective	Purge time range	0... 99 Min. realtime calculation
	Pressure range indication	0... 25.0 mbar (0-2500Pa) , resolution: 0.05 mbar (5 Pa)
	Menu and status	LC-Display : 3 Lines of 12 Signs
	Errors	via display and acoustic alarm (with Remote Unit F-411)
Viewing Window	Mounted in cover of unit	Magnifying window allows complete view of LC -Display without removing cover of the controller
	Material	Polyacryl, magnifying, diameter 58 mm
Mounting	Position of mounting on cabinet	inside or outside cabinet without any limitations
	Ambient temperature during storage / transport	- 40° C to +70° C, without condensation
Pressurizing configuration programmable	Variant A	leakage compensation with automatic switch to variation B
	Variant B	continous purging (to cool equipment inside cabinet)
	Variant C	for small and moveable pressurized cabinets
	Variant D	for analyzers with internal release of flammable gases etc.

