

DX/DXE 7x5 Series

DIGITAL EX-PROOF INTERCOM STATION

FOR USE IN EXPLOSIVE (HAZARDOUS) AREAS OF ZONE 1 AND 2

They are used in extreme environments as typically found in the Oil & Gas and the Chemical & Pharmaceutical sector as well as in the Steel industry. The rugged design allows for clear and reliable communication at any time, whether you operate the intercom station in extreme cold or heat, dirt or dust or explosive (hazardous) environments as classified by zone 1 and 2.

The robust two-part housing is made of flame-retardant, glass-fiber reinforced polyester. The electronics inside is installed in a flameproof enclosure and the terminal compartment provides increased safety. The user controls are controlled via intrinsically safe electronics.

Its connectivity and health status is constantly monitored, logged and flexibly notified system-internally and to third-party systems.

- Housing made of glass-fiber reinforced polyester
- Equipment group and category Ex II 2G
- Operating temperature range DX series: -40 °C to +70 °C (-40 °F to +158 °F)
- Degree of protection IP66
- Configurable and programmable user controls: dial keypad and momentary rocker switch
- Designed for use with industrial gloves
- Visual indication of call or busy status via LEDs
- Noise-compensating microphone with dynamic compression
- Adjustable speaker volume and microphone sensitivity
- Self-diagnostics by monitoring of internal electronics, microphone and cable path
- Potential-free relay contact



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THE ENGINEERS OF COMMUNICATION

Horn Speaker
Clear sound quality in low and high ambient noise environments

Equipment Identification
Free space to apply a device tag

Protected Label
To display the call number or location of intercom station in the plant

Microphone
Noise-compensating microphone with dynamic compression

Equipment Group and Category
Ex II 2G

Ex marking DX series
Ex db eb ib IIC T4 Gb

Ex marking DXE series
Ex db eb ib [ib] IIC T4 Gb

User Controls

The different modular user controls allow for customization according to customer and project-specific needs at any time. The housing can either be configured with one dial keypad and two momentary rocker switches or with up to three momentary rocker switches.

Industrial Dial Keypad

To enter call numbers; use the * key to speak and the # key to delete the call number entered

Industrial Momentary Rocker Switch
Freely programmable, integrated red LEDs for call and busy signaling, protective labels, designed for use with industrial gloves

Cover Plate
To protect module openings



Equipment group **II 2G Ex db eb ib [ib] IIC T4 Gb** Equipment protection level

Equipment category

Temperature class

Marking

Explosion group

II	All areas except mining	ib	Intrinsically safe category b
2G	Gas category zone 1	[ib]	Intrinsically safe output
Ex	Compliant with DIN EN 60079	IIC	Most ignitable gas group
db	Flameproof enclosure	T4	Surface temperature <135 °C (<275 °F)
eb	Increased safety	Gb	Gas zone 1



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FLEXIBLE AND EASILY EXPANDABLE

The intercom stations of the DX/DXE series can be expanded with various external explosion-proof (hazardous) components. An optional 25-W booster amplifier installed in the flameproof enclosure enables the use of an external speaker. Based on project or specification needs, you can connect a flashing warning beacon. Additionally, you can connect a headset or handset - if required - also together with a foot switch.



* For DXE series only



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MULTI-FACETED MOUNTING OPTIONS AND ROBUST MECHANICAL ACCESSORIES

To make best use of your intercom station, you can mount it to steel I-beams or to internal and external walls. Using the mounting brackets available in the 1 AMW 05 mounting kit, you can easily mount and ideally align it. In areas, where you cannot directly mount the intercom station to a wall (e.g., for gates or entrance areas), a free-standing mounting post that is bolted to the ground can be supplied. If required, you can also mount additional acoustic or visual signaling devices to it. In high ambient noise areas, acoustic hoods provide adequate noise insulation to ensure clear communication at any time.



Illustrations similar



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SERIES OVERVIEW

DX SERIES



DX 705	Up to three momentary rocker switches, equipment group and category Ex II 2G, degree of protection IP66, marking Ex db eb Ib IIC T4 Gb, -40 °C to +70 °C (-40 °F to +158 °F), 42 V DC to 72 V DC
W x H x D	141 mm x 484 mm x 171 mm (5,55" x 19,06" x 6,73")
Weight	Approx. 7 kg (approx. 15,43 lbs)
Accessories	See "Accessories for DX/DXE Series", page 7



DX 715	One dial keypad and up to two momentary rocker switches, equipment group and category Ex II 2G, degree of protection IP66, marking Ex db eb Ib IIC T4 Gb, -40 °C to +70 °C (-40 °F to +158 °F), 42 V DC to 72 V DC
W x H x D	141 mm x 484 mm x 171 mm (5,55" x 19,06" x 6,73")
Weight	Approx. 7 kg (approx. 15,43 lbs)
Accessories	See "Accessories for DX/DXE Series", page 7

DXE SERIES WITH CONNECTOR FOR EXTERNAL ACCESSORIES



DXE 705	Up to three momentary rocker switches, connector for one handset, headset, or foot switch, equipment group and category Ex II 2G, degree of protection IP66, marking Ex db eb Ib IIC T4 Gb, -40 °C to +55 °C (-4 °F to +131 °F), 42 V DC to 72 V DC
W x H x D	141 mm x 484 mm x 171 mm (5,55" x 19,06" x 6,73")
Weight	Approx. 7 kg (approx. 15,43 lbs)
Accessories	See "Accessories for DX/DXE Series", page 7 and "Accessories for DXE Series Only", page 9



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DXE 715	One dial keypad and up to two momentary rocker switches, connector for one handset, headset, or foot switch, equipment group and category Ex II 2G, degree of protection IP66, marking Ex db eb Ib IIC T4 Gb, -20 °C to +55 °C (-4 °F to +131 °F), 42 V DC to 72 V DC
W x H x D	141 mm x 484 mm x 171 mm (5,55" x 19,06" x 6,73")
Weight	Approx. 7 kg (approx. 15,43 lbs)
Accessories	See "Accessories for DX/DXE Series", page 7, and "Accessories for DXE Series Only", page 9

TECHNICAL DATA

MECHANICAL DATA	
Width x height x depth	141 mm x 484 mm x 171 mm (5,55" x 19,06" x 6,73")
Cable glands	3 x M20 (cable diameter: 4 mm to 13 mm (0,16" to 0,51")) 1 x M25 (cable diameter: 7 mm to 17 mm (0,28" to 0,67"))
Weight	Approx. 7 kg (approx. 15,43 lbs)
Color	Pure Orange (RAL 2004)

ELECTRICAL DATA	
Operating voltage range	42 V DC to 72 V DC
Quiescent current consumption	20 mA
Max. current consumption	80 mA
Sound pressure level (distance of 30 cm (0.98 ft))	106 dB
Speaker	15 W / 8 Ohms
Relay contact	1 A, 90 V DC, 30 W (resistive load) 0,3 A, 90 V DC (any type of load)

ENVIRONMENTAL REQUIREMENTS AND STANDARDS

Relative humidity (non-condensing)	Max. 95 %
Degree of protection	IP66
EMC	IEC/EN 61000-6-2 IEC/EN 61000-6-4
Certificates	PTB 19 ATEX 2005 X IECEX PTB 19,0026 X
Equipment group and category	Ex II 2G



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SERIES OVERVIEW CHART

DX SERIES

Type				Booster Amplifier*	Type Number
2 DX 705		1	2		301-650-200
2 DX 705/25		1	2	x	301-650-200/25
2 DX 715	x	1	1		301-650-201
2 DX 715/25	x	1	1	x	301-650-201/25
4 DX 705		2	1		301-650-400
4 DX 705/25		2	1	x	301-650-400/25
4 DX 715	x	2			301-650-401
4 DX 715/25	x	2		x	301-650-401/25
6 DX 705		3			301-650-600
6 DX 705/25		3		x	301-650-600/25

* Operating temperature range of the DX intercom stations changes to -40 °C to +55 °C (-40 °F to +131 °F)

Other types of intercom stations are available upon request.

DXE SERIES

Type				Booster Amplifier	Type Number
4 DXE 715	x	2			301-651-401
4 DXE 715/25	x	2		x	301-651-401/25
6 DXE 705		3			301-651-600
6 DXE 705/25		3		x	301-651-600/25

Other types of intercom stations are available upon request.

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