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EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 74578X** **Issue 2**

[4] Product: **EXgate™ Communication Enclosure**

[5] Manufacturer: **BARTEC AS**

[6] Address: **Vestre Svanholmen 24
4313 Sandnes
PO box: 418
4064 Stavanger
Norway**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.


[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015 and EN 60079-31:2014.**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to the “Specific Conditions of Use” listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

II 2 G	Ex db IIA/IIB/IIC T6/T5/T4 Gb or	for T class	
	Ex db eb IIA/IB/IIC T6/T5/T4 Gb	and T _{amb}	
	II 2 D	Ex tb IIIC T70°C/80°C/95°C/100°C Db	details
			see [15]



Date of issue:
2023-12-01



Bjørn Spongsveen
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

- [13] **Schedule**
- [14] **EU-Type Examination Certificate No:** Presafe 20 ATEX 74578X Issue 2
- [15] **Description of Product**

EXgate™ Communication enclosure consists of communication devices such as Radios, GPS, Wi-Fi Access Points, antennas, repeaters and gateways built into a flameproof enclosure and protected with type of protection “flameproof enclosure” and “dust protection by enclosure”, which can include externally assembled Ex certified socket (receptacle) or “increased safety” enclosure as junction box.

It is intended for fixed installation. “Dust protection” (w/o dust layers) is assured with appropriate O-ring between the enclosure body and top and with a gasket between enclosure body and junction box. Enclosure is made of stainless steel. Enclosure’s body and top are fixed together by flameproof threaded joint. Enclosure top includes non-metallic dome or flat glass window cemented on the metallic top of the enclosure or just flat metallic cover.

Electronic components are located inside the flameproof enclosure including connection terminals for field wiring. Flameproof enclosure is provided with three threaded holes (direct entries) intended for Ex certified receptacle, line bushing and cable glands.

Version with external enclosure is intended for indirect entry (via line bushing) and includes connection terminals for field connection located inside the junction box made of thin stainless steel sheet with a thickness of 1,5 mm. The junction box is provided with up to three entries (plane holes) intended for cable glands.

All free entries are supplied with the appropriate Ex certified blanking elements.

Type Designation: EXgate™

Applicable models: EXgate™ 215_ *_*_*_*, EXgate™ 360_ *_*_*(P/T/W)_*_*
(See attachment for description of product designation code and details about T-class and Tamb)

Electrical data and principal characteristics:

EXgate™ 215
Rated voltage: 3 to 24 VDC, POE (37 – 57 V DC) / 230 VAC
Rated current: ≤ 1,5A (DC), ≤ 0,2A (AC)

EXgate™ 360
Rated voltage: 3 to 24 VDC, POE (37 – 57 V DC) / 230 VAC
Rated current: ≤ 3A (DC), ≤ 0,5A (AC)

Max input power / transmitted power from antennas:
Gas group: IIA = 6W, IIB = 3.5W, IIC = 2W.

Ambient temperature:
-20°C ≤ Tamb ≤ +(see Attachment)

Degrees of protection (IP Code)
IP66

Routine tests

- Routine overpressure test at 39.6 bar for duration of at least 10 seconds acc. Cl. 16 of EN 60079-1:2014 for EXgate™ 215 flameproof enclosures which include radio “Dot 2271”
- Routine overpressure test at 20.4 bar for duration of at least 10 seconds acc. Cl. 16 of EN 60079-1:2014 for EXgate™ 215 flameproof enclosures w/o radio “Dot 2271” included.
- Routine overpressure test at 13.8 bar for duration of at least 10 seconds acc. Cl. 16 of EN 60079-1:2014 for EXgate™ 360 flameproof enclosures .
- Dielectric strength test according to Clause 7.1 of EN 60079-7:2015 (500V/1500V R.M.S. for U_n 24V/230V) (0-5%) at 48-62 Hz maintained 60s or 1.2 x test voltage maintained at least 100 ms for increased safety enclosure.

[16] **Report No.:** SC322943/00
Project No.: PRJN-322943-2023-PA-NOR

[17] **Specific Conditions of Use**

1. The Instructions provide guidance for the user to minimize the risk from electrostatic discharge.
2. Flameproof threaded joint at EXgate™ 215 - M208x2 6g/6H minimum 9.5 (nine and half) threads must be engaged.
3. Flameproof threaded joints at EXgate™ 215 - M20/25x1.5 6g/6H minimum 7 (seven) threads must be engaged
4. Flameproof threaded joints at EXgate™ 360 - M352x3 6g/6H minimum 6 (six) threads must be engaged.
5. When a Connector half fitted with contact pins is not connected to an associated Plug or Receptacle, it shall not be energized as per EN IEC 60079-0:2018, clause 20.2
6. Plugs and receptacles shall only be used with blanking caps or mating Connector halves certified under certificate number Sira 07ATEX1229X.
7. Pilot light type EFL*PC* underwent only a shock corresponding to an energy of a low risk at 2J
8. The flameproof joints (inside pilot light type EFL *PC*) have a different value from those specified in the tables of the IEC 60079-1 standard, for any repair to contact the manufacturer.

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

Number	Title	Rev.	Date
CNX-516-2	Ex e Enclosure TNCN 080805 for EXgate™	C	2023-09-24
EXA-11-2	Gasket for TNCN 080805 mounted on EXgate™	C	2023-09-24
EXA-19-4	EXgate™ 215 Ex d enclosure with possible Ex e enclosure	B	2023-10-12
EXA-20-4	Ex d Enclosure EXgate™ 215	C	2023-10-26
EXA-21-4	EXgate™ 215 Principle Drawing of the filling of the dome top including internal volume calculations	B	2023-09-24
EXA-23-5	Type Label for EXgate™, ATEX and IECEx	B	2023-10-10
EXA-25-3	Connection diagram EXgate™ 215 with PoE configuration	C	2023-09-15
EXA-27-3	Connection diagram EXgate™ 215 with receptacle configurat	C	2023-09-15
EXA-28-3	Connection diagram EXgate™ 215 with direct entry	C	2023-09-15
EXA-30-4	Ex d enclosure EXgate™ 360	A	2023-11-16
EXA-31-4	EXgate™ 215 Ex d Enclosure with GPS antenna	B	2023-10-12

EXA-32-4	EXgate™ 215 Ex d enclosure with possible Ex e enclosure	B	2023-11-16
XCD-161-4	TNXCD/AD General Drawing for Ex d/de Enclosures with Door	B	2023-06-12
XCD-162-4	TNXCD/AD General Drawing for Glass Front and Ex d bottom section	B	2023-06-12
XCD-238- 4	Dome in Polycarbonate for TNXCD 195	A	2021-04-27
XCD-239-4	Dome in Composite (Polyester) for TNXCD 215	B	2023-11-07

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-12-04	SC190073/00
1	New versions of the product introduced, new Ex certified connection terminals included in the junction box, changes in descriptive drawings.	2021-10-14	SC190073/01
2	-new size EXgate™ 360 with polycarbonate dome. -new polycarbonate dome for EXgate™ 215 -signal light for EXgate™ 215 included -manufacturer's name change	2023-12-01	SC322943/00

END OF CERTIFICATE




Attachment to Certificate - Presafe 20 ATEX 74578X, Issue 2


Description of product designation code

Typekey explanation:


EXgate™215 1 R D 1 Z	
Z	A letter code that pin points the internal configuration
1-XX	Means variant of threaded entries
S	The letter 'S' may also be used, specifying "Special"
D	Means a Composite Dome Ex d top
P	Means a Polycarbonate Dome Ex d top
T	Means a Tight Ex d top
W	Means a flat Glas Ex d top
O	Means without an Amphenol Receptacle is mounted
R	Means an Amphenol Receptacle is mounted
1	Means an Ex d solution
4	Means an Ex de solution with external Ex e enclosure
155-360	Means the outer diameter of the enclosure in mm
EXgate™	Means the product type

Letter	Description	Value / info
A*	Size - Diameter	215 or 360mm
B*	Ex execution	1= Means an Ex d solution 4= Means an Ex de solution with external Ex e enclosure
C*	Receptacle	R= Amphenol Receptacle is mounted O= Without Amphenol Receptacle
D*	Top section	D= Means a Composite Dome Ex d top P= Means a Polycarbonate Dome Ex d top T= Means a Tight Ex d top W= Means a flat Glas Ex d top
E*	Cable entries	1-XX Variant of threaded entries S May also be used, specifying "Special"
F*	Installed component	A= Means DOT 2217 is installed B= Means GPS OEM-GNSS-503 is installed C= Means Bullet Antenna is installed D= Means Sentrius IG60 Gateway is installed E= Means RCS-100 Repeater is installed
G*	Environment	II 2G or II 2D or II 2 GD
H*	Ex code	db or eb db or tb
I*	Gas group	IIA, IIB or IIC
J*	Temp Class	T6, T5 or T4
K*	EPL	Gb or Db
L*	Dust Group	IIC
M*	Temperature	T70 or T80°C or T95°C
N*	Certification Scheme	Presafe 20 ATEX 74578 X and/or IECEx PRE 20.0102X
O*	Lower Tamb	-20°C
P*	Higher Tamb	EXgate™ 215: +36° to +72°C EXgate™ 360: +30° to +60°C
Q*	IP rating	IP66
R*	U _N	3 to 24 VDC / POE (37-57 VDC) / 230 VAC
S*	I _N	≤1,5 A @ DC / 0,2 A @ AC
T*	Serial number	5-digit serial number
U*	Production year	Last two digits of the year, like 21 for year 2021
V*	Maximum dissipated power	EXgate™ 215 ≤ 30 W EXgate™ 360 ≤ 60 W
W*	WARNING	THREADED HOLES - SEE INSTALLATION INSTRUCTIONS
X*	WARNING	Do not open when an explosive atmosphere may be present
Y*	WARNING	Potential electrostatic charging hazard - See instructions





Type:
EXgate® A*B*C*D*E*F*



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G* Ex H* I* J* K*
G* Ex H* L* M* K*

N*
N*

U_k = R* V I_k = S* A Q* T.amb. O* ≤ Ta ≤ P*
S.No./Year T*/U* W*
X*

Maximum surface temperature (T-class) and ambient temperature (T_{amb}) (determined w/o dust layers)

Ambient temperature, T class and max. surface temperature (determined w/o dust layers):

Model	Maximum power (dissipation)	Ambient temperature	T Class / surface temp.
EXgate™ 215 * 0 D **	3.5W	-20°C ≤ T _{amb} ≤ +62°C	T6 / 70°C
	9W	-20°C ≤ T _{amb} ≤ +58°C	T6 / 70°C
	15W	-20°C ≤ T _{amb} ≤ +50°C	T6 / 70°C
	20W	-20°C ≤ T _{amb} ≤ +46°C	T6 / 70°C
	26W	-20°C ≤ T _{amb} ≤ +41°C	T6 / 70°C
	30W	-20°C ≤ T _{amb} ≤ +36°C	T6 / 70°C
EXgate™ 215 * R ***	20W	-20°C ≤ T _{amb} ≤ +55°C	T5 / 95°C
	26W	-20°C ≤ T _{amb} ≤ +40°C	T6 / 70°C
	30W	-20°C ≤ T _{amb} ≤ +36°C	T6 / 70°C
EXgate™ 215 * 0 D **	15W	-20°C ≤ T _{amb} ≤ +50°C	T6 / 70°C
	20W	-20°C ≤ T _{amb} ≤ +46°C	T6 / 70°C
	26W	-20°C ≤ T _{amb} ≤ +41°C	T6 / 70°C
	30W	-20°C ≤ T _{amb} ≤ +36°C	T6 / 70°C
EXgate™ 215 * 0 P ** EXgate™ 215 * 0 W **	3.5W	-20°C ≤ T _{amb} ≤ +72°C	T6 / 80°C
	9W	-20°C ≤ T _{amb} ≤ +68°C	T6 / 80°C
	15W	-20°C ≤ T _{amb} ≤ +60°C	T6 / 80°C
	20W	-20°C ≤ T _{amb} ≤ +56°C	T6 / 80°C
	26W	-20°C ≤ T _{amb} ≤ +51°C	T6 / 80°C
	30W	-20°C ≤ T _{amb} ≤ +46°C	T6 / 80°C
EXgate™ 215 * 0 T **	3.5W	-20°C ≤ T _{amb} ≤ +72°C	T6 / 80°C
	9W	-20°C ≤ T _{amb} ≤ +68°C	T6 / 80°C
	15W	-20°C ≤ T _{amb} ≤ +60°C	T6 / 80°C
	20W	-20°C ≤ T _{amb} ≤ +56°C	T6 / 80°C
	26W	-20°C ≤ T _{amb} ≤ +51°C	T6 / 80°C
	30W	-20°C ≤ T _{amb} ≤ +46°C	T6 / 80°C
	20W	-20°C ≤ T _{amb} ≤ +71°C	T5 / 95°C
	26W	-20°C ≤ T _{amb} ≤ +66°C	T5 / 95°C
	30W	-20°C ≤ T _{amb} ≤ +61°C	T5 / 95°C
	26W	-20°C ≤ T _{amb} ≤ +71°C	T4 / 100°C
	30W	-20°C ≤ T _{amb} ≤ +66°C	T4 / 100°C

Model	Maximum power (dissipation)	Max Ambient temperature	T Class / surface temp.
EXgate™ 360 * 0 T **	35W	-20°C ≤ T _{amb} ≤ +60°C	T6 / 80°C
	40W	-20°C ≤ T _{amb} ≤ +60°C	T5 / 90°C
	45W	-20°C ≤ T _{amb} ≤ +60°C	T5 / 90°C
	50W	-20°C ≤ T _{amb} ≤ +60°C	T5 / 90°C
	55W	-20°C ≤ T _{amb} ≤ +60°C	T5 / 90°C
	60W	-20°C ≤ T _{amb} ≤ +60°C	T5 / 90°C

EXgate™ 360 * R T **	60W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +55^{\circ}\text{C}$	T5 / 95°C
	60W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$	T6 / 80°C
EXgate™ 360 * R W **	35W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +55^{\circ}\text{C}$	T5 / 95°C
	40W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +54^{\circ}\text{C}$	T5 / 95°C
	45W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +52^{\circ}\text{C}$	T5 / 95°C
	50W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +49^{\circ}\text{C}$	T5 / 95°C
	55W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +42^{\circ}\text{C}$	T5 / 95°C
	60W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$	T6 / 80°C
EXgate™ 360 * 0 W **	30W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$	T6 / 80°C
	35W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +58^{\circ}\text{C}$	T6 / 80°C
	40W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +54^{\circ}\text{C}$	T6 / 80°C
	45W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +52^{\circ}\text{C}$	T6 / 80°C
	50W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +49^{\circ}\text{C}$	T6 / 80°C
	55W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +42^{\circ}\text{C}$	T6 / 80°C
EXgate™ 360 * R P **	60W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$	T6 / 80°C
	55W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +42^{\circ}\text{C}$	T6 / 80°C
	50W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +39^{\circ}\text{C}$	T6 / 80°C
	45W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +42^{\circ}\text{C}$	T5 / 95°C
	40W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +44^{\circ}\text{C}$	T5 / 95°C
	35W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +48^{\circ}\text{C}$	T5 / 95°C
	30W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +53^{\circ}\text{C}$	T5 / 95°C
	20W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +55^{\circ}\text{C}$	T5 / 95°C
EXgate™ 360 * 0 P **	60W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +30^{\circ}\text{C}$	T6 / 80°C
	55W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +32^{\circ}\text{C}$	T6 / 80°C
	50W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +39^{\circ}\text{C}$	T6 / 80°C
	45W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +42^{\circ}\text{C}$	T6 / 80°C
	40W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +44^{\circ}\text{C}$	T6 / 80°C
	35W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +48^{\circ}\text{C}$	T6 / 80°C
	30W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +53^{\circ}\text{C}$	T6 / 80°C
	10W	$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$	T6 / 80°C

END OF CERTIFICATE's ATTACHMENT