



(1) EC TYPE EXAMINATION CERTIFICATE

(2) Equipment or protective system intended for use in potentially explosive atmospheres

Directive 94/9/EC

(3) EC type examination certificate number:

ISSeP03ATEX085X

(4) Equipment or protective system:

Limitation device type BARRIER 4 associated to a transceiver coil.

(5) Applicant – Manufacturer – Authorized representative in the Community:

ORPAK INDUSTRIES LTD

(6) Address:

31 Lechi St.

P.O.B. 1461

BNEI-BRAK 51114

ISRAEL

- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) ISSeP, notified body n<sup>r</sup> 492 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in annex II to the Directive.

The examination and test results are recorded in confidential report n<sup>r</sup> 02059.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + A1 and A2: 1999

EN 50020: 2002

EN 50039: 1980

EN 50284: 1999

- (10) If the symbol "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipement or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following indications:

(Ex) 11.10

EEx ia II B T5

SYST

Colfontaine, the 28 july 2003

Renaud Alain

Manager of Colfontaine division

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC Zoning A. Schweitzer, rue de la Platincrie B-7340 COLFONTAINE (Wasmes)

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(13) SCHEDULE

# (14) EC TYPE EXAMINATION CERTIFICATE N<sup>R</sup> ISSeP03ATEX085X

(15) Description of the equipment or protective system:

Limitation device type BARRIER 4 associated to a transceiver coil.

The interconnection cable between the limitation device and the transceiver coil can't be greater than 100 m.

The possible and admissible transceiver coils are listed in the manufacturer's documents.

Electrical parameters: None.

#### Routine tests:

- The manufacturer shall make the routine verifications and tests necessary to ensure that the electrical apparatus produced complies with the specification submitted to the testing station together with the prototype or sample (EN 50014 clause 24).
- Each BARRIER 4 shall be submitted to a routine test in order to verify the correct operation of each component and the fuse resistance.
- Each interconnexion cable shall be submitted to a voltage test conforming to clause 5.2.4 of EN 50039
   : 1980.

#### **Eventual prescriptions**

T<sub>amb</sub>: -20°VC to +60°C (BARRIER 4) T<sub>amb</sub>: -35°C to +80°C (transceiver coils)

### (16) Report n<sup>r</sup> 02059

Composed in total of 44 pages, completed by the following descriptive documents:

"Safety Barriers for VIT Installation Information"

The drawings:

	08.07.1998 12.02.2003	Module, Barrier-4, potted PCB Assembly - Barrier 4	
	12.02.2003	DCD Assembly Domion 4	
		PCB Assembly - Barrier 4	
	02.08.1998	Barrier4, External Connection	Table of
	28.06.1998	PCB Specifications	
2	05.02.2003	Artwork, PCB (x20), P.S, Barrier 4	
2	05.02.2003	Artwork, PCB (x20), S.S, Barrier 4	
	12.02.2003	Barrier-4, Explosion	
Ü	24.07.2003	Label, Barrier-4	
1	06.03.2003	List, Viro Receiver Coils	
2	16.03.2003	Coil, Viro Receiver	
2 2 3	1	2 05.02.2003 2 05.02.2003 3 12.02.2003 1 24.07.2003 06.03.2003	2 05.02.2003 Artwork, PCB (x20), P.S, Barrier 4 2 05.02.2003 Artwork, PCB (x20), S.S, Barrier 4 3 12.02.2003 Barrier-4, Explosion 4 1 24.07.2003 Label, Barrier-4 5 06.03.2003 List, Viro Receiver Coils

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### **SCHEDULE**

## EC TYPE EXAMINATION CERTIFICATE NR ISSeP03ATEX085X

819300610-00A	C1	Î I	20.03.2003	Coil, Viro Receiver, Cng.
819300611-00A	B2		13.05.2003	Coil - VIT, Cng Viro Receiver
***************************************	U 0.000	1 1	10.00.200	
819301010-00A	B2	1	13.05.2003	Coil 2", Viro Receiver Unit
819301110-00A	C2		13.05.2003	Coil, 3" Viro Receiver Unit
819309000-00A	F4		16.03.2003	Viro Receiver Assembly - VIT
819309051-00A	B1		16.03.2003	Coil, Viro Receiver Assembly, VIT (Rectangle)
819309052-00A	<b>A</b> 1		16.03.2003	Coil, Viro Receiver Assembly, Non VIT
819310330-00B	B1		16.03.2003	Molded Receiver Coil
819300300-00B	В		22.11.2000	Housing, Receiver Coil, H.P. Todo
819300650-00A	Α		03.09.2001	Housing, Coil-LPG, Nettuno
819313200-00A	Α	2	27.07.1998	Bobine for OPW 11A (Receiver Unit)
819313300-00B	В	-	25.01.2000	Housing, Receiver Coil Moulded (63 mm)
819341010-00B	Α	3	01.03.2001	Shaped Bobine, Two Parts
814100600-00A	В	10 18 H	24.06.1998	Rubber Protecting Cover
819310610-00B	Α	20.0	26.11.1997	Housing, Receiver Coil, Posilock.
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### (17) Special conditions for safe use:

### Symbol X

- Temperature range for the Barrier : 20°C to + 60 °C
- Temperature range for the transceiver coils: -35 °C to +80 °C
- During the installation and the use of the transceiver coils, all precautions shall be taken to avoid any cable pulling.
- During the installation and the use of the transceiver coils, all precautions shall be taken to avoid electrostatic hazards.
- If the interconnection cable is used for many circuits, this cable shall be of a type A or B following the clause 5.3 of EN 50039: 1980.
- (18) Essential Health and Safety Requirements: covered by the Standards listed in (9).

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