



## (1) EC-TYPE EXAMINATION CERTIFICATE

- (2) Component intended for use on/in equipment or protective system intended for use in Potentially explosive atmospheres.

  Directive 94/9/EC
- (3) EC-Type Examination Certificate nr. LOM 08ATEX3047U
- (4) Component Cable entries
  Types H...Ex
- (5) Applicant HAWKE TRANSIT SYSTEM, S.L.
- (6) Address Pasco del Niño, 4, nave B2 39300 TORRELAVEGA (Cantabria) SPAIN
- (7) This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential report nr. LOM 07.456 UP

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

Standards EN 60079-0:2006 EN 60079-7:2007 EN 61241-0:2006 EN 61241-1:2004

- (10) The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- This EC-Type Examination Certificate relates only to the design and construction of this specified component in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacture and supply of this component.

  These are not covered by this certificate.
- (12) The marking of the componet shall include the following:

Ex e II

Ex e II

Ex tD A21 IP66

-20 °C ≤ Ta ≤ +80°C

Madrid, 22th September 2008



Angel Vega Remesal Head of the ATEX

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RCPCER 07.3/2

UNIVERSIDAD POLITÉCNICA DE MADRID ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA ( Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)





### (A1) SCHEDULE

(A2) EC-Type Examination Certificate: LOM 08ATEX3047U

#### (A3) Description of the certified component

The cable entries consist of a frame, rubber modules of prismatic shape and a compression system. The rubber modules are available in different sizes and each can accept a range of cable diameters. The modules are also available without holes that allow the filling of spaces in the frames. The range of diameters of cables is between 3 and 100 mm. Each module is distinguished by colour coding.

The frames are indicated to be placed welded in walls of enclosures for electrical equipment.

The frames can be combined in multiple arrays.

Rubber modules types:

Dimensions	Reference	Cable diameter		
mm wor wor wor	WOT WOT WOT WOT	(mm)		
COMPONEOUS COMPO	HF150	0 (*)		
OT WOT WOT WOT WOT	HF153	13 to 5 100 1100 1100 11		
15x15	HF155	5 to 7		
DOM FOW FOW FOW FO	HF157	7 to 9 mol mol mol mol		
FOW FOW FOW FOW ES	WO J WO J WO J WO J	WOTWOTWOTWOTWOTH WOTWOTWOTWOTH		
01 W01 W01 W01 W01	HF200	0 (*)		
07 W07 W07 W01 W01	HF203	3 to 6		
FOW FOW FOW LOW LO	HF206	6 to 9		
20x20	HF209	9 to 12		
DI WOLWOLIWOLIWOL TOW LOW LOW LOW LO	HF2011	11 to 14		
LOM COM LOM LOM LO	HF2013	13 to 16 1 10 1 10 1 10		
TOWITOWITOWINGT TOWITOWITOWING	LOW LOW LOW LOW LOW LOW LOW	WO 1 WO 1 WO 1 WO 1 WO 1 W WO 1 WO 1 WO		
O I WO I WO I WO I WO I	HF300	0 (*)		
TOW FOW FOW FOW FO	HF3012	12 to 15		
TOW FOW FOW FOW FO	HF3015	15 to 18		
20,20	HF3018	18 to 21		
30x30 NO WO WO	HF3021	21 to 24		
91 W0 1 W0 1 W0 1 W0 1	NOT WOT WOT WOT	WO LMO LMO LMO LMO LA		
TOW FOW FOW FOW F	NOT WOT WOT WOT	MITOMITOMITOMITOMITOM		
01 W01 W01 W01 W01	TOW FOW FOW FOR	WOTWOTWOTWOTWOTE		
TOW FOW FOW FOW FO	HF400	0 (*)		
LOW LOW LOW LOW LOW LO	HF4022	22 to 25		
40x40	HF4025	25 to 28		
TOW FOW FOW FOW FOR	HF4028	28 to 31		
TOW FOW FOW FOW F	HF4031	31 to 34		

(*)	modules	without	noie

Dimensions	Reference	Cable diameter
mm wo wo	I MO I WO I WO I WO I WO	(mm)
OFFICHTON FON TON FO ON FOW FOW FOW FO ON FOW FOW FOW FO	HF600	0 (*)
	HF6031	31 to 34
	HF6034	34 to 37
	HF6037	37 to 40
(0-(0) 100 100	HF6040	40 to 43
0000	HF6043	43 to 46
	HF6046	46 to 49
	HF6049	49 to 52
	HF6052	1 52 to 54 0 1 10 1
	TWO LOW COM LOW LOW COM TO WO	3 WG 1 WO 1 WO 1 WO 1 WO 1 Y
OW LOW LOW COM LOW L	HF900	0 (*)
	HF9053	53 to 56
	HF9056	56 to 59
1 WO LWO 1 WO 1 WO	HF9059	59 to 62
90x9001 wo1 wo	HF9062	62 to 65
	HF9065	65 to 68
	HF9068	68 to 71
OWLOWLOMEOWE	OM FOW FOW LOW FOW I	1 WC 1 WO 1 WO 1 WO 1 I
OM LOM LOM LOM L	HF1200 NO 1 NO	1 MC TOO(*)01 MOT MOT
	HF12072	72 to 75
	HF120750100	175 to 78
	HF12078	78 to 81
120v120	HF12081	81 to 84
120X120W0 W0	HF12084	84 to 87
	HF12087	87 to 90
	HF12090	90 to 93
	HF12093	93 to 96
	HF12096	96 to 100



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### (A1) SCHEDULE

(A2) EC-Type Examination Certificate: LOM 08ATEX3047U

(A3) Description of equipment or protective system (continue)

Types of frames

HC\*\* Rectangular frames with flange for rubber modules of 60 mm in dept

Variants: HCX standard

HCOX opened frame on one side

of tope conconton	Internal area/size OM ON	External dimensions
OM LOW LOW LOW LOW L	MIDMIONION COM MM ON COM COM COM	LOM LOM LOM MM LOM LOM LOM
HCX2	100x120 OM TOM LOW LOW LOW	220x240 OM OM
HCX40M LOM LO	м L M60x120 ом гом гом гом гом гом	LOM LOW L 280x240 / LOW LOW
HCX6	220x120	340x240
HCX8	280x120	400x240

HM\*\* Rectangular frames for rubber modules of 30 mm in depth

/ariants: HMX without flange HMFX with flange

HMXO without flange, opened frame on one side

HMEX without flange, with a protective collar on one side
HMBX without flange, with two protective collars on both sides

OW LOW LOW L	Internal	wtowtowtowtowtowtemal dimensions towtowtowtowtowtow				
Type	area size	DM LOW				
LOM LOM LOM L	MIOMmm IOMI	M LHMX LOW	□ HMXF	M HMXO W	HMEX	M HMBX ON
HM*2	100x120	120x140	220x240	120x140	140x160	140x160
HM*4	160x120	180x140	280x240	180x140	200x160	200x160
™HM*6™	220x120	240x140	340x240	<sup>™</sup> 240x140 <sup>™</sup>	280x160	280x160
HM*8	280x120	300x140	400x240	300x140	320x160	320x160

HRT Cylindrical rubber frame foreseen to be installed inside entry tubes of enclosures with flange (CB) and without flange (C)

Type Type	M LOW (Internal area size (ON LOW	External diameter	LOM LO Depthon LOM
TOW TOW TOW TOW TOW TO	mm on ton ton ton	mm mm	mm
HRT30 LOWE	MIONIONIONISX15MLONIONION	TOM COM LO32 OM LOM LON	FOW FOW 1991 FOW FOW
OM LOW HRT40 LOW LO	W LOW LOW LOW 20x20 W LOW LOW LOW	сом сом го40ом сом сом	TONTON 99 TONTON
HRT50	30x30	TOW LOW LOS OW LOW LOW	66
HRT70	MIOMIOMIOW40x40MIOMIOMIOM	IOM LOW LOTOOM LOW LOW	CONTON (69) TONTON
HRT100	WIONIOWIOW60x60WIOWIOWIOW	COM COM L(100)M LOW LOW	LOM 10М 69 ТОМ 10М
HRT150	90x90	150	69
ON LOHRT200 LOW LO	WLOWLOW 10120x120 LOWLOW LOW	TOW TOW E-200 M LOW LOW	TOW TOW 169 TOW TOW

(A4) Test report nr LOM 07.456 UP

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### (A1) SCHEDULE

(A2) EC-Type Examination Certificate: LOM 08ATEX3047U

#### (A5) Special conditions for safe use

- They may be used in fixed cable installations
- A cylindrical hole in the enclosure is needed for the installation of the types HRT, This hole should be of an appropriate size, both in diameter and length.

### (A6) Individual tests

None

### (A7) Essential Health and Safety Requirements

Explosion safe requirements are covered by application of the standards indicated in page 1/4 of this certificate.

#### (A8) Descriptive Documents

01W01W01W01W01W01W01		Rev.	Date Olwolno
- Technical description		OMICANI	2008-06-10
- Drawings nr.:	ATEX 101 WO 1 NO	A	2008-06-10
TOW FOW FOW FOW FOW FOW FO	MOT ATEX 201 MOT NO	MA MO	2008-06-10
	MO ATEX 3	A	2008-06-10
	ATEX 4	A	2008-06-10
	WOLVATEX 501 WOLWO	INAIWO	2008-06-10
	ATEX 6	A	2008-06-10
	WOT VATEX 701 WOT WO	MAT WO	2008-06-10
	ATEX 9.1	A	2008-06-10
	ATEX 9.2	A	2008-06-10
	MOT ATEX 10 MOT MO	MAINO	2008-06-10
	ATEX 11	A	2008-06-10

