

Type Approval Certificate (DRAFT)

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER Instrumentacion Industrial Zurc, S.A.

PLACE OF PRODUCTION C/Pujadas
77-79 7a Planta
08005 Barcelona
Spain

DRAFT

DESCRIPTION Power Transducer

TYPES CW-M CW-TE CW-TA CW-TAN
CY-M CY-TE CY-TA CY-TAN

APPLICATION Marine, offshore and industrial in environmental categories ENV1 and ENV2 as described in Lloyd's Register Test Specification No. 1: 1996.

SPECIFIED STANDARDS (To be confirmed – IEC 688)

TECHNICAL SPECIFICATION Class 0.5

Transducer	Input Range		Auxiliary Supply (a.c.)	Frequency	Configuration
	Voltage (V)	Current (A)			
CW-M	0 - 660	1 or 5	115/230/400	45/65 Hz	Single Phase
CW-TE	0 - 660	1 or 5	115/230/400	45/65 Hz	3 wire, Balanced
CW-TA	0 - 660	1 or 5	115/230/400	45/65 Hz	3 wire, Balanced
CW-TAN	0 - 660	1 or 5	115/230/400	45/65 Hz	4 wire, Unbalanced
CY-M	0 - 660	1 or 5	115/230/400	45/65 Hz	Single Phase
CY-TE	0 - 660	1 or 5	115/230/400	45/65 Hz	3 - phase, Balanced
CY-TA	0 - 660	1 or 5	115/230/400	45/65 Hz	4 wire, Unbalanced
CY-TAN	0 - 660	1 or 5	115/230/400	45/65 Hz	4 wire, Unbalanced

Certificate No. 03/00093

Issue Date 22 September 2003

Expiry Date 21 September 2008

Sheet 1 of 2

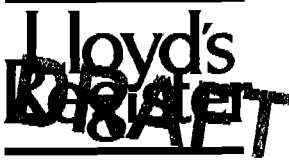
"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 03/00093 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Certificate No.	03/00093
Issue Date	22 September 2003
Expiry Date	21 September 2008
Sheet	2 of 2

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Lloyd's Register EMEA (London Office)
MARINE SUPPORT GROUP DESIGN APPRAISAL
 71 Fenchurch Street, London, EC3A 3BS
 Telephone 020 7709 9166 Fax 020 7488 4796
 Email tad@lr.org

Page	1 of 2
Document number	03/00093
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
22 September 2003	DAPP/MSG/ECE/TA/W00251780/MHR/O-

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.
Issued to: INSTRUMENTACION INDUSTRIAL ZURC, S.A.
for: POWER TRANSDUCER
Types: CW-M, CW-TE, CW-TA, CW-TAN, CY-M, CY-TE, CY-TA, CY-TAN
TYPE APPROVAL CERTIFICATE No. 03/00093 DRAFT

The undernoted documents have been reviewed for compliance with the requirements of the LR Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request form	Undated
LR Barcelona memo	28.05.2003
Lloyd's Register memo	16.09.2003

Data Sheets

Type CW-M	Undated
Type CW-TE	Undated
Type CW-TA	Undated
Type CW-TAN	Undated
Type CY-M	Undated
Type CY-TE	Undated
Type CY-TA	Undated
Type CY-TAN	Undated

Drawings

2 121 042 (Rev. h)	06.05.2002
Convertidor de potencia activa monofasico 313.000.339	24.04.2002
Convertidor de potencia activa monofasico 313.000.343	24.04.2002
Convertidor de potencia activa monofasico 313.000.337	24.04.2002
Convertidor de potencia activa monofasico 313.000.339	23.04.2002
Convertidor de potencia activa monofasico 313.000.343	23.04.2002
Convertidor de potencia activa monofasico 313.000.337	23.04.2002
Convertidor de potencia activa trifasico 3 hilos 313.000.339	24.04.2002
Convertidor de potencia activa trifasico 3 hilos 313.000.337	24.04.2002
Salida analog. convert. potencia 313.000.343	23.04.2002
Convertidor de potencia active trifas. desequil. 4 313.000.339	24.04.2002
Convertidor de potencia active trifas. desequil. 4 313.000.337	24.04.2002
Convertidor de potencia reactiva monofasico 313.000.339	23.04.2002
Convertidor de potencia reactiva monofasico 313.000.337	23.04.2002
Convertidor de potencia reactiva trifasico 3 hilos (Aron) 313.000.339	24.04.2002
Salida analog. convert. potencia 313.000.343	24.04.2002

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Page	2 of 2
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Drawings (cont.)

Convertidor de potencia reactiva trifasico 3 hilos (Aron) 313.000.337	24.04.2002
Convertidor de potencia reactiva trifas. disequil. 4 313.000.339	23.04.2002
Convertidor de potencia reactiva trifas. disequil. 4 313.000.351	23.04.2002

TEST REPORTS

LGAI No. 22029944	28.05.2003
LGAI No. 22.030.044	14.11.2002
LGAI No. 22027159	29.11.2002
DEKRA-ITS Certificate No. 20200142/2-2	18.12.2001

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

M. A. RUFAIE
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Electrical and Control Engineering / Type Approval
Marine Support Group / Lloyd's Register EMEA (London)
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Part 2
Measuring Instruments and CT's (Part 2)

Producer / Licence No.	Type	Standard	Class	Supply	Range	Category/ Additional Tests	Remarks	Cert. No.
Instrumentacion Industrial Zurc, S.A., C/Pujadas, 77-79 7a Planta, 08005 Barcelona, Spain.	Power Transducers	(Awaiting Test Reports for compliance with IEC 688)		Auxiliary		ENV1 ENV2 (1996)	Expires:	03/00993 DRAFT
	CW-M		0.5	115/230/400 a.c.	0 - 660 V			
	CW-TA		0.5	115/230/400 a.c.	0 - 660 V			
	CW-TE		0.5	115/230/400 a.c.	0 - 660 V			
	CW-TAN		0.5	115/230/400 a.c.	0 - 660 V			
	CY-M		0.5	115/230/400 a.c.	0 - 660 V			
	CY-TE		0.5	115/230/400 a.c.	0 - 660 V			
	CY-TA		0.5	115/230/400 a.c.	0 - 660 V			
CY-TAN			0.5	115/230/400 a.c.	0 - 660 V			

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