

Type Approval Certificate

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

Praxis Automation Technology B.V.
Willem Barentszstraat 1,
2315 TZ Leiden
THE NETHERLANDS

DESCRIPTION

Integrated Alarm, Monitoring and Control System

TYPE

G-DATA, MAXI/MEGA - GUARD, consisting of:

1. OWS - Operator Work Station for Control and Graphic presentation of the following typical processes:

- Alarm and Monitoring
- Electrical Power Management
- Main Engine Valve Control
- PID Control

The OWS comprises the following components:

- Model 6001 Marine Personal Computer, inclusive 19" TFT colour Graphic screen
- Redundant network interface
- Operator Keyboard
- Trackerball
- Local Operator Panel
- Duty Select Panel
- 8 Channel LED
- Patrol Alarm Panel

Certificate No.	04/30009
Issue Date	31 December 2004
Expiry Date	30 December 2009
Sheet	1 of 3

Lloyd's Register EMEA
P.O. Box 701, 3000 AS Rotterdam

W.J. Dijke
Type Approval Department
Lloyd's Register EMEA/Rotterdam Office

2. PCU - Process Control Units for processing of inputs, outputs, alarms and control loops, consisting of:
 - Model 6004, Analogue Input board executed as 19" rack model
 - Model 6005, Digital Input/output board executed as 19" rack model.
 - Model 6018, 8 Input, 8 Output, * Pulse Input and * Relay output board executed as 19" rack model.
 - Model 6030, Digital input/output executed as 19" rack model or Din rail model.
 - Model 6032, Digital Input unit executed as 19" rack model or Din rail model.
 - Model 6033, Mixed input/output module executed as 19" rack model.
 - Model 6034 Mixed input/output model executed as 19" rack model or Din rail model or as Engine Mounted model (EM).
 - Model 6049, Local Processor board with redundant network interface executed as Din rail model.

3. PCS - Propulsion Control System consisting of:
 - All models mentioned under PCU
 - Bridge/Control Room control Lever and Telegraph Panel
 - Safety Panel
 - Bridge/Engine Room Telegraph Panel
 - Safety Panel
 - Electronic Drive Unit
 - Electronic Actuator
 - Display and Operator Panel

4. PMS - Power Management System consisting of:
 - All models mentioned under PCU
 - Synchronisation and Short circuit Din module
 - Display and Operating module

Certificate No. 04/30009

Issue Date 31 December 2004

Expiry Date 30 December 2009

Sheet 2 of 3

Lloyd's Register EMEA
P.O. Box 701, 3000 AS Rotterdam

W.J. Dijke
Type Approval Department
Lloyd's Register EMEA/Rotterdam Office

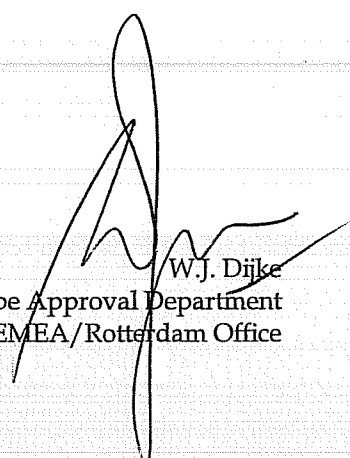
APPLICATION	Marine and Offshore application for use in environmental categories ENV 1, ENV 2, ENV 3 and ENV 4 for Model 6034 EM only as defined in Lloyd's Register Type Approval Scheme, Test Specification Number 1, 2002
STANDARD	Manufacturer's Specification
RATINGS	Nominal Power Supply at 24 - 48 V dc input DC/DC converter

"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. ROT.TA.0490330 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	04/30009
Issue Date	31 December 2004
Expiry Date	30 December 2009
Sheet	3 of 3

Lloyd's Register EMEA
P.O. Box 701, 3000 AS Rotterdam


W.J. Dijke
Type Approval Department
Lloyd's Register EMEA/Rotterdam Office