

**THE NETHERLANDS
(N E D E R L A N D)****COMMUNICATION**

Concerning ⁽¹⁾:

- ~~approval granted~~
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitively discontinued~~

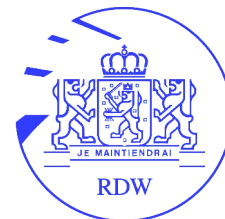
of a type of CNG/LNG component pursuant to Regulation number 110.


Approval number: E4-110R-010396

Extension number: 02

1. CNG/LNG component considered:

- ~~Container(s) or cylinder(s)~~⁽⁺⁾
- ~~Tank(s) or vessel(s)~~⁽⁺⁾
- ~~Pressure indicator~~⁽⁺⁾
- ~~Pressure relief valve~~⁽⁺⁾
- ~~Automatic valve(s)~~⁽⁺⁾
- ~~Excess flow valve~~⁽⁺⁾
- ~~Gas tight housing~~⁽⁺⁾
- ~~Pressure regulator(s)~~⁽⁺⁾
- ~~Non return valve(s) or check valve(s)~~⁽⁺⁾
- ~~Pressure relief device (PRD)(temperature triggered)~~⁽⁺⁾
- ~~Manual valve~~⁽⁺⁾
- ~~Flexible fuel lines~~⁽⁺⁾
- ~~Filling unit or receptacle~~⁽⁺⁾
- ~~Gas injector(s)~~⁽⁺⁾
- ~~Gas flow adjuster~~⁽⁺⁾
- ~~Gas/air mixer~~⁽⁺⁾
- ~~Electronic control unit~~⁽⁺⁾
- ~~Pressure and temperature sensor(s)~~⁽⁺⁾
- ~~CNG filter(s)~~⁽⁺⁾
- ~~PRD (pressure triggered)~~⁽⁺⁾
- ~~Fuel rail~~⁽⁺⁾
- ~~Heat exchanger(s)/vaporizer(s)~~⁽⁺⁾
- ~~Natural gas detector(s)~~⁽⁺⁾



- LNG filling receptacle(s)^(†)
 - LNG pressure control regulator(s)⁽¹⁾
 - LNG pressure and/or temperature sensor(s)^(†)
 - LNG manual valve(s)^(†)
 - LNG automatic valve(s)^(†)
 - LNG non return valve(s)^(†)
 - LNG pressure relief valve(s)^(†)
 - LNG excess flow valve(s)^(†)
 - LNG fuel pump(s)^(†)
 -
2. Trade name or mark : Engineered Controls International
Economizer ECL/ECR series
- Brand names: RegO Products
Macro Technologies
3. Manufacturer's name and address : Engineered Controls International, LLC
100 RegO Drive
NC 27244, Elon
United States of America
4. If applicable, name and address of manufacturer's representative :
5. Submitted for approval on : September 2016
6. Technical service responsible for conducting approval tests : Kiwa Nederland B.V.
P.O. Box 137
7300 AC Apeldoorn
The Netherlands
7. Date of report issued by that service : October 12th 2016
8. Number of report issued by that service : 150201360_160800572
9. Approval : ~~granted/refused/extended/withdrawn~~⁽¹⁾
10. Reason(s) of extension (if applicable) : The body material of the LNG ECL/ECR series has been changed from B16 UNSC36000 rod to UNS C37700 forging.
There are no dimensional or internal machining changes.
11. Place : Zoetermeer
12. Date : 27-OCT-2016
13. Signature :
- 
Ing A.M. Boekestein
14. The documents filed with the application or extension of approval can be obtained upon request.

⁽¹⁾ Strike out what does not apply.

ADDENDUM

1. Additional information concerning the type approval of a type of CNG/LNG components pursuant to Regulation number 110.
 - 1.1. Natural Gas Storage System
 - 1.1.1. Container(s) or cylinder(s) (for CNG system)
 - 1.1.1.1. Dimensions :
 - 1.1.1.2. Material :
 - 1.1.2. Tank(s) or vessel(s) (for LNG system)
 - 1.1.1.1. Capacity :
 - 1.1.1.2. Material :
 - 1.2. Pressure indicator
 - 1.2.1. Working pressure(s) ⁽²⁾ :
 - 1.2.2. Material :
 - 1.3. Pressure relief valve (discharge valve)
 - 1.3.1. Working pressure(s) ⁽²⁾ :
 - 1.3.2. Material :
 - 1.4. Automatic valve(s)
 - 1.4.1. Working pressure(s) ⁽²⁾ :
 - 1.4.2. Material :
 - 1.5. Excess flow valve
 - 1.5.1. Working pressure(s) ⁽²⁾ :
 - 1.5.2. Material :
 - 1.6. Gas-tight housing
 - 1.6.1. Working pressure(s) ⁽²⁾ :
 - 1.6.2. Material :
 - 1.7. Pressure regulator(s)
 - 1.7.1. Working pressure(s) ⁽²⁾ :
 - 1.7.2. Material :
 - 1.8. Non-return valve(s) or check valve(s)
 - 1.8.1. Working pressure(s) ⁽²⁾ :
 - 1.8.2. Material :
 - 1.9. Pressure relief device (temperature triggered)
 - 1.9.1. Working pressure(s) ⁽²⁾ :
 - 1.9.2. Material :
 - 1.10. Manual valve
 - 1.10.1. Working pressure(s) ⁽²⁾ :
 - 1.10.2. Material :
 - 1.11. Flexible fuel lines
 - 1.11.1. Working pressure(s) ⁽²⁾ :
 - 1.11.2. Material :



1.12.	Filling unit or receptacle	
1.12.1.	Working pressure(s) ⁽²⁾	:
1.12.2.	Material	:
1.13.	Gas injector(s)	
1.13.1.	Working pressure(s) ⁽²⁾	:
1.13.2.	Material	:
1.14.	Gas flow adjuster	
1.14.1.	Working pressure(s) ⁽²⁾	:
1.14.2.	Material	:
1.15.	Gas/air mixer	
1.15.1.	Working pressure(s) ⁽²⁾	:
1.15.2.	Material	:
1.16.	Electronic control unit	
1.16.1.	Basic software principles	:
1.17.	Pressure and temperature sensor(s)	
1.17.1.	Working pressure(s) ⁽²⁾	:
1.17.2.	Material	:
1.18.	CNG filter(s)	
1.18.1.	Working pressure(s) ⁽²⁾	:
1.18.2.	Material	:
1.19.	PRD (pressure triggered)	
1.19.1.	Working pressure(s) ⁽²⁾	:
1.19.2.	Material	:
1.20.	Fuel rail(s)	
1.20.1.	Working pressure(s) ⁽²⁾	:
1.20.2.	Material	:
1.21.	Heat Exchanger(s)/Vaporizer(s)	
1.21.1.	Working pressure(s) ⁽²⁾	:
1.21.2.	Material	:
1.22.	Natural gas detector(s)	
1.22.1.	Working pressure(s) ⁽²⁾	:
1.22.2.	Material	:
1.23.	LNG filling receptacle(s)	
1.23.1.	Working pressure(s) ⁽²⁾	:
1.23.2.	Material	:
1.24.	LNG pressure control regulator(s)	
1.24.1.	Working pressure(s) ⁽²⁾	: ECL and ECR series up to 3.8 MPa ECL 502B series up to 1.6 MPa
1.24.2.	Material	: See report 160800572
1.25.	LNG pressure and/or temperature sensor(s)	
1.25.1.	Working pressure(s) ⁽²⁾	:
1.25.2.	Material	:



- 1.26. LNG manual valve(s)
- 1.26.1. Working pressure(s)⁽²⁾ :
- 1.26.2. Material :

- 1.27. LNG automatic valve(s)
- 1.27.1. Working pressure(s)⁽²⁾ :
- 1.27.2. Material :

- 1.28. LNG non-return valve(s)
- 1.28.1. Working pressure(s)⁽²⁾ :
- 1.28.2. Material :

- 1.29. LNG pressure relief valve(s)
- 1.29.1. Working pressure(s)⁽²⁾ :
- 1.29.2. Material :

- 1.30. LNG excess flow valve(s)
- 1.30.1. Working pressure(s)⁽²⁾ :
- 1.30.2. Material :

- 1.31. LNG fuel pump(s)
- 1.31.1. Working pressure(s)⁽²⁾ :
- 1.31.2. Material :

⁽²⁾ Specify the tolerance

