

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



**COMMUNICATION**

Concerning <sup>(1)</sup>:

- ~~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- ~~approval withdrawn~~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\*110R02/00\*0396\*04**

1. CNG/LNG component considered:

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



- LNG filling receptacle(s)<sup>(+)</sup>
- LNG pressure control regulator(s)<sup>(1)</sup>
- LNG pressure and/or temperature sensor(s)<sup>(+)</sup>
- LNG manual valve(s)<sup>(+)</sup>
- LNG automatic valve(s)<sup>(+)</sup>
- LNG non return valve(s)<sup>(+)</sup>
- LNG pressure relief valve(s)<sup>(+)</sup>
- LNG excess flow valve(s)<sup>(+)</sup>
- LNG fuel pump(s)<sup>(+)</sup>
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2. Trade name or mark : Economizer ECL/ECR series  
Brand names: RegO Products  
Macro Technologies
3. Manufacturer's name and address : Engineered Controls International LLC  
100 RegO Drive 27244  
Elon, North Carolina  
United States of America
4. If applicable, name and address of manufacturer's representative :
5. Submitted for approval on : March 2015
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 25<sup>th</sup> 2018
8. Number of report issued by that service : 150201360\_180800424
9. Approval : ~~granted/refused/extended/withdrawn~~<sup>(1)</sup>
10. Reason(s) of extension (if applicable) : The currently homologated LNG Economizer ECL/ECR series is updated with model ECL502-xxxNX  
The new Gylon 3505 gasket is replacing the old Teflon liner for the whole ECL series.
11. Place : Zoetermeer
12. Date : 12-NOV-2018
13. Signature :   
R.F.R. Clement
14. The documents filed with the application or extension of approval can be obtained upon request.

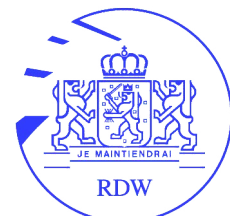
<sup>(1)</sup> Strike out what does not apply.

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)
      - 1.1.2.1. Capacity :
      - 1.1.2.2. Material :
  - 1.2. Pressure indicator
    - 1.2.1. Working pressure(s) <sup>(2)</sup> :
    - 1.2.2. Material :
  - 1.3. Pressure relief valve (discharge valve)
    - 1.3.1. Working pressure(s) <sup>(2)</sup> :
    - 1.3.2. Material :
  - 1.4. Automatic valve(s)
    - 1.4.1. Working pressure(s) <sup>(2)</sup> :
    - 1.4.2. Material :
  - 1.5. Excess flow valve
    - 1.5.1. Working pressure(s) <sup>(2)</sup> :
    - 1.5.2. Material :
  - 1.6. Gas-tight housing
    - 1.6.1. Working pressure(s) <sup>(2)</sup> :
    - 1.6.2. Material :
  - 1.7. Pressure regulator(s)
    - 1.7.1. Working pressure(s) <sup>(2)</sup> :
    - 1.7.2. Material :
  - 1.8. Non-return valve(s) or check valve(s)
    - 1.8.1. Working pressure(s) <sup>(2)</sup> :
    - 1.8.2. Material :
  - 1.9. Pressure relief device (temperature triggered)
    - 1.9.1. Working pressure(s) <sup>(2)</sup> :
    - 1.9.2. Material :
  - 1.10. Manual valve
    - 1.10.1. Working pressure(s) <sup>(2)</sup> :
    - 1.10.2. Material :
  - 1.11. Flexible fuel lines
    - 1.11.1. Working pressure(s) <sup>(2)</sup> :
    - 1.11.2. Material :



- 1.12. Filling unit or receptacle
  - 1.12.1. Working pressure(s) <sup>(2)</sup> :
  - 1.12.2. Material :
  
- 1.13. Gas injector(s)
  - 1.13.1. Working pressure(s) <sup>(2)</sup> :
  - 1.13.2. Material :
  
- 1.14. Gas flow adjuster
  - 1.14.1. Working pressure(s) <sup>(2)</sup> :
  - 1.14.2. Material :
  
- 1.15. Gas/air mixer
  - 1.15.1. Working pressure(s) <sup>(2)</sup> :
  - 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) <sup>(2)</sup> :
  - 1.17.2. Material :
  
- 1.18. CNG filter(s)
  - 1.18.1. Working pressure(s) <sup>(2)</sup> :
  - 1.18.2. Material :
  
- 1.19. PRD (pressure triggered)
  - 1.19.1. Working pressure(s) <sup>(2)</sup> :
  - 1.19.2. Material :
  
- 1.20. Fuel rail(s)
  - 1.20.1. Working pressure(s) <sup>(2)</sup> :
  - 1.20.2. Material :
  
- 1.21. Heat Exchanger(s)/Vaporizer(s)
  - 1.21.1. Working pressure(s) <sup>(2)</sup> :
  - 1.21.2. Material :
  
- 1.22. Natural gas detector(s)
  - 1.22.1. Working pressure(s) <sup>(2)</sup> :
  - 1.22.2. Material :
  
- 1.23. LNG filling receptacle(s)
  - 1.23.1. Working pressure(s) <sup>(2)</sup> :
  - 1.23.2. Material :
  
- 1.24. LNG pressure control regulator(s)
  - 1.24.1. Working pressure(s) <sup>(2)</sup> : ECL and ECR series up to 3.8 MPa  
ECL 502 series up to 1.6 MPa
  - 1.24.2. Material : See report 150201360\_180800424
  
- 1.25. LNG pressure and/or temperature sensor(s)
  - 1.25.1. Working pressure(s) <sup>(2)</sup> :
  - 1.25.2. Material :



- 1.26. LNG manual valve(s)
- 1.26.1. Working pressure(s) <sup>(2)</sup> :
- 1.26.2. Material :
  
- 1.27. LNG automatic valve(s)
- 1.27.1. Working pressure(s) <sup>(2)</sup> :
- 1.27.2. Material :
  
- 1.28. LNG non-return valve(s)
- 1.28.1. Working pressure(s) <sup>(2)</sup> :
- 1.28.2. Material :
  
- 1.29. LNG pressure relief valve(s)
- 1.29.1. Working pressure(s) <sup>(2)</sup> :
- 1.29.2. Material :
  
- 1.30. LNG excess flow valve(s)
- 1.30.1. Working pressure(s) <sup>(2)</sup> :
- 1.30.2. Material :
  
- 1.31. LNG fuel pump(s)
- 1.31.1. Working pressure(s) <sup>(2)</sup> :
- 1.31.2. Material :

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<sup>(2)</sup> Specify the tolerance

