



**NSAI**  
Standards

Irish Standard  
I.S. EN 16297-2:2012

# Pumps - Rotodynamic pumps - Glandless circulators - Part 2: Calculation of energy efficiency index (EEI) for standalone circulators

## I.S. EN 16297-2:2012

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English Version

**Pumps - Rotodynamic pumps - Glandless circulators - Part 2:  
Calculation of energy efficiency index (EEI) for standalone  
circulators**

Pompes - Pompes rotodynamiques - Circulateurs sans  
presse-étoupe - Partie 2: Calcul de l'indice d'efficacité  
énergétique (EEI) pour les circulateurs indépendants

Pumpen - Kreiselpumpen - Umwälzpumpen in  
Nassläuferbauart - Teil 2: Berechnung des  
Energieeffizienzindex (EEI) von externen  
Umwälzpumpen

This European Standard was approved by CEN on 18 August 2012.

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## Foreword

This document (EN 16297-2:2012) has been prepared by Technical Committee CEN/TC 197 “Pumps”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document, together with EN 16297-1:2012, supersedes EN 1151-1:2006.

EN 16297 consists of the following parts under the general title *Pumps — Rotodynamic pumps — Glandless circulators*:

- Part 1: General requirements and procedures for testing and calculation of energy efficiency index (EEI);
- Part 2: Calculation of energy efficiency index (EEI) for standalone circulators;
- Part 3: Energy efficiency index (EEI) for circulators integrated in products.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

The European Standard has been prepared under mandate M/469 EN of 22 June 2010 given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Requirements of the EU Directive 2005/32/EC of 6 July 2005 and Commission Regulation (EC) 641/2009 of 22 July 2009 by describing procedures for measurement and calculation of hydraulic power, power consumption, and energy efficiency index of circulators.

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