

ISO 8933-1:2024-11 (E)

Ships and marine technology - Energy efficiency - Part 1: Energy efficiency of individual maritime components

| Contents | | Page |
|--------------------|--|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Symbols and abbreviated terms | 2 |
| 5 | Method to evaluate the energy efficiency of individual maritime components | 2 |
| 5.1 | General | 2 |
| 5.2 | Measuring conditions | 3 |
| 6 | Pumps | 3 |
| 6.1 | General | 3 |
| 6.2 | Definition of input and output | 3 |
| 6.3 | Definitions of boundaries and media | 4 |
| 6.4 | Calculation method | 4 |
| 6.5 | Measuring method | 5 |
| 7 | Fans | 6 |
| 7.1 | General | 6 |
| 7.2 | Definition of input and output | 6 |
| 7.3 | Definitions of boundaries and media | 7 |
| 7.4 | Calculation method | 7 |
| 7.5 | Measuring method | 8 |
| 8 | Mechanical power transmission | 9 |
| 8.1 | Gearboxes | 9 |
| 8.1.1 | General | 9 |
| 8.1.2 | Definition of input and output | 10 |
| 8.1.3 | Definitions of boundaries and media | 10 |
| 8.1.4 | Calculation method | 10 |
| 8.1.5 | Measuring method | 13 |
| 9 | Heat exchanging | 15 |
| 9.1 | General | 15 |
| 9.2 | Definition of input and output | 16 |
| 9.3 | Definitions of boundaries and media | 16 |
| 9.4 | Calculation method | 17 |
| 9.4.1 | General | 17 |
| 9.4.2 | Electrical heaters | 17 |
| 9.5 | Measuring method | 19 |
| 10 | Centrifuges | 20 |
| 10.1 | General | 20 |
| 10.2 | Definition of input and output | 20 |
| 10.3 | Definitions of boundaries and media | 20 |

| | | |
|-------------|---------------------------------|-----------|
| 10.4 | Calculation method | 21 |
| 10.5 | Measuring method | 21 |
| | Bibliography | 23 |