

DETAILED PRODUCT DESCRIPTION:

Brushless A.C. generators, 3 phases, 4 poles, single or double bearings.

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|--------------------------|-------------------------------|
| Enclosure class: | IP 23 or IP 45 |
| Winding insulation: | Class H |
| Temperature rise limits: | Class B, F or H |
| Voltage class: | Up to 690 V (star connection) |
| Power class: | Up to 864 kVA |
| Frequency class: | 50 or 60 Hz |
| Speed: | 1500 or 1800 RPM |

| Rating class H: (kVA) Amb 45°C | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Type | 50 Hz | | | 60 Hz | | | | |
| | 380 V | 400 V | 415 V | 440 V | 450 V | 460 V | 480 V | 690 V |
| ECP32-1S4C | 36 | 36 | 36 | 41,3 | 42,3 | 43,2 | 43,2 | 43,2 |
| ECP32-2S4C | 43,2 | 43,2 | 40,3 | 48 | 49,9 | 51,8 | 51,8 | 51,8 |
| ECP32-1M4C | 48 | 48 | 48 | 57,6 | 57,6 | 57,6 | 57,6 | 57,6 |
| ECP32-2M4C | 60 | 60 | 60 | 69,6 | 70,8 | 72 | 72 | 72 |
| ECP32-1L4C | 72 | 72 | 72 | 78,7 | 82,6 | 86,4 | 86,4 | 86,4 |
| ECP32-2L4C | 79,2 | 79,2 | 79,2 | 92,2 | 94,1 | 96 | 96 | 96 |

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|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| ECP34-1S4C | 84 | 84 | 84 | 101 | 101 | 101 | 101 | 101 |
| ECP34-2S4C | 96 | 96 | 96 | 115 | 115 | 115 | 115 | 115 |
| ECP34-1M4C | 120 | 120 | 120 | 134 | 134 | 144 | 144 | 144 |
| ECP34-2M4C | 130 | 130 | 130 | 144 | 150 | 156 | 156 | 156 |
| ECP34-1L4C | 144 | 144 | 144 | 163 | 168 | 173 | 173 | 173 |
| ECP34-2L4C | 154 | 158 | 158 | 183 | 187 | 190 | 190 | 190 |

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|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| ECO38-1S4C | 173 | 173 | 173 | 211 | 211 | 211 | 211 | 211 |
| ECO38-2S4C | 192 | 192 | 192 | 230 | 230 | 230 | 230 | 230 |
| ECO38-1M4C | 216 | 216 | 216 | 259 | 259 | 259 | 259 | 259 |
| ECO38-2M4C | 240 | 240 | 230 | 288 | 288 | 288 | 288 | 288 |
| ECO38-1L4C | 288 | 288 | 288 | 326 | 336 | 346 | 346 | 346 |
| ECO38-2L4C | 336 | 336 | 336 | 403 | 403 | 403 | 403 | 403 |

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|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| ECO40-1S4C | 384 | 384 | 384 | 432 | 446 | 461 | 461 | 461 |
| ECO40-2S4C | 432 | 432 | 432 | 490 | 504 | 518 | 518 | 518 |
| ECO40-3S4C | 480 | 480 | 480 | 557 | 566 | 576 | 576 | 576 |
| ECO40-1L4C | 528 | 528 | 528 | 605 | 619 | 634 | 634 | 634 |
| ECO40-2L4C | 600 | 600 | 600 | 677 | 699 | 720 | 720 | 720 |
| ECO40-3L4C | 653 | 653 | 653 | 749 | 766 | 783 | 783 | 783 |
| ECO40-VL4C | 720 | 720 | 720 | 864 | 864 | 864 | 864 | 864 |

| Rating class F: (kVA) Amb 45°C | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Type | 50 Hz | | | 60 Hz | | | | |
| | 380 V | 400 V | 415 V | 440 V | 450 V | 460 V | 480 V | 690 V |
| ECP32-1S4C | 33,6 | 33,6 | 33,6 | 39,4 | 40,4 | 41,3 | 41,3 | 41,3 |
| ECP32-2S4C | 39,4 | 39,6 | 37,4 | 46,1 | 48,0 | 49,9 | 49,9 | 49,9 |
| ECP32-1M4C | 46,1 | 46,1 | 46,1 | 55,7 | 55,7 | 55,7 | 55,7 | 55,7 |
| ECP32-2M4C | 57,1 | 57,1 | 57,1 | 67,2 | 67,9 | 68,6 | 68,6 | 68,6 |
| ECP32-1L4C | 64,3 | 64,3 | 64,3 | 76,8 | 78,3 | 79,7 | 79,7 | 79,7 |
| ECP32-2L4C | 70,3 | 70,3 | 70,3 | 85,4 | 86,9 | 88,3 | 88,3 | 88,3 |

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|------------|------|------|------|------|------|------|------|------|
| ECP34-1S4C | 75,8 | 75,8 | 75,8 | 91,2 | 91,2 | 91,2 | 91,2 | 91,2 |
| ECP34-2S4C | 86,4 | 86,4 | 86,4 | 105 | 105 | 105 | 105 | 105 |
| ECP34-1M4C | 108 | 108 | 108 | 120 | 125 | 130 | 130 | 130 |
| ECP34-2M4C | 116 | 116 | 116 | 130 | 135 | 140 | 140 | 140 |
| ECP34-1L4C | 131 | 131 | 131 | 144 | 150 | 156 | 156 | 156 |
| ECP34-2L4C | 138 | 143 | 143 | 158 | 165 | 171 | 171 | 171 |

| Rating class F: (kVA) Amb 45°C | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Type | 50 Hz | | | 60 Hz | | | | |
| | 380 V | 400 V | 415 V | 440 V | 450 V | 460 V | 480 V | 690 V |
| ECO38-1S4C | 163 | 163 | 163 | 197 | 197 | 197 | 197 | 197 |
| ECO38-2S4C | 178 | 178 | 178 | 211 | 211 | 211 | 211 | 211 |
| ECO38-1M4C | 199 | 199 | 199 | 240 | 240 | 240 | 240 | 240 |
| ECO38-2M4C | 221 | 221 | 221 | 269 | 269 | 269 | 269 | 269 |
| ECO38-1L4C | 264 | 264 | 264 | 298 | 307 | 317 | 317 | 317 |
| ECO38-2L4C | 307 | 307 | 307 | 370 | 370 | 370 | 370 | 370 |

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|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| ECO40-1S4C | 355 | 355 | 355 | 394 | 408 | 422 | 422 | 422 |
| ECO40-2S4C | 394 | 394 | 394 | 442 | 456 | 470 | 470 | 470 |
| ECO40-3S4C | 432 | 432 | 432 | 499 | 509 | 518 | 518 | 518 |
| ECO40-1L4C | 480 | 480 | 470 | 547 | 562 | 576 | 576 | 576 |
| ECO40-2L4C | 541 | 541 | 541 | 611 | 631 | 650 | 650 | 650 |
| ECO40-3L4C | 605 | 605 | 605 | 691 | 709 | 726 | 726 | 726 |
| ECO40-VL4C | 662 | 662 | 662 | 797 | 797 | 797 | 797 | 797 |

For class B rating temperature rises, multiply class H rating by 0,792.

For degree of protection IP45 (fitting an air inlet filter and air outlet filter), multiply class H rating by 0,74.

For 50°C ambient temperature, multiply class H rating (or class F, or class B) by 0,97.

APPLICATION / LIMITATIONS:

Generator is intended for ship's use according to CRS Rules for the Classification of Ships.

TYPE APPROVAL DOCUMENTATION:

Drawings:

ECP32C

- MD35 coupling overall dimensions, B0764, rev.03
- B3B14 coupling overall dimensions, B0765, rev.03
- Shaft MD35_B0670_03
- Shaft B3B14, B0671, rev.03
- Technical Guide for ECP32C, rev.04

ECP34C

- MD35 coupling overall dimensions, B0931, rev.04
- B3B14 coupling overall dimensions, B0940, rev.04
- Shaft MD35, B0800, rev.03
- Shaft B3B14, B0886, rev.02
- Technical Guide for ECP34C, rev.04

ECO38C

- MD35 coupling overall dimensions, B1700, rev.01
- B3B14 coupling overall dimensions, B1702, rev.01
- Shaft MD35, B1451, rev.01
- Shaft B3B14, B1452, rev.02
- Technical Guide for ECO38C, rev.00

Test Reports:

- Test Report No. 16500201, dated 22/04/2021.
- Test Report No. 16500205, dated 29/04/2021.
- Test Report No. 15600201, dated 19/07/2021.
- Test Report No. 15600206, dated 02/08/2021.

ECO40

- Overall dimensions - MD35 coupling, D00045, rev.00
- Overall dimensions - B3B14 coupling, D00047, rev.00
- Shaft MD35_S type, A9446, rev.02
- Shaft B3B14_S type, A9449, rev.02
- Shaft MD35_L type, A9447_03
- Shaft MD35_VL type, A9448_02
- Shaft B3B14_VL type, A9448_02
- Technical Guide for ECO40C, rev.00

- Test Report No. 17100201, dated 07/05/2021.
- Test Report No. 17100206, dated 25/05/2021.
- Test Report No. 19200207, dated 26/11/2021.

MARKING OF PRODUCT:

The following information are to be marked on the rating plate: manufacturer's name, product type, serial number, year of manufacture, number of phases, rated power, rated current, rated voltage, rated frequency, degree of protection, thermal class and maximum ambient temperature.

CONDITIONS FOR CERTIFICATION:

Society reserves the right to require check test at maker facility at any time.

Maker is responsible to inform purchaser on proper methods of use and generators maintenance.