

Enertronica Santerno Iris Blue frequency inverter
Product information acc. to REGULATION (EU) 2019/1781 (ANNEX I, Section 4)

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| Product's model identifier | Power losses | | | | | | | | | Efficiency level | Apparent output power - IEC 61800-9-2 S _{r,eq} kVA | Indicative motor rated power output kW | Rated output current A | Maximum operating temperature °C | Rated supply voltage V | Rated supply frequency Hz | Switching frequency kHz | Rated apparent output power kVA |
|----------------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|------------------|---|---|---------------------------|-------------------------------------|---------------------------|------------------------------|----------------------------|------------------------------------|
| | f, I (90%, 100%) | f, I (100%, 50%) | f, I (50%, 100%) | f, I (50%, 50%) | f, I (50%, 25%) | f, I (0%, 100%) | f, I (0%, 50%) | f, I (0%, 25%) | Standby losses | | | | | | | | | |
| | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | | | | | | | | | |
| S05 0007 2T | 3.2 | 1.8 | 2.8 | 1.6 | 1.2 | 2.6 | 1.6 | 1.2 | 0.4 | IE2 | 5.85 | 3 | 12.5 | 50 | 230 | 50 | 5 | 5.0 |
| S05 0008 2T | 2.8 | 1.6 | 2.5 | 1.4 | 1.0 | 2.3 | 1.4 | 1.0 | 0.3 | IE2 | 7.94 | 3.7 | 15 | 50 | 230 | 50 | 5 | 6.0 |
| S05 0010 2T | 3.2 | 1.8 | 2.8 | 1.5 | 1.1 | 2.6 | 1.5 | 1.1 | 0.3 | IE2 | 7.94 | 4 | 17 | 50 | 230 | 50 | 5 | 6.8 |
| S05 0013 2T | 2.9 | 1.6 | 2.5 | 1.4 | 1.0 | 2.3 | 1.4 | 1.0 | 0.3 | IE2 | 7.94 | 4.5 | 19 | 50 | 230 | 50 | 5 | 7.6 |
| S05 0015 2T | 2.5 | 1.4 | 2.2 | 1.2 | 0.9 | 2.0 | 1.2 | 0.9 | 0.2 | IE2 | 9.95 | 5.5 | 23 | 50 | 230 | 50 | 5 | 9.2 |
| S05 0016 2T | 2.7 | 1.4 | 2.3 | 1.3 | 0.9 | 2.2 | 1.3 | 0.9 | 0.2 | IE2 | 14.4 | 7.5 | 27 | 45 | 230 | 50 | 3 | 10.8 |
| S05 0020 2T | 2.7 | 1.4 | 2.3 | 1.2 | 0.9 | 2.1 | 1.2 | 0.9 | 0.2 | IE2 | 14.4 | 9.2 | 30 | 40 | 230 | 50 | 3 | 12.0 |
| S12 0023 2T | 2.6 | 1.4 | 2.2 | 1.2 | 0.8 | 2.1 | 1.2 | 0.8 | 0.1 | IE2 | 19.5 | 11 | 38 | 50 | 230 | 50 | 3 | 15.1 |
| S12 0033 2T | 2.5 | 1.3 | 2.1 | 1.1 | 0.8 | 2.0 | 1.1 | 0.8 | 0.1 | IE2 | 23.9 | 15 | 51 | 45 | 230 | 50 | 3 | 20.3 |
| S12 0037 2T | 2.2 | 1.1 | 1.9 | 1.0 | 0.7 | 1.7 | 1.0 | 0.7 | 0.1 | IE2 | 28.3 | 15 | 65 | 40 | 230 | 50 | 3 | 25.9 |
| S15 0040 2T | 2.9 | 1.6 | 2.5 | 1.4 | 1.0 | 2.2 | 1.2 | 1.0 | 0.2 | IE2 | 38.2 | 18.5 | 72 | 40 | 230 | 50 | 3 | 28.7 |
| S15 0049 2T | 3.0 | 1.7 | 2.6 | 1.5 | 1.0 | 2.3 | 1.2 | 1.0 | 0.2 | IE2 | 38.2 | 22 | 80 | 40 | 230 | 50 | 3 | 31.9 |
| S20 0060 2T | 2.7 | 1.5 | 2.3 | 1.4 | 1.0 | 2.1 | 1.2 | 1.0 | 0.2 | IE2 | 38.2 | 25 | 88 | 45 | 230 | 50 | 3 | 35.1 |
| S20 0067 2T | 3.0 | 1.7 | 2.6 | 1.5 | 1.1 | 2.4 | 1.3 | 1.1 | 0.2 | IE2 | 47.0 | 28 | 103 | 40 | 230 | 50 | 3 | 41.0 |
| S20 0074 2T | 2.8 | 1.6 | 2.4 | 1.4 | 1.0 | 2.2 | 1.2 | 1.0 | 0.1 | IE2 | 56.9 | 30 | 120 | 45 | 230 | 50 | 3 | 47.8 |
| S20 0086 2T | 2.7 | 1.5 | 2.3 | 1.3 | 0.9 | 2.1 | 1.1 | 0.9 | 0.1 | IE2 | 68.4 | 37 | 145 | 40 | 230 | 50 | 3 | 57.8 |
| S30 0113 2T | 3.0 | 1.7 | 2.6 | 1.4 | 1.0 | 2.3 | 1.2 | 1.0 | 0.1 | IE2 | 92.8 | 45 | 180 | 45 | 230 | 50 | 3 | 71.7 |
| S30 0129 2T | 3.0 | 1.6 | 2.5 | 1.4 | 1.0 | 2.3 | 1.2 | 1.0 | 0.1 | IE2 | 92.8 | 55 | 195 | 40 | 230 | 50 | 3 | 77.7 |
| S30 0150 2T | 2.9 | 1.6 | 2.4 | 1.4 | 0.9 | 2.2 | 1.2 | 0.9 | 0.1 | IE2 | 92.8 | 65 | 215 | 45 | 230 | 50 | 2 | 85.6 |
| S30 0162 2T | 2.8 | 1.6 | 2.4 | 1.3 | 0.9 | 2.2 | 1.1 | 0.9 | 0.1 | IE2 | 111 | 70 | 240 | 40 | 230 | 50 | 2 | 95.6 |
| S41 0180 2T | 2.1 | 1.0 | 1.8 | 1.0 | 0.5 | 1.5 | 0.9 | 0.5 | 0.1 | IE2 | 135 | 75 | 300 | 45 | 230 | 50 | 2 | 119.5 |
| S41 0202 2T | 2.3 | 1.1 | 2.0 | 1.1 | 0.6 | 1.6 | 0.9 | 0.6 | 0.0 | IE2 | 162 | 90 | 345 | 40 | 230 | 50 | 2 | 137.4 |
| S41 0217 2T | 2.3 | 1.1 | 2.0 | 1.1 | 0.6 | 1.6 | 0.9 | 0.6 | 0.0 | IE2 | 162 | 110 | 375 | 45 | 230 | 50 | 2 | 149.4 |
| S41 0260 2T | 2.3 | 1.1 | 1.9 | 1.1 | 0.6 | 1.6 | 0.9 | 0.6 | 0.0 | IE2 | 196 | 120 | 445 | 40 | 230 | 50 | 2 | 177.3 |

Operating point (f; I)

f = relative motor stator frequency; I = relative torque-producing current

Power losses

Power losses at operating points (f; I) and in standby mode relate to the rated apparent output power.

| Product's model identifier | Power losses | | | | | | | | | | Efficiency level | Apparent output power - IEC 61800-9-2 S _{r,eq} kVA | Indicative motor rated power output kW | Rated output current A | Maximum operating temperature °C | Rated supply voltage V | Rated supply frequency Hz | Switching frequency kHz | Rated apparent output power kVA | |
|----------------------------|------------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------|---|---|---------------------------|-------------------------------------|---------------------------|------------------------------|----------------------------|------------------------------------|-----------------------|
| | f, I (90%, 100%) | | | | | f, I (50%, 25%) | | | | | | | | | | | | | | Standby losses [%] |
| | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | | | | | | | | | | |
| S05 0005 4T | 2.9 | 1.6 | 2.6 | 1.4 | 1.0 | 2.4 | 1.4 | 1.0 | 0.3 | IE2 | 7.94 | 4.5 | 10.5 | 50 | 400 | 50 | 5 | 7.3 | | |
| S05 0007 4T | 2.8 | 1.5 | 2.4 | 1.3 | 0.9 | 2.2 | 1.3 | 0.9 | 0.2 | IE2 | 9.95 | 5.5 | 12.5 | 50 | 400 | 50 | 5 | 8.7 | | |
| S05 0009 4T | 2.8 | 1.5 | 2.4 | 1.3 | 0.9 | 2.2 | 1.3 | 0.9 | 0.2 | IE2 | 14.4 | 7.5 | 16.5 | 40 | 400 | 50 | 5 | 11.4 | | |
| S05 0011 4T | 2.8 | 1.5 | 2.4 | 1.3 | 0.9 | 2.2 | 1.3 | 0.9 | 0.2 | IE2 | 14.4 | 7.5 | 16.5 | 40 | 400 | 50 | 5 | 11.4 | | |
| S05 0014 4T | 2.8 | 1.5 | 2.4 | 1.3 | 0.9 | 2.2 | 1.3 | 0.9 | 0.2 | IE2 | 14.4 | 7.5 | 16.5 | 40 | 400 | 50 | 5 | 11.4 | | |
| S12 0016 4T | 2.3 | 1.2 | 2.0 | 1.0 | 0.7 | 1.8 | 1.0 | 0.7 | 0.1 | IE2 | 19.5 | 11 | 27 | 45 | 400 | 50 | 3 | 18.7 | | |
| S12 0017 4T | 2.4 | 1.2 | 2.0 | 1.1 | 0.7 | 1.9 | 1.1 | 0.7 | 0.1 | IE2 | 23.9 | 15 | 30 | 40 | 400 | 50 | 3 | 20.8 | | |
| S12 0020 4T | 2.4 | 1.2 | 2.0 | 1.1 | 0.7 | 1.9 | 1.1 | 0.7 | 0.1 | IE2 | 23.9 | 15 | 30 | 40 | 400 | 50 | 3 | 20.8 | | |
| S12 0025 4T | 1.8 | 0.9 | 1.6 | 0.8 | 0.6 | 1.5 | 0.8 | 0.6 | 0.1 | IE2 | 38.2 | 22 | 41 | 40 | 400 | 50 | 3 | 28.4 | | |
| S12 0030 4T | 1.8 | 0.9 | 1.5 | 0.8 | 0.5 | 1.4 | 0.8 | 0.5 | 0.1 | IE2 | 38.2 | 22 | 45 | 40 | 400 | 50 | 3 | 31.2 | | |
| S12 0034 4T | 1.7 | 0.9 | 1.5 | 0.8 | 0.5 | 1.4 | 0.8 | 0.5 | 0.0 | IE2 | 47.0 | 30 | 57 | 40 | 400 | 50 | 3 | 39.5 | | |
| S12 0036 4T | 1.7 | 0.9 | 1.5 | 0.8 | 0.5 | 1.4 | 0.8 | 0.5 | 0.0 | IE2 | 47.0 | 30 | 60 | 40 | 400 | 50 | 3 | 41.6 | | |
| S15 0040 4T | 1.6 | 0.9 | 1.4 | 0.8 | 0.6 | 1.3 | 0.7 | 0.6 | 0.1 | IE2 | 56.9 | 37 | 72 | 40 | 400 | 50 | 3 | 49.9 | | |
| S15 0049 4T | 1.7 | 1.0 | 1.5 | 0.8 | 0.6 | 1.3 | 0.7 | 0.6 | 0.1 | IE2 | 56.9 | 45 | 80 | 40 | 400 | 50 | 3 | 55.4 | | |
| S20 0060 4T | 1.6 | 0.9 | 1.3 | 0.8 | 0.6 | 1.2 | 0.7 | 0.6 | 0.1 | IE2 | 68.4 | 50 | 88 | 45 | 400 | 50 | 3 | 61.0 | | |
| S20 0067 4T | 1.8 | 1.0 | 1.5 | 0.9 | 0.6 | 1.4 | 0.7 | 0.6 | 0.1 | IE2 | 92.8 | 55 | 103 | 40 | 400 | 50 | 3 | 71.4 | | |
| S20 0074 4T | 1.6 | 0.9 | 1.4 | 0.8 | 0.6 | 1.3 | 0.7 | 0.6 | 0.1 | IE2 | 92.8 | 65 | 120 | 45 | 400 | 50 | 3 | 83.1 | | |
| S20 0086 4T | 1.5 | 0.9 | 1.3 | 0.7 | 0.5 | 1.2 | 0.6 | 0.5 | 0.1 | IE2 | 111 | 75 | 145 | 40 | 400 | 50 | 3 | 100.5 | | |
| S30 0113 4T | 1.7 | 1.0 | 1.5 | 0.8 | 0.6 | 1.3 | 0.7 | 0.6 | 0.1 | IE2 | 135 | 100 | 180 | 45 | 400 | 50 | 2 | 124.7 | | |
| S30 0129 4T | 1.7 | 0.9 | 1.5 | 0.8 | 0.6 | 1.3 | 0.7 | 0.6 | 0.0 | IE2 | 162 | 110 | 195 | 40 | 400 | 50 | 2 | 135.1 | | |
| S30 0156 4T | 1.6 | 0.9 | 1.4 | 0.8 | 0.5 | 1.3 | 0.7 | 0.5 | 0.0 | IE2 | 162 | 120 | 215 | 45 | 400 | 50 | 2 | 149.0 | | |
| S30 0162 4T | 1.6 | 0.9 | 1.4 | 0.8 | 0.5 | 1.3 | 0.7 | 0.5 | 0.0 | IE2 | 196 | 132 | 240 | 40 | 400 | 50 | 2 | 166.3 | | |
| S41 0180 4T | 1.2 | 0.6 | 1.0 | 0.6 | 0.3 | 0.9 | 0.5 | 0.3 | 0.0 | IE2 | 245 | 160 | 300 | 45 | 400 | 50 | 2 | 207.8 | | |
| S41 0202 4T | 1.3 | 0.6 | 1.1 | 0.6 | 0.3 | 0.9 | 0.5 | 0.3 | 0.0 | IE2 | 245 | 200 | 345 | 40 | 400 | 50 | 2 | 239.0 | | |
| S41 0217 4T | 1.3 | 0.6 | 1.1 | 0.6 | 0.3 | 0.9 | 0.5 | 0.3 | 0.0 | IE2 | 302 | 220 | 375 | 45 | 400 | 50 | 2 | 259.8 | | |
| S41 0260 4T | 1.3 | 0.6 | 1.1 | 0.6 | 0.3 | 0.9 | 0.5 | 0.3 | 0.0 | IE2 | 381 | 250 | 445 | 40 | 400 | 50 | 2 | 308.3 | | |

Operating point (f, I)

f = relative motor stator frequency; I = relative torque-producing current

Power losses

Power losses at operating points (f, I) and in standby mode relate to the rated apparent output power.