

# Asynchron-Elan types 2-pole

30/04/2025

## Power

Continuous power for efficient water cooling  
The peak power is considerably higher.

## Rotor

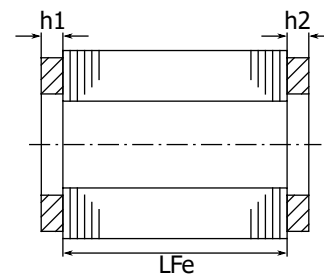
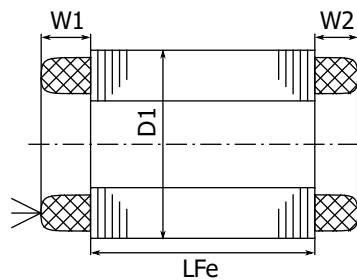
material of squirrel cage: normal aluminium or copper for a bigger rotorbore (up to about 100 m/s). For higher speeds copper-rotors with steel reinforcement are available. Alternatively for higher speeds with reduced power, rotors in aluminium alloy are available.

| Speed                | in krpm | 6           | 12   | 18   | 24   | 30   | 36   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   |
|----------------------|---------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Frequency            | in Hz   | 100         | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
| Types (D1/LFe in cm) |         | Power in kW |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| mW 6/2-2-s2r..       |         | 0.12        | 0.24 | 0.36 | 0.48 | 0.6  | 0.72 | 0.84 | 0.96 | 1.1  | 1.2  | 1.3  | 1.4  | 1.6  | 1.7  | 1.8  |
| mW 6/3-2-s2r..       |         | 0.18        | 0.36 | 0.54 | 0.72 | 0.9  | 1.1  | 1.3  | 1.4  | 1.6  | 1.8  | 2    | 2.2  | 2.3  | 2.5  | 2.7  |
| mW 6/4.5-2-s2r..     |         | 0.3         | 0.6  | 0.9  | 1.2  | 1.5  | 1.8  | 2.1  | 2.4  | 2.7  | 3    | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  |
| mW 6/6-2-s2r..       |         | 0.43        | 0.87 | 1.3  | 1.7  | 2.2  | 2.6  | 3    | 3.5  | 3.9  | 4.3  | 4.8  | 5.2  | 5.6  | 6.1  | 6.5  |
| mW 6/8-2-s2r..       |         | 0.61        | 1.2  | 1.8  | 2.4  | 3    | 3.6  | 4.2  | 4.9  | 5.5  | 6.1  | 6.7  | 7.3  | 7.9  | 8.5  | 9.1  |
| mW 7/2-2-s1r..       |         | 0.12        | 0.23 | 0.35 | 0.47 | 0.58 | 0.7  | 0.82 | 0.93 | 1    | 1.2  | 1.3  | 1.4  | 1.4  |      |      |
| mW 7/3-2-s1r..       |         | 0.24        | 0.48 | 0.72 | 0.97 | 1.2  | 1.4  | 1.7  | 1.9  | 2.2  | 2.4  | 2.7  | 2.9  | 2.9  |      |      |
| mW 7/4-2-s1r..       |         | 0.35        | 0.7  | 1    | 1.4  | 1.8  | 2.1  | 2.4  | 2.8  | 3.2  | 3.5  | 3.8  | 4.2  | 4.5  |      |      |
| mW 7/5-2-s1r..       |         | 0.5         | 1    | 1.5  | 2    | 2.5  | 3    | 3.5  | 4    | 4.5  | 5    | 5.5  | 6    | 6.2  |      |      |
| mW 7/6-2-s1r..       |         | 0.62        | 1.2  | 1.9  | 2.5  | 3.1  | 3.8  | 4.4  | 5    | 5.6  | 6.2  | 6.9  | 7.5  | 9.8  |      |      |
| mW 7/7-2-s1r..       |         | 0.78        | 1.6  | 2.4  | 3.1  | 3.9  | 4.7  | 5.5  | 6.3  | 7    | 7.8  | 8.6  | 9.4  | 9.8  |      |      |
| mW 7/10-2-s1r..      |         | 1.1         | 2.2  | 3.3  | 4.4  | 5.5  | 6.6  | 7.7  | 8.8  | 9.9  | 11   | 12.1 | 13.2 | 13.2 |      |      |
| mW 8.3/3-2-s3r..     |         | 0.47        | 0.94 | 1.4  | 1.9  | 2.3  | 2.8  | 3.3  | 3.7  | 4.2  | 4.7  |      |      |      |      |      |
| mW 8.3/4-2-s3r..     |         | 0.71        | 1.4  | 2.1  | 2.8  | 3.5  | 4.2  | 5    | 5.7  | 6.4  | 7.1  |      |      |      |      |      |
| mW 8.3/5-2-s3r..     |         | 0.93        | 1.9  | 2.8  | 3.7  | 4.6  | 5.6  | 6.5  | 7.4  | 8.4  | 9.3  |      |      |      |      |      |
| mW 8.3/7-2-s3r..     |         | 1.4         | 2.9  | 4.3  | 5.7  | 7.2  | 8.6  | 10   | 11.4 | 12.9 | 14.3 |      |      |      |      |      |
| mW 8.3/9-2-s3r..     |         | 1.9         | 3.8  | 5.7  | 7.6  | 9.4  | 11.3 | 13.2 | 15.1 | 17   | 18   |      |      |      |      |      |
| mW 9/4-2-s2r..       |         | 0.89        | 1.8  | 2.7  | 3.6  | 4.4  | 5.3  | 6.2  | 7.1  | 8    | 8.9  |      |      |      |      |      |
| mW 9/6-2-s2r..       |         | 1.5         | 3    | 4.5  | 6    | 7.5  | 9    | 10.5 | 12   | 13.5 | 14.9 |      |      |      |      |      |
| mW 9/8-2-s2r..       |         | 2.1         | 4.1  | 6.2  | 8.2  | 10.3 | 12.3 | 14.4 | 16.4 | 18.5 | 21   |      |      |      |      |      |
| mW 9/10-2-s2r..      |         | 2.6         | 5.2  | 7.8  | 10.5 | 13.1 | 15.7 | 18.3 | 21   | 24   | 26   |      |      |      |      |      |
| mW 10.6/5-2-s2r..    |         | 1.6         | 3.2  | 4.8  | 6.4  | 8    | 9.3  | 10.6 | 11.9 |      |      |      |      |      |      |      |
| mW 10.6/8-2-s2r..    |         | 2.9         | 5.8  | 8.7  | 11.6 | 14.5 | 17   | 19.4 | 22   |      |      |      |      |      |      |      |
| mW 10.6/10-2-s2r..   |         | 3.7         | 7.4  | 11.1 | 14.9 | 18.6 | 22   | 25   | 28   |      |      |      |      |      |      |      |
| mW 10.6/12-2-s2r..   |         | 4.6         | 9.2  | 13.8 | 18.3 | 23   | 27   | 31   | 34   |      |      |      |      |      |      |      |
| mW 13.5/10-2-s2r..   |         | 5.8         | 12.1 | 18.1 | 24   | 29   | 33   | 28   |      |      |      |      |      |      |      |      |
| mW 13.5/11-2-s2r..   |         | 6.3         | 12.9 | 19.8 | 27   | 32   | 36   | 31   |      |      |      |      |      |      |      |      |
| mW 15/7.5-2-s1r..    |         | 5.6         | 11.2 | 16.8 | 22   | 28   | 28   |      |      |      |      |      |      |      |      |      |
| mW 15/9-2-s1r..      |         | 7           | 14   | 21   | 28   | 35   | 35   |      |      |      |      |      |      |      |      |      |
| mW 15/12-2-s1r..     |         | 10          | 20   | 30   | 40   | 50   | 50   |      |      |      |      |      |      |      |      |      |
| mW 15/15-2-s1r..     |         | 12.8        | 26   | 38   | 51   | 64   | 64   |      |      |      |      |      |      |      |      |      |
| mW 15/22-2-s1r..     |         | 20          | 40   | 60   | 80   | 100  | 100  |      |      |      |      |      |      |      |      |      |



# Dimension sheet

Sketch



| Main dimensions<br>all dimensions in mm<br>Typ<br>(D1/LFe in cm) | Stator               |                        |    | Rotor  |      |        |    |             |    |      |
|------------------------------------------------------------------|----------------------|------------------------|----|--------|------|--------|----|-------------|----|------|
|                                                                  | Outer diameter<br>D1 | Length of winding head |    | Bore   |      |        |    | Ring length |    |      |
|                                                                  |                      | W1<br>with PTC         | W2 | d3 min |      | d3 max |    | h           |    |      |
|                                                                  |                      |                        |    | Al     | Cu   | Al     | Cu | Al          | Cu | CuSt |
| mW 6/ .. -2-s2r..                                                | 60.2                 | 20                     | 17 | -      | 20.5 | -      | 21 | -           | 4  | 10   |
| mW 7/ .. -2-s1r..                                                | 70.2                 | 21                     | 15 | -      | 21.5 | -      | 24 | -           | 4  | 12   |
| mW 8.3/ .. -2-s3r..                                              | 83                   | 25                     | 22 | -      | 26   | -      | 30 | -           | 6  | 14   |
| mW 9/ .. -2-s2r..                                                | 90                   | 29                     | 25 | -      | 26   | -      | 34 | -           | 6  | 14   |
| mW 10.6/ .. -2-s2r..                                             | 106.5                | 40                     | 32 | -      | 32.5 | -      | 40 | -           | 6  | 14   |
| mW 13.5/ .. -2-s2r..                                             | 135                  | 42                     | 38 | -      | 42.5 | -      | 48 | -           | 8  | 16   |
| mW 15/ .. -2-s1r..                                               | 150                  | 46                     | 36 | -      | 40.5 | -      | 52 | -           | 8  | 16   |