## **ELYO SMART NN**



AIR-WATER HEAT PUMPS FOR OUTDOOR INSTALLATION





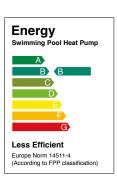






### **Elyo Smart NN**

Pool heat pump for outdoor installation energy class "B" and Inverter technology, specially designed to have good performance in cold weathers. Moreover, it can work in the optimal point to obtain more **energy efficiency**, in a **quieter** way and to helping **extend the swimming season**.









### PRODUCT DESCRIPTION

- Energy Class "B", allowing energy savings up to 21% in comparison with class "C".
- Inverter Technology, automatically varies the heating power to make the heat pump work in the optimal point.
- Fluidra Connect Compatible, Modbus connection to enable the Fluidra Connect platform.
- **Soft Start**, to avoid peak voltage when the compressor starts.
- Minimum working air temperature -12°C, ready to work in cold weathers.

- Cycle inversion defrosting, that allows faster defrosting.
- Heating & Cooling, thanks to its 4 way valve.
- **Electronic Expansion Valve**, to enchance the COP (Coefincient Of Performance).
- R410a refrigerant, non ozone depleting gas.
- ABS plastic shell, to avoid corroison.
- **Titanium heat exchanger**, with twisted-tube to enhance performance.
- Flow switch and high and low pressure switch.

**Accessories included:** Winter cover, anti-vibration base, drainage connection, waterproof box, 10m signal wire, water connection assembly & Modbus signal wire.



We reserve the right to change all or part of the product features and/ or the contents of this document without prior notice.

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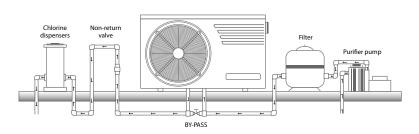
| <b>ELYO SMART</b>                              | NN                |       |            |              |           |                  |           |          |                      |                  |           |  |
|--|-------------------|-------|------------|--------------|-----------|------------------|-----------|----------|----------------------|------------------|-----------|--|
| MODEL  |                   |       | 6kW        | 9kW          | 12kW      | 16kW             | 19kW      | 24kW     |                      | 28kW             |           |  |
| CODE   |                   | 68769 | 68770      | 68771        | 68772     | 68774            | 68775     | 68776    | 68850                | 68851            |           |  |
| 27 °C AIR T.                                   | Heating capacity  | KW    | 6.1-2.1    | 9.2-2.3      | 12.5-2.9  | 16-3.8           | 19-4.7    | 24-5.9   |                      | 28.5-6.8         |           |  |
| 26 °C WATER T.                                 | Power consumption | KW    | 1.097-0.16 | 1.59-0.18    | 2.02-0.22 | 2.66-0.3         | 3.4-0.37  | 4.28     | 4.28-0.47            |                  | 5.09-0.54 |  |
| 80% HUMIDITY                                   | СОР               |       | 13-5.6     | 13-5.8       | 13-6.2    | 12.6-6           | 12.5-5.6  | 12.5-5.6 |                      | 12.4-5.6         |           |  |
| 15 °C AIR T.<br>26 °C WATER T.<br>70% HUMIDITY | Heating capacity  | KW    | 4.7-2.5    | 6.8-1.9      | 9.2-2.2   | 11.5-3           | 14.7-3.9  | 18.9-4.7 |                      | 23.2-5.6         |           |  |
|  | Power consumption | KW    | 1.04-0.35  | 1.51-0.27    | 2-0.31    | 2.55-0.39        | 3.27-0.51 | 4.2-     | 0.61                 | 5.16-0.73        |           |  |
|  | СОР               |       | 7.1-       | 4.5          | 7.1-4.6   | 7-4.5            |           |          |                      |                  |           |  |
| COMPRESSOR TYPE                                |                   |       | (          | GMCC/TOSHIB/ | 4         | MITSUBISHI       |           |          |                      |                  |           |  |
| VOLTAGE V/Hz/Ph                                |                   |       |            | 220~240V     | 50Hz /1Ph | 380V<br>50Hz/3Ph |           |          | 220~240V<br>50Hz/1Ph | 380V<br>50Hz/3Ph |           |  |
| RATED CURRENT A                                |                   | 4,4   | 6,9        | 8,5          | 11,7      | 16,3             | 18,9      | 6,9      | 22,5                 | 8,2              |           |  |

| COMPRESSOR TYPE                       | GMCC/TOSHIBA                    |       |            | MITSUBISHI |       |        |      |                       |                  |     |  |
|---------------------------------------|---------------------------------|-------|------------|------------|-------|--------|------|-----------------------|------------------|-----|--|
| VOLTAGE                               | 220~240V 50Hz /1Ph 380V 50Hz/3F |       |            |            |       |        |      | 220~240V<br>50Hz /1Ph | 380V<br>50Hz/3Ph |     |  |
| RATED CURRENT                         | A                               | 4,4   | 6,9        | 8,5        | 11,7  | 16,3   | 18,9 | 6,9                   | 22,5             | 8,2 |  |
| MINIMUM FUSE                          | A                               | 7     | 10         | 13         | 16    | 20     | 26   | 9                     | 34               | 13  |  |
| ADVISED POOL VOLUME (with pool cover) | m³                              | 10-25 | 12-33      | 15-60      | 25-85 | 55-120 | 65-  | 130                   | 75-180           |     |  |
| ADVISED WATER FLUX                    | m³/h                            | 2,5   | 2,8        | 3,7        | 4,6   | 5,0    | 8,0  |                       | 10,0             |     |  |
| WATER PRESSURE DROP                   | Кра                             | 12    | 12         | 14         | 15    | 18     | 2    | 0 25                  |                  | 5   |  |
| HEAT EXCHANGER                        | Twist-titanium tube in PVC      |       |            |            |       |        |      |                       |                  |     |  |
| WATER CONNECTION                      | 50                              |       |            |            |       |        |      |                       |                  |     |  |
| FAN QUANTITY                          | 1 2                             |       |            |            |       |        |      |                       |                  |     |  |
| NOISE LEVEL (1m) dB(A)                |                                 | 40-50 | 1-50 40-52 |            |       | 41-54  |      | 42-6                  |                  | 60  |  |
| REFRIGERANT (R410a)                   | g                               | 800   | 950        | 1050       | 1600  | 2300   | 30   | 00                    | 38               | 00  |  |

| DIMENSION / WEIGHT |                 |              |              |              |              |              |               |       |       |  |  |
|--------------------|-----------------|--------------|--------------|--------------|--------------|--------------|---------------|-------|-------|--|--|
| MODEL              | 6kW             | 9kW          | 12kW         | 16kW         | 19kW         | 24kW         |               | 28kW  |       |  |  |
| CODE               | 68769           | 68770        | 68771        | 68772        | 68774        | 68775        | 68776         | 68850 | 68851 |  |  |
| NET WEIGHT         | kg              | 54           |              | 68           | 78           | 98           | 117           |       | 128   |  |  |
| GROSS WEIGHT kg    |                 | 66           |              | 73           | 83           | 113          | 135           |       | 146   |  |  |
| NET DIMENSION      | mm              | 1008x380x577 |              | 1050x440x709 |              | 1050x450x870 | 1050x452x1295 |       |       |  |  |
| PACKING DIMENSION  | NG DIMENSION mm |              | 1095x430x705 |              | 1130x470x850 |              | 1130x515x1430 |       |       |  |  |

 $Maximum\ operating\ conditions:\ minimum\ outdoor\ air\ temperature\ -12\ °C.\ Maximum\ pool\ water\ temperature\ 40\ °C.\ Maximum\ water\ inlet\ pressure\ 3\ bar.$ 

#### Diagram of setup



- The heat pump is ready for connection to a general power supply to earth.
- The threshold voltage variation is +/-10% during operation.
- Protect the line with a circuit breaker and a 30 mA residual-current device.
- The air should reach the unit free of obstacles (30 cm min.).
- The air expelled should not be blocked by anything (2.5 m).
- Avoid potential air recirculation.
- Mount the unit on a level base.

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