# 10. Technical specifications

## 10.1 Physical properties

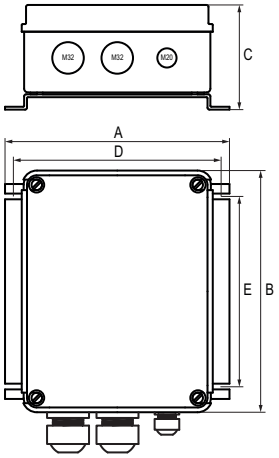
### 10.1.1 Dimensions and weight of IP20 and IP50 models with low bottom (code S)

***NOTICE**: provide space around the controller as indicated in "Guarantee cooling" on page 19.*

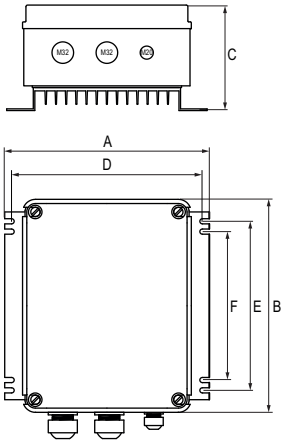
| | |
|---|---|
| SELPRO www.selpro.it | MODEL: RDMXXX-XX-X-X-X-(S)-X-X<br>CODE: ZARDMXXXXXXXX(S)XX |

| Model | A (mm) | B | C | D | E | F | Weight (kg) |
|---|---|---|---|---|---|---|---|
| RDM308 | 235 | 255 | 114 | 220 | 200 | - | 2.6 |
| RDM312 | 230 | 255 | 128 | 220 | 200 | 170 | 3 |
| RDM320 (1/4 outputs) | 230 | 255 | 158 | 220 | 200 | 170 | 4 |
| RDM320 (2/8 outputs) | 236 | 350 | 203 | 174 | 320 | - | 5.5 |
| RDM328 | 236 | 350 | 203 | 174 | 320 | - | 5.7 |

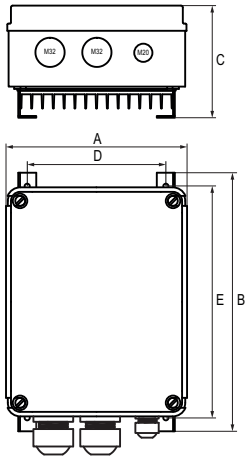
**RDM 308**



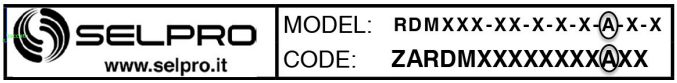

**RDM 312, 320 (1/4 outputs)**




**RDM 320 (2/8 outputs), 328**

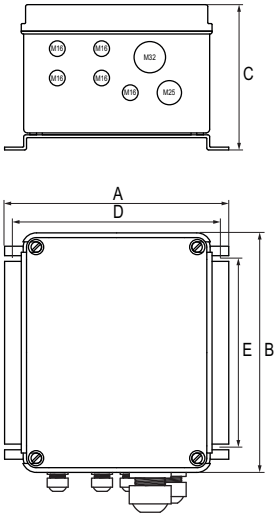


### 10.1.2 Dimensions and weight of IP20 and IP50 models with high bottom (code A)

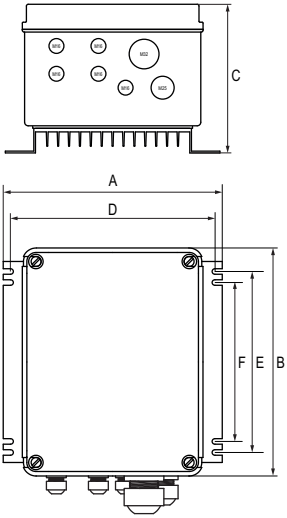



| Model | A (mm) | B | C | D | E | F | Weight (kg) |
|---|---|---|---|---|---|---|---|
| RDM308 | 235 | 255 | 154 | 220 | 200 | - | 2.8 |
| RDM312 | 230 | 255 | 168 | 220 | 200 | 170 | 3.2 |
| RDM320 (1/4 outputs) | 230 | 255 | 198 | 220 | 200 | 170 | 4.2 |
| RDM320 (2/8 outputs) | 236 | 350 | 253 | 174 | 320 | - | 5.7 |
| RDM328 | 236 | 350 | 253 | 174 | 320 | - | 5.9 |

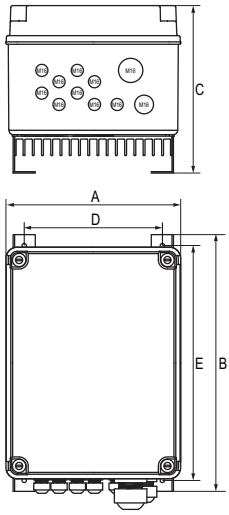
**RDM308**




**RDM312, 320 (1/4 outputs)**




**RDM320 (2/8 outputs), 328**




### 10.1.3 Case and cable clamps

| | |
|---|---|
| **Materials** | GW-PLAST 75 maximum temperature 60 °C (ball heat sealing 85 °C) and aluminum. |
| **Screw plugs** | TPN series with max 1.8 Nm torque (CEI 23-58) |
| **Protection rating** | IP55 or IP20 (for model with square container) |
| **Pollution** | High Pollution |
| **Fire resistance** | Category D |
| **M16, M20, M32 cable clamps** | IP67 protection, class V2, polyamide PA6 |
| **M25 cable clamps** | IP67 protection, class V2, polyamide PA6 |

### 10.1.4 Storage and installation environmental conditions

| | |
|---|---|
| **Working temperature** | from -20 to +50 °C |
| **Storage temperature** | from -25 to + 60 °C |
| **Humidity** | RH < 85% non condensing |
| **Vibrations** | Under 1 G (9.8 m/s2) |

## 10.2 Electrical specifications

### 10.2.1 Applications

High-speed, three-phase, asynchronous motors with adjustable voltage applied to axial or centrifugal fans.

### 10.2.2 Specifications

| | |
|---|---|
| **Rated voltage** | 400 V ac ± 20% three-phase<br>On request 230 V ac / 480 V ac |
| **Frequency** | 50/60 Hz automatically recognized |
| **Minimum current** | 0.2 A |
| **Over voltage protection** | Surge category II (4 KV), EN 61000-4-5 |
| **Auto restart** | The controller automatically restarts as soon as the alarm condition is cleared. |
| **Transducer power supply** | 20 Vdc - 20 mA, not stabilized. Protected against short circuiting. |
| **Potentiometer and sensor power supply** | 10 Vdc/5 Vdc (automatic switching), stabilized with protection. |

### 10.2.3 Rated current and power

| Model | RMS rated current Ampere (In) | Three-phase output | Environmental temperature downgrade > 50 °C (A/°C) | Rated power nominal kVA @ 400 V ac | Dissipated power command circuits | Power dissipated in the area |
|---|---|---|---|---|---|---|
| RDM308 | 8 | Single, x4 | 0.6 | 5.5 | 10 W | 48 W @ 12 A |
| RDM312 | 12 | Single, x4 | 0.6 | 8.0 | 10 W | 72 W @ 12 A |
| RDM320 | 20 | Single, x4, double, x8 | 1 | 13.0 | 10 W | 120 W @ 20 A |
| RDM328 | 28 | Double, x8 | 1.4 | 17.0 | 10 W | 168 W @ 28 A |

### 10.2.4 Nominal current declassified due to height of installation

| **Installation height (m)** | 0 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 |
|---|---|---|---|---|---|---|---|
| **Rated current reduction (%)** | 100 | 95 | 90 | 85 | 80 | 75 | 70 |

### 10.2.5 Electric insulation

| | |
|---|---|
| **Case** | Class I (use of grounded protection conductor) |
| **Command circuits** | 4000 V ac between command input and mains voltage parts |

### 10.2.6 Nominal cable sections

## 10.3 Maintenance

### 10.3.1 Clean Up

Clean the container and/or dissipator with a dry rag.

### 10.3.2 Responsibility for disposal



As indicated in European Directive 2012/19/EU, do not dispose of the product with other unsorted urban waste.

The owner is responsible for the disposal of these products and of the other electric and electronic equipment using the specific collection organizations indicated by the government or local public agencies.

Correct disposal and recycling help to prevent potentially negative consequences to the environment and health of people.

For more detailed information about disposal, contact the responsible public authorities, the waste disposal service, or the representative from which the product was purchased.

## 10.4 Conformity

### 10.4.1 Declaration of conformity

The full text is available on the website www.selpro.it.

### 10.4.2 EC - Declaration of conformity

| Directive | EC standard code | Version |
|---|---|---|
| EMC 2014/30/EU | EN IEC 61800-3 | 2018 |
| | EN IEC 61000-6-2 | 2019 |
| | EN 61000-6-3 | 2007 +A1:2011 |
| | EN IEC 55014-1 | 2021 |
| | EN IEC 55014-2 | 2021 |
| Safety 2014/35/EU | EN 61800-5-1 | 2007 +A1:2017 +A11:2021 |
| | EN 60335-1 | 2012 +A13:2017 +A2:2019 |
| | EN 60730-1 | 2017 |
| RoHS 2012/19/EU | EN 50581 | 2012 |

### 10.4.3 UK - Declaration of conformity

| Subject | Name | Version |
|---|---|---|
| EMC | BS EN IEC 61800-3 | 2018 |
| | BS EN IEC 61000-6-2 | 2019 |
| | BS EN 61000-6-3 | 2007 +A1:2011 |
| | BS EN IEC 55014-1 | 2021 |
| | BS EN IEC 55014-2 | 2021 |
| Safety | BS EN 61800-5-1 | 2007 +A1:2017 +A11:2021 |
| | BS EN 60335-1 | 2012 +A13:2017 +A2:2019 |
| | BS EN 60730-1 | 2017 |
| RoHS | BS EN 50581 | 2012 |

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