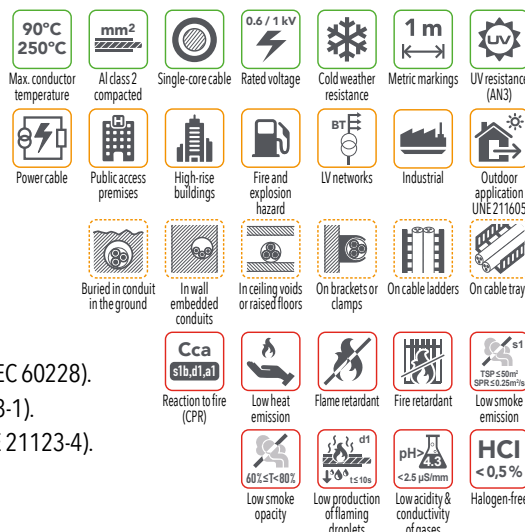


# AFIRENAS RZ1 (AS) 0.6/1 kV AL

MIGUÉLEZ ARTICLE GROUP  
551



- **Standards (construction/tests):** EC 60502-1 and UNE 21123-4.
- **Technical Designation:** RZ1 (AS) 0.6/1 kV AL.
- **Construction:**
  - **Conductor:** Aluminium, class 2, circular compacted stranded conductor (UNE-EN IEC 60228 and IEC 60228).
  - **Insulation:** Cross-linked polyethylene (XLPE). XLPE (IEC 60502-1) and Type DIX 3 (Table 2A HD 603-1).
  - **Oversheath:** Halogen-free thermoplastic polyolefin. Type ST8 (IEC 60502-1) and Type DMZ-E (UNE 21123-4).
- **Rated Voltage (Uo/U):** 0.6/1 kVAC; 1.5 kV DC.
- **Maximum system voltage (Um):** 1.2 kVAC; 1.8 kV DC.
- **Voltage test:** 3.5 kVAC (5 minutes).
- **Maximum conductor temperature. Normal operation / short-circuit (t≤5s):** 90 °C / 250 °C.
- **Range:** Single-core cable. Configurations: 1X(25-...-630) mm<sup>2</sup>.
- **Reaction to fire (CPR - EN 50575 & EN 13501-6):** Cca-s1b,d1,a1.
- **Additional fire performance features (when CPR Regulation is not applicable):** Flame retardant, fire retardant, halogen-free and low gas and smoke emission with low opacity/toxicity/corrosivity/conductivity (IEC 60332-1-2, IEC 60332-3-24, IEC 61034-2, IEC 60754-1 and IEC 60754-2).
- **Applications:** Fixed installations. Specially suitable as power cable in public buildings, premises with risk of fire or explosion, high-rise buildings, tunnels, and any other installation requiring enhanced fire performance (e.g. cable bunches, vertical risers, etc.).  
Suitable for indoor and outdoor installations, on supports in open air, in ducts or buried.  
When the cable is installed on clamps, the horizontal distance between clamps shall not exceed 20 times the cable diameter. This distance is also applicable between support points when laid on other types of supports (e.g. cable trays, ladders, or mesh trays). In no case shall this distance exceed 80 cm. For vertical runs, the maximum distance between supports shall not exceed 150 cm.  
If single-core cables are installed separately, clamps made of plastic or non-magnetic metals shall be used.  
Cables and cable bundles shall be fixed to prevent indentations or damage due to thermal expansion.  
The cable shall not be subjected to compressive forces that could damage it.  
Connections between different components shall be good, permanent, mechanically robust, corrosion-resistant, and have low electrical resistivity. Likewise, conductor connections shall be made using methods or systems that ensure perfect continuity of the conductor and its insulation. Joints, connections and branches shall be implemented using proper techniques to prevent deterioration of the conductor or other materials due to thermal expansion or dangerous potentials caused by galvanic effects. Unnecessary joints and connections should be avoided.
- **Temperature ranges:**
  - **Minimum ambient temperature:** –30 °C (fixed, static installation, protected against mechanical damage, shock or vibration).
  - **Maximum ambient temperature:** +70 °C.
  - **Maximum storage temperature:** +50 °C.
  - **Minimum laying temperature:** 0 °C.  
This temperature refers to the cable itself, not to the surrounding environment.  
If the cables have a lower temperature, they must be warmed up (e.g. by keeping them for a suitable time in a heated room).
- **Minimum Bending Radius:**
  - **During installation:** 15xD.
  - **Final position:** 10xD.  
D = overall diameter of the cable (mm).
- **Maximum pulling force during installation:**
  - F = 30xS (N). "S" = cross-sectional area of the conductor (mm<sup>2</sup>), applied to the aluminium conductor.
  - F = 5xD<sup>2</sup> (N). "D" = overall diameter (mm), applied to the oversheath.
- **Identification:** Oversheath color → Green (93).
- **Packaging and Presentation:** Drum/cut to length (03).
  - **Minimum drum diameter:** 12xD (D = external cable diameter (mm)).

\* Short product code. Must be completed with the corresponding characters for 'oversheath colour' and 'packaging'. Check the 'Miguelélez product code' section on our web page, in 'Downloads'.  
 \*\* Check the CPR-classified range and the range included in the certifications indicated for each product, as well as much more information about our products, on the website: [www.miguelélez.com](http://www.miguelélez.com)  
 \*\*\* Dimensional and weight values are approximate and subject to normal manufacturing tolerances.  
 \*\*\*\* It is the sole responsibility of the end user to determine suitability of this product for its intended use and application. Please, consult the regulations, laws or standards that are applicable to each particular case.  
 The installation systems and additional requirements established by any regulation, law and/or standards applicable to each particular case must be met.

• Other Features:

- Metric markings on the oversheath every 1.0 m.
- 100% recyclable packaging. Wooden reels (PEFC and SFC certified).

• Marking:

MIGUELEZ AFIRENAS RZ1 (AS) 0,6/1 kV 1XS mm<sup>2</sup> Al 90°C IEC 60502-1 made in Spain UNE 21123 clase C<sub>ca</sub>-s1b,d1,a1 EN 50575 MM/YY X Mts

\* Minimum marking content.

Code	No. of cores & nominal cross-sectional area	Insulation thickness	Overall diameter	Total weight	Maximum electrical resistance at 20°C (DC)
	mm <sup>2</sup>				
885101002509303	1 X 25	0.9	10.8	153	1.20
885101003509303	1 X 35	0.9	11.8	191	0.868
885101005009303	1 X 50	1.0	13.2	238	0.641
885101007009303	1 X 70	1.1	15.3	324	0.443
885101009509303	1 X 95	1.1	16.8	409	0.320
885101012009303	1 X 120	1.2	18.5	497	0.253
885101015009303	1 X 150	1.4	20.3	604	0.206
885101018509303	1 X 185	1.6	22.6	738	0.164
885101024009303	1 X 240	1.7	25.5	940	0.125
885101030009303	1 X 300	1.8	28.5	1167	0.100
885101040009303	1 X 400	2.0	31.7	1441	0.0778
885101050009303	1 X 500	2.2	35.0	1799	0.0605
885101063009303	1 X 630	2.4	39.4	2348	0.0469

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