# Product data sheet

Specifications



## Braking Unit for ATV900, APM, Single Drive, 440 V, 315 kW

MODBUOC31R4APM

## Main

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| **Range of product** | Altivar Process Modular |
| **Product or component type** | Control module |
| **[Us] rated supply voltage** | 440 V |
| **Maximum current Irms** | 161.0 A during braking phase<br>115.0 A over whole braking sequence<br>125.0 A for continuous operation |
| **Nominal power** | 315.0 kW |

## Complementary

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| **Permanent braking power** | 375.0 kW (5 % (12 s))<br>220.0 kW (50 % (120 s))<br>130.0 kW (100 %) |
| **Tightening torque** | 243 lb.in<br>27.5 N.m |
| **Power factor** | 100 |
| **Network number of phases** | 3 phases |
| **Electrical connection** | Resistor PA1, PA2, PA3, PB1, PB2, PB3: screw terminal 6 x 70…6 x 120 mm²/6 x 2/0 AWG...6 x 300 kcmil |
| **Kit composition** | 1<br>Control unit 1 |
| **Cycle time** | 240 s |

## Environment

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| **IP degree of protection** | IP21 conforming to IEC 61800-5-1<br>IP54 conforming to IEC 61800-5-1<br>IP21 conforming to IEC 60529<br>IP54 conforming to IEC 60529 |
| **Operating altitude** | 0...4800 m with current derating above 1000m |
| **Ambient air temperature for operation** | -10…40 °C (without derating)<br>40…50 °C (with derating factor) |
| **Ambient air temperature for storage** | -40…70 °C |
| **Standards** | EN/IEC 61800-3<br>EN/IEC 61800-5-1<br>IEC 61000-3-12<br>IEC 60721-3<br>IEC 61508<br>IEC 13849-1<br>UL 61800-5-1 |
| **Product certifications** | TÜV<br>cUL |
| **Marking** | CE |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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|---|---|
| **Environmental characteristic** | 3C3 conforming to IEC 60721-3-3 |
| **Pollution degree** | 2 conforming to IEC 61800-5-1 |
| **Shock resistance** | 4 gn for 11 ms conforming to IEC 60068-2-27 |
| **Relative humidity** | 5…95 % without condensation conforming to IEC 60068-2-3 |
| **Vibration resistance** | 1.5 mm peak to peak (f= 2…13 Hz) conforming to IEC 60068-2-6<br>0.5 gn (f= 13…200 Hz) conforming to IEC 60068-2-6 |
| **Noise level** | 69 dB conforming to 86/188/EEC |
| **Insulation resistance** | For 1 minute, between supply and earth terminals: > 1 MOhm at 500 V DC |
| **Electromagnetic compatibility** | Electrostatic discharge immunity test level 3 conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4<br>1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5<br>Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 |

## Contractual warranty

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| **Warranty (in months)** | 18 |