

Product datasheet

Specifications



standard power module , Altivar
Process Modular, 110...160kW,
380...480V, IP00, reduced height

APM1A0C16N4RH

EAN Code: 3606481677709

Main

Range of product	Altivar Process Modular
Product or component type	Power module
Device short name	APM
Product destination	Synchronous motors Asynchronous motors
Mounting mode	Cabinet mount
Kit composition	1 power module 1 mains unit 1 power supply for fan 48 V 1 relay for fan 3 fuse holder 2 brackets with nuts screws and washers for fuse
EMC filter	Integrated with 300 m conforming to IEC 61800-3 category C3
IP degree of protection	IP00 conforming to IEC 61800-5-1 IP21 (for cabinet integration) conforming to IEC 61800-5-1 IP54 (for cabinet integration) conforming to IEC 61800-5-1
Supply frequency	50...60 Hz - 5...5 %
Network number of phases	3 phases
[Us] rated supply voltage	380...480 V - 10...10 %
Motor power kW	160 kW at 380...480 V (normal duty) 132 kW at 380...480 V (heavy duty)
Motor power hp	250 hp at 380...480 V normal duty 200 hp at 380...480 V heavy duty

Complementary

Degree of protection	UL type 1 conforming to UL 61800-5-1 (cabinet integration) UL type 12 conforming to UL 61800-5-1 (cabinet integration)
Prospective line I _{sc}	50 kA
Apparent power	223 kVA at 380...480 V normal duty 181 kVA at 380...480 V heavy duty
Continuous output current	302 A at 2.5 kHz for normal duty 250 A at 2.5 kHz for heavy duty
Switching frequency	2.5...8 kHz with derating factor 2...8 kHz adjustable
Permissible temporary current boost	1.1 x I _n during 60 s (normal duty) 1.5 x I _n during 60 s (heavy duty)
Width	230 mm
Height	1230 mm

Rates duty January 2016

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

Depth	510 mm
Net weight	100 kg
Marking	CE

Environment

Insulation resistance	> 1 MOhm 500 V DC for 1 minute to earth
Operating position	Vertical +/- 10 degree
Maximum THDI	<48 % from 80...100 % of load
Electromagnetic compatibility	Electrostatic discharge immunity test level 3 conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6
Pollution degree	2 conforming to IEC 61800-5-1
Vibration resistance	1.5 mm peak to peak (f= 2...13 Hz) conforming to IEC 60068-2-6 0.5 gn (f= 13...200 Hz) conforming to IEC 60068-2-6
Shock resistance	7 gn for 11 ms conforming to IEC 60068-2-27
Relative humidity	5...95 % without condensation conforming to IEC 60068-2-3
Ambient air temperature for operation	-10...40 °C (without derating) 40...50 °C (with derating factor)
Ambient air temperature for storage	-40...70 °C
Operating altitude	<= 4800 m with current derating above 1000m
Environmental characteristic	Chemical pollution resistance class 3C3 conforming to IEC 60721-3-3 Dust pollution resistance class 3S3 conforming to IEC 60721-3-3
Standards	IEC 61800-3 IEC 61800-5-1 IEC 61000-3-12 IEC 60721-3 IEC 61508 IEC 13849-1
Product certifications	TÜV cUL

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	69.000 cm
Package 1 Width	75.000 cm
Package 1 Length	135.000 cm
Package 1 Weight	140.000 kg

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	190249
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	3bbb22c2-1823-4e45-bb65-ca06bd66095b
REACH Regulation	REACH Declaration

Use Again

Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins