

SNP-Z20 series

200 Watt

- 200 Watt continuous fanless power
- High efficiency up to 85 %
- Installation height only 38.1 mm

The SNP-Z20 power supply series is distinguished by its very high efficiency ranging from 80 to 85 %. Thus, it can supply 200 W continuous fanless power up to an operating ambient temperature of +50 °C. The complete operating ambient temperature range even extends from 0 °C to +70 °C. By its high-grade components as well as by its overload, short circuit and overvoltage protection the SNP-Z20 series reaches its high MTBF of over 300 000 h.



Industry

Technical data

Input voltage	85...264 V AC, active PFC
Input frequency	47...63 Hz
Input current	4 A / 115 V AC, 2 A / 230 V AC
Inrush current	<30 A / 115 V AC, <60 A / 230 V AC, +25 °C
Efficiency	App. 85 %, SNP-Z201 app. 80 %, at 230 V AC and convection-cooled
Hold up time	App. 20 ms / 115 V AC
Protection	Short circuit protection: Switch off with auto-recovery Overload protection: Switch off with auto-recovery Overvoltage protection: Switch off (model / response threshold) SNP-Z207 (13.1...15.1 V), SNP-Z208 (17.6...20.1 V), SNP-Z209 (26...31 V), SNP-Z20T (51...60 V), SNP-Z201, -Z206 (5.7...7 V) Overtemperature protection: yes
Line regulation	±1 % at rated load and input voltage change of ±10 %
Load regulation	±1 % (A1 Load step ±40 % related to 60 % load, 230 V AC) ±5 % (A2 Load step ±40 % related to 60 % load, 230 V AC)
Earth leakage current	<3.5 mA
Safety / EMC	TÜV, UL, CB, CE
Operating temperature	0...+70 °C
Derating	In the range of +50...+70 °C, 2.5 % / °C, (SNP-Z201 max. +50 °C)
MTBF	App. 300 000 h according to MIL-HDBK-217F at +25 °C
Storage temperature	-20...+85 °C
Operating humidity	10...90 % RH, non-condensing
Dimensions (WxDxH)	203.2 x 106.7 x 38.1 mm <u>Tolerances:</u> Mounting points: ±0.5 mm, all other dimensions ±0.8 mm
Weight (net)	0.6 kg

Product specific data

Remote sense	Regulation range 0.5 V, at A1
Max. capacitive load	SNP-Z206: 30 000 µF, -Z207, -Z208: 6 000 µF, -Z209: 2 000 µF, -Z20T: 1 000 µF
Convection-cooled	180 W: SNP-Z206, 200 W: SNP-Z207, -Z208, -Z209, -Z20T, -Z201
Fan-cooled	225 W: 18CFM (31 m³/h), SNP-Z206, 250 W: 18CFM (31 m³/h), SNP-Z207, -Z208, -Z209, -Z20T, -Z201

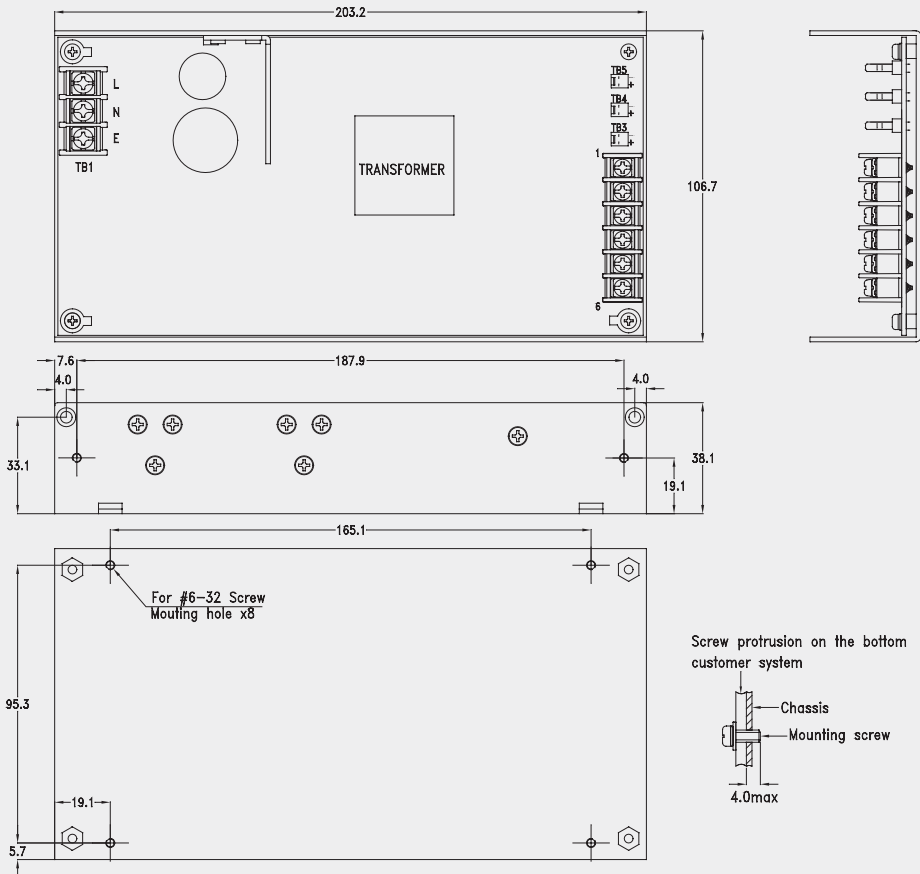
Article No.	Output	Output voltage	Output current			Ripple & Noise	Efficiency
			min	Rated load	max load		
SNP-Z206	A1	+5 V	1 A	36 A	45 A	<50 mV _{SS}	85 %
SNP-Z207	A1	+12 V	0 A	17 A	21 A	<100 mV _{SS}	85 %
SNP-Z208	A1	+15 V	0 A	13.5 A	17 A	<100 mV _{SS}	85 %
SNP-Z209	A1	+24 V	0 A	8.5 A	10.5 A	<100 mV _{SS}	85 %
SNP-Z20T	A1	+48 V	0 A	4.3 A	5.2 A	<100 mV _{SS}	85 %
SNP-Z201	A1	+5 V	2 A	20 A	25 A	<50 mV _{SS}	80 %
	A2	+12 V	0 A	6 A	8 A	<120 mV _{SS}	
	A3	12 V _{isolated}	0 A	2 A	3 A	<120 mV _{SS}	

SNP-Z201: Output A3 is galvanically isolated from A1 and A2. Ripple and noise was measured by a 15 MHz bandwidth limited oscilloscope with connected 0.47 µF ceramic capacitor at each output. As a power component this PSU is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards.

Drawing SNP-Z20 series

Tolerances:

Mounting points: ±0.5 mm,
all other dimensions ±0.8 mm



Connectors:

SNP-Z206:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 5 V fan / TB4: LED / TB5: Remote Sense Molex 5045-02A
TB2: PIN1,2,7,8: +5 V / PIN3,4,5,6: GND

SNP-Z207:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 12 V fan / TB4: LED / TB5: Remote Sense Molex 5045-02A
TB2: PIN1,2,3: +12 V / PIN4,5,6: GND

SNP-Z208:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 12 V fan / TB4: LED / TB5: Remote Sense Molex 5045-02A
TB2: PIN1,2,3: +15 V / PIN4,5,6: GND

SNP-Z209:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 24 V fan / TB4: LED / TB5: Remote Sense Molex 5045-02A
TB2: PIN1,2,3: +24 V / PIN4,5,6: GND

SNP-Z20T:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 12 V fan / TB4: LED / TB5: Remote Sense Molex 5045-02A
TB2: PIN1,2,3: +48 V / PIN4,5,6: GND

SNP-Z201:

TB1: AC input / clamping screw, TB2: DC output / clamping screw, TB3: 12 V fan / TB4: LED / TB5: Remote Sense / Molex 5045-02A
TB2: PIN1,2: +5 V / PIN3,4,5: GND / PIN6: +12 VA / PIN7: +12 VB GND / PIN8: +12 VB (PIN7/8 are galvanically isolated from PIN1...6)