

**65 W
 AC/DC
 ADAPTER**

65 Watt Value Power

HNP65F-Interchangeable Adapter Serie



HNP-POWER

| Besondere Merkmale | Features |
|--------------------|----------|
|--------------------|----------|

| | |
|--------------------------------------|--|
| Weltweiter Einsatz (3 clips) | Worldwide usage with 3 interchangeable input clips |
| Steckerschaltnetzteil | Plug in switching adaptor |
| Doppelte Isolation | Double insulated |
| Kompakter Aufbau | Small low profile package |
| Überlast- und kurzschlußfest | Overload, short circuit protection |
| Minimalster Leerlaufverlust | Lowest standby power consumption |
| EU CoC V5 tier 2 / EnergyStar DOE VI | EU CoC V5 tier 2/ EnergyStar DOE VI |
| EU Eingangsclip im Lieferumfang | EU AC clip included |

| Anwendung | Application |
|-----------|-------------|
|-----------|-------------|

| | |
|-------------------------|-------------------------|
| Minicomputer | Minicomputer |
| Drahtlose Kommunikation | Wireless communications |
| Peripheriegeräte | Peripherals |
| Netzwerktechnik | Networking |
| Mobile Ausrüstungen | Portable equipment |
| Telekommunikation | Telecom |

| Technische Daten | Specification |
|------------------|---------------|
|------------------|---------------|

(bei 25°C Umgebungstemperatur) at 25 °C ambient temperature

| Eingangsdaten | Input Specifications |
|---------------|----------------------|
|---------------|----------------------|

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|-------------------------|------------------------------|-------------------|
| Eingangsspannung | Input voltages | 90...264 VAC |
| Eingangsfrequenz | Input frequency | 47...63 Hz |
| Eingangsstrom | Input current | 1.5A(rms) @ 90VAC |
| Netzausfallüberbrückung | Hold-up time, nom.conditions | 10ms@230VAC |
| Einschaltstromstoß | Inrush current | <60A/240VAC |
| Leerlaufverlust | No load power consumption | < 0.21 Watt |

| Ausgangsdaten | Output Specifications |
|---------------|-----------------------|
|---------------|-----------------------|

| | | |
|------------------|-------------------|------------------------|
| Leistung | Power | typ.65 Watt |
| Wirkungsgrad | Efficiency | DOE VI / CoC V5 tier 2 |
| Ausregelzeit ±2% | Recovery time ±2% | max. 1 ms |
| Restwelligkeit | Ripple and noise | typ. 200mV pp |

| Allgemeine Daten | General Specifications |
|------------------|------------------------|
|------------------|------------------------|

| | | |
|------------------------|------------------------------|---|
| Betriebstemperatur | Operating temperature | -10°C...+40°C |
| Lagertemperatur | Storage temperature | -20°C...+70°C |
| Arbeits-Luftfeuchte | Operating humidity | 10...90%RH |
| Isolation | Dielectric Withstand (Hipot) | 3000VAC 1min inp.<->outp. |
| Leckstrom | Leakage current | 0.25mA max.@240 VAC |
| Überstromschutz | Overcurrent protection | continuous, auto restart |
| Kurzschlussfestigkeit | Shortcircuit protection | no damage, auto recovery |
| Zulassungsbestimmungen | Safety requirements | TÜV/GS EN62358-1:2014+A11:2017 UL 62368-1:2014, CAN/CSA-C22.2 62368-1:2014 UL 60950-1:2007/R:2014-10; CAN/CSA-C22.2 60950-1:2007+A2:2014; UKCA (see DoC) EN55032:2015; EN55035:2017 EN61000-3-2:2019;EN61000-3-3:2013+A1:2019 |

| | | |
|-----|-----|---|
| EMV | EMC | EN55032:2015; EN55035:2017 EN61000-3-2:2019;EN61000-3-3:2013+A1:2019 |
|-----|-----|---|

| | | |
|------|------|-------------|
| RoHS | RoHS | 2015/863/EU |
|------|------|-------------|



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65 W AC/DC ADAPTER

Bestell-Information / Order Information

| Modell | Ausgang Output | Last/Load | |
|------------|----------------|-----------|-------|
| | | Min. | Max. |
| HNP65F-120 | 12 V | 0.0 A | 5 A |
| HNP65F-150 | 15 V | 0.0 A | 4,3 A |
| HNP65F-240 | 24 V | 0.0 A | 2,7 A |

Vermerk

Andere Versionen (Spannungen / Stecker / Farben) mit Mindestbestellmengen auf Anfrage

Note

Other versions (Voltages / Connectors / Colors) with minimum order quantities on request

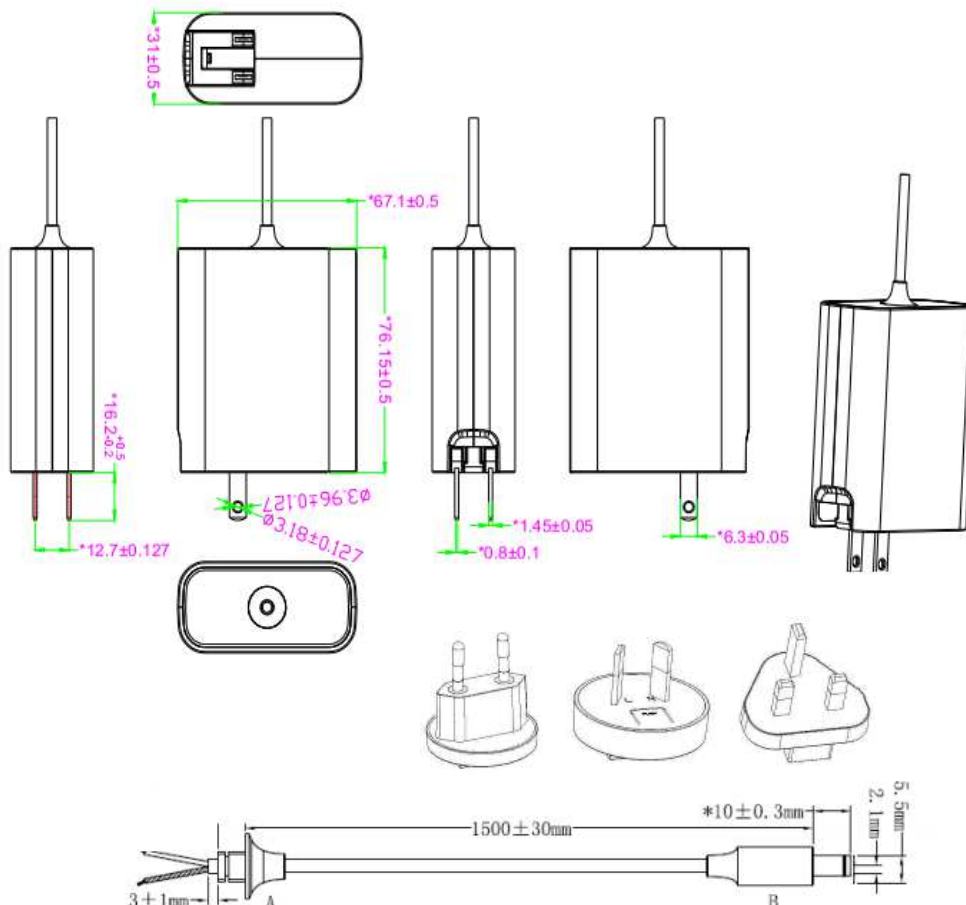
MEMO:

Mechanik

Mechanical

| | | |
|--|--------------|---|
| L×B×H | L×W×H | 76,1 × 67,1 × 31 mm |
| Gewicht | Weight | 207 g |
| DC-Stecker | DC-connector | 2.1 x 5.5 x 10 mm , inside positive, outside negative |
| DC-Kabel | DC-cable | L=1500mm , UL1185 18AWG |
| AC-clips im Lieferumfang / AC-clips included | | EU |
| Zusätzlich bestellbare Clips / Extra order clips | | UK + AU |

PIN-Belegung und Zeichnung / Pin Assignments & Drawing





Energieeffizienz / Efficiency (EU) 2019/1782

| Model | Input Voltage/Frequency | Output Voltage(V) | Output Current(A) | Power for label | Average efficiency | Efficiency at 10% load | No load power consumption (Watt) |
|---------------------|-------------------------|-------------------|-------------------|-----------------|--------------------|------------------------|----------------------------------|
| HNP06-USBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,46% | 78,85% | 0.07W |
| HNP06-050L6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,46% | 78,85% | 0.07W |
| HNP06-051-MiniUSBL6 | 230Vac / 50Hz | 5.1 | 1.47 | 7.5W | 78,55% | 74,27% | 0.10W |
| HNP06-060L6 | 230Vac / 50Hz | 6.0 | 1.25 | 7.5W | 78,13% | 78,13% | 0.05W |
| HNP06-090L6 | 230Vac / 50Hz | 9.0 | 0.83 | 7.5W | 81,45% | 77,22% | 0.06W |
| HNP06-120L6 | 230Vac / 50Hz | 12.0 | 0.62 | 7.5W | 80,71% | 77,66% | 0.09W |
| HNP06-MICROUSBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,46% | 78,85% | 0.07W |
| HNP06-MINIUSBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,46% | 78,85% | 0.07W |
| HNP06I-USBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,13% | 78,15% | 0.08W |
| HNP06I-050L6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,13% | 78,15% | 0.08W |
| HNP06I-090L6 | 230Vac / 50Hz | 9.0 | 0.83 | 7.5W | 80,18% | 76,48% | 0.07W |
| HNP06I-120L6 | 230Vac / 50Hz | 12.0 | 0.62 | 7.5W | 81,70% | 76,52% | 0.06W |
| HNP06I-MicroUSBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,13% | 78,15% | 0.08W |
| HNP06I-MiniUSBL6 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,13% | 78,15% | 0.08W |
| HNP07-050V2 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,21% | 72,50% | 0.06W |
| HNP07-090V2 | 230Vac / 50Hz | 9.0 | 0.84 | 7.5W | 80,58% | 74,04% | 0.06W |
| HNP07-120V2 | 230Vac / 50Hz | 12.0 | 1.00 | 7.5W | 81,05% | 70,94% | 0.06W |
| HNP07-USBV2 | 230Vac / 50Hz | 5.0 | 1.50 | 7.5W | 77,15% | 72,51% | 0.06W |
| HNP12-USBL6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,64% | 78,92% | 0.06W |
| HNP12-050L6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,64% | 78,92% | 0.06W |
| HNP12-090L6 | 230Vac / 50Hz | 9.0 | 1.30 | 11.7W | 83,19% | 80,69% | 0.07W |
| HNP12-120L6 | 230Vac / 50Hz | 12.0 | 1.00 | 12.0W | 85,56% | 82,15% | 0.07W |
| HNP12-150L6 | 230Vac / 50Hz | 15.0 | 0.80 | 12.0W | 83,12% | 71,42% | 0.09W |
| HNP12-240L6 | 230Vac / 50Hz | 24.0 | 0.50 | 12.0W | 86,71% | 77,66% | 0.07W |
| HNP12-MicroUSBL6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,64% | 78,92% | 0.06W |
| HNP12I-USBL6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,41% | 78,96% | 0.06W |
| HNP12I-050L6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,64% | 78,92% | 0.06W |
| HNP12I-090L6 | 230Vac / 50Hz | 9.0 | 1.30 | 11.7W | 83,44% | 81,01% | 0.07W |
| HNP12I-120L6 | 230Vac / 50Hz | 12.0 | 1.00 | 12.0W | 85,72% | 82,15% | 0.05W |
| HNP12I-150L6 | 230Vac / 50Hz | 15.0 | 0.80 | 12.0W | 83,12% | 71,42% | 0.09W |
| HNP12I-240L6 | 230Vac / 50Hz | 24.0 | 0.50 | 12.0W | 86,71% | 77,15% | 0.07W |
| HNP12I-MicroUSBL6 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 80,40% | 79,00% | 0.06W |
| HNP12-050V2 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 82,12% | 75,04% | 0.06W |
| HNP12-090V2 | 230Vac / 50Hz | 9.0 | 1.33 | 12.0W | 83,58% | 74,58% | 0.06W |
| HNP12-120V2 | 230Vac / 50Hz | 12.0 | 1.00 | 12.0W | 84,02% | 74,66% | 0.06W |
| HNP12-USBV2 | 230Vac / 50Hz | 5.0 | 2.40 | 12.0W | 83,54% | 76,44% | 0.06W |
| HNP18-USBV2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,17% | 78,62% | 0.06W |
| HNP18-CV2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,01% | 78,58% | 0.06W |
| HNP18-050V2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,34% | 78,75% | 0.06W |
| HNP18-090V2 | 230Vac / 50Hz | 9.0 | 2.00 | 18.0W | 85,51% | 82,24% | 0.06W |
| HNP18-120V2 | 230Vac / 50Hz | 12.0 | 1.50 | 18.0W | 85,67% | 82,62% | 0.06W |
| HNP18-150V2 | 230Vac / 50Hz | 15.0 | 1.20 | 18.0W | 85,63% | 82,74% | 0.06W |
| HNP18-240V2 | 230Vac / 50Hz | 24.0 | 0.75 | 18.0W | 85,92% | 83,07% | 0.07W |
| HNP18I-USBV2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,26% | 78,81% | 0.06W |
| HNP18I-CV2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,15% | 78,69% | 0.06W |
| HNP18I-050V2 | 230Vac / 50Hz | 5.0 | 3.00 | 18.0W | 82,30% | 78,83% | 0.06W |
| HNP18I-090V2 | 230Vac / 50Hz | 9.0 | 2.00 | 18.0W | 85,43% | 82,15% | 0.06W |
| HNP18I-120V2 | 230Vac / 50Hz | 12.0 | 1.50 | 18.0W | 85,77% | 82,59% | 0.06W |
| HNP18I-150V2 | 230Vac / 50Hz | 15.0 | 1.20 | 18.0W | 85,74% | 82,95% | 0.06W |
| HNP18I-240V2 | 230Vac / 50Hz | 24.0 | 0.75 | 18.0W | 86,08% | 83,17% | 0.07W |
| HNP20EU-CPD | 230Vac / 50Hz | 5.0 | 3.00 | 15.0W | 81,39% | 78,44% | 0.10W |
| | 230Vac / 50Hz | 9.0 | 2.22 | 19.98W | 85,47% | 82,15% | 0.10W |
| | 230Vac / 50Hz | 12.0 | 1.67 | 20.04W | 85,48% | 82,16% | 0.10W |
| HNP20EU-CPDV2 | 230Vac / 50Hz | 5.0V | 3.0A | 15.0W | 84,80% | 79,16% | 0.03W |
| | 230Vac / 50Hz | 9.0V | 2.22A | 19.98W | 88,57% | 81,70% | 0.03W |
| | 230Vac / 50Hz | 12.0V | 1.67A | 20.04W | 88,78% | 78,82% | 0.03W |
| HNP24-090L6 | 230Vac / 50Hz | 9.0 | 2.50 | 22.5W | 86,14% | 84,15% | 0.05W |
| HNP24-120L6 | 230Vac / 50Hz | 12.0 | 2.00 | 24.0W | 86,12% | 83,58% | 0.05W |
| HNP24-150L6 | 230Vac / 50Hz | 15.0 | 1.60 | 24.0W | 86,74% | 82,89% | 0.09W |
| HNP24-240L6 | 230Vac / 50Hz | 24.0 | 1.00 | 24.0W | 87,64% | 84,06% | 0.07W |
| HNP24I-090L6 | 230Vac / 50Hz | 9.0 | 2.50 | 22.5W | 86,14% | 84,15% | 0.05W |
| HNP24I-120L6 | 230Vac / 50Hz | 12.0 | 2.00 | 24.0W | 86,12% | 83,58% | 0.05W |
| HNP24I-150L6 | 230Vac / 50Hz | 15.0 | 1.60 | 24.0W | 85,98% | 83,11% | 0.10W |
| HNP24I-240L6 | 230Vac / 50Hz | 24.0 | 1.00 | 24.0W | 87,64% | 84,06% | 0.07W |
| HNP30EU-CPD | 230Vac / 50Hz | 5.0V | 3.0A | 15.0W | 85,16% | 80,20% | 0.07W |
| | 230Vac / 50Hz | 9.0V | 3.0A | 27.0W | 88,15% | 83,58% | 0.07W |
| | 230Vac / 50Hz | 12.0V | 2.5A | 30.0W | 89,03% | 82,83% | 0.07W |
| | 230Vac / 50Hz | 15.0V | 2.0A | 30.0W | 89,16% | 81,45% | 0.07W |
| | 230Vac / 50Hz | 20.0V | 1.5A | 30.0W | 88,68% | 77,83% | 0.07W |
| HNP36-4USB | 230Vac / 50Hz | 5.0 | 7.20 | 36.0W | 86,70% | 85,30% | 0.07W |
| HNP36I-4USB | 230Vac / 50Hz | 5.0 | 7.20 | 36.0W | 86,70% | 85,30% | 0.07W |
| HNP40F-2CPD | 230Vac / 50Hz | 5.0V | 3.0A | 15.0W | 85,66% | 80,00% | 0.17W |
| | 230Vac / 50Hz | 9.0V | 2.22A | 19.98W | 89,08% | 82,04% | 0.17W |
| | 230Vac / 50Hz | 12.0V | 1.67A | 20.04W | 89,55% | 80,72% | 0.17W |
| HNP42EU-050 | 230Vac / 50Hz | 5.0 | 5.00 | 25.0W | 84,28% | 80,90% | 0.10W |
| HNP42EU-090 | 230Vac / 50Hz | 9.0 | 3.00 | 27.0W | 85,90% | 81,26% | 0.10W |
| HNP42EU-120 | 230Vac / 50Hz | 12.0 | 3.50 | 42.0W | 88,05% | 84,41% | 0.10W |
| HNP42EU-150 | 230Vac / 50Hz | 15.0 | 2.80 | 42.0W | 88,47% | 84,21% | 0.10W |
| HNP42EU-240 | 230Vac / 50Hz | 24.0 | 1.75 | 42.0W | 89,20% | 84,15% | 0.10W |
| HNP42I-050 | 230Vac / 50Hz | 5.0 | 5.00 | 25.0W | 84,28% | 80,90% | 0.10W |
| HNP42I-090 | 230Vac / 50Hz | 9.0 | 3.00 | 27.0W | 87,02% | 84,03% | 0.08W |
| HNP42I-120 | 230Vac / 50Hz | 12.0 | 3.50 | 42.0W | 87,99% | 85,11% | 0.07W |
| HNP42I-150 | 230Vac / 50Hz | 15.0 | 2.80 | 42.0W | 88,84% | 86,01% | 0.08W |
| HNP42I-240 | 230Vac / 50Hz | 24.0 | 1.75 | 42.0W | 89,65% | 86,53% | 0.08W |
| HNP65EU-CPDGaN | 230Vac / 50Hz | 5.0V | 3.0A | 15.0W | 84,30% | 69,23% | 0.07W |
| | 230Vac / 50Hz | 9.0V | 3.0A | 27.0W | 88,03% | 76,96% | 0.07W |
| | 230Vac / 50Hz | 12.0V | 3.0A | 36.0W | 88,86% | 79,13% | 0.07W |
| | 230Vac / 50Hz | 15.0V | 3.0A | 45.0W | 89,57% | 82,09% | 0.07W |
| | 230Vac / 50Hz | 20.0V | 3.25A | 65.0W | 90,46% | 83,75% | 0.07W |
| HNP65F-120 | 230Vac / 50Hz | 12.0 | 5.00 | 60W | 88,15% | 86,23% | 0.09W |
| HNP65F-150 | 230Vac / 50Hz | 15.0 | 4.30 | 60W | 90,10% | 85,33% | 0.02W |
| HNP65F-240 | 230Vac / 50Hz | 24.0 | 2.70 | 60W | 90,78% | 87,56% | 0.01W |
| HNP65-120L6 | 230Vac / 50Hz | 12.0 | 5.00 | 60.0W | 89,00% | 83,00% | 0.16W |
| HNP65-150L6 | 230Vac / 50Hz | 15.0 | 4.30 | 64.5W | 89,50% | 83,00% | 0.16W |
| HNP65-240L6 | 230Vac / 50Hz | 24.0 | 2.72 | 65.2W | 90,00% | 83,00% | 0.16W |
| HNP90M-120 | 230Vac / 50Hz | 12.0V | 7.0A | 84.0W | 88,59% | 89,98% | 0.10W |
| HNP90M-190 | 230Vac / 50Hz | 19.0V | 4.7A | 89.3W | 88,62% | 87,51% | 0.12W |
| HNP90M-240 | 230Vac / 50Hz | 24.0V | 3.75A | 90.0W | 89,58% | 86,49% | 0.13W |
| HNP120M-120 | 230Vac / 50Hz | 12.0V | 8.0A | 96.0W | 88,56% | 89,18% | 0.14W |
| HNP120M-240 | 230Vac / 50Hz | 24.0V | 5.0A | 120.0W | 88,49% | 72,54% | 0.13W |
| HNP120M-480 | 230Vac / 50Hz | 48.0V | 2.7A | 129.6W | 89,64% | 87,68% | 0.11W |
| HNP180U-120 | 230Vac / 50Hz | 12.0V | 8.5A | 102.0W | 88,61% | 80,16% | 0.07W |
| HNP180U-240 | 230Vac / 50Hz | 24.0V | 7.5A | 180.0W | 91,35% | 85,82% | 0.03W |
| HNP180U-480 | 230Vac / 50Hz | 48.0V | 3.7A | 177.6W | 91,02% | 82,22% | 0.02W |