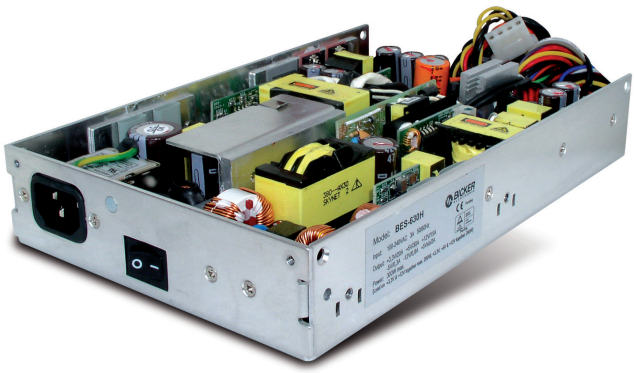
BES-630H

300 Watt

- **300 Watt continuous fanless power**
- **Operating temperature -20…+70 °C**
- **Rugged design**

By its rugged design the 300 W ATX PC power supply BES-630H is the ideal power supply for fanless working applications in high-end systems.
Due to its extremely high efficiency of ≥82 % the BES-630H can supply 300 W without active cooling by fan. It is designed for an ambient temperature range of -20 up to +70 °C.



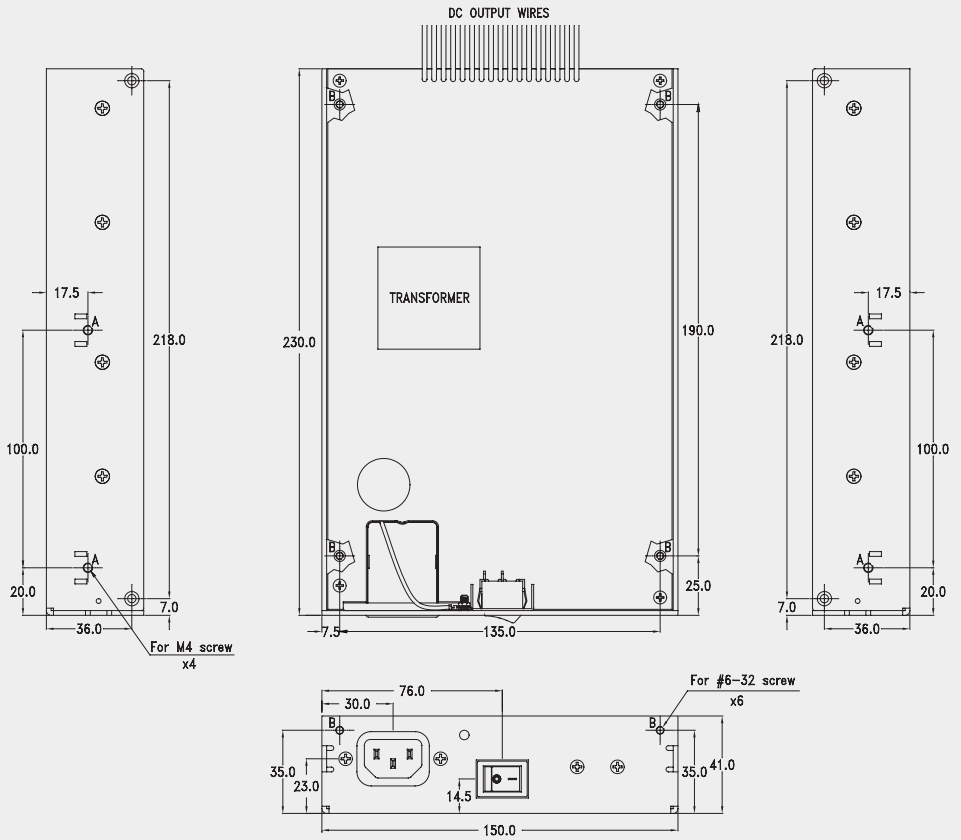
Technical data	
Input voltage	90…264 V AC (active PFC)
Input frequency	47…63 Hz
Input current	6 A (115 V AC) / 3 A (230 V AC)
Inrush current	30 A (115 V AC), 60 A (230 V AC) at +25 °C
Efficiency	≥82 %, at 230 V AC and nominal power
Hold up time	20 msec / 115 V AC
Power-Good-Signal	Switch on delay 100…500 msec Switch off delay 1 msec
Protection	Short circuit protection: At each output, reboot Overload protection: At every channel, reboot Overtemperature protection: Switch off at 120 °C, auto-recovery at 76 °C heatsink temperature Overvoltage protection: +3.3 V (+3.6…+5 V), +5 V (+5.7…+7 V), +12 V (+13.4…+15.6 V)
Earth leakage current	<3.5 mA, 240 V AC
Safety / EMC	CE
Operating temperature	0…+70 °C, start up from -20 °C
Derating	From +50…+70 °C, 2.5 % / °C
MTBF	165 000 h at +25 °C, according to MIL-HDBK-217F
Storage temperature	-40…+75 °C
Operating humidity	5…95 % RH, non-condensing at 40 °C
Dimensions	230 x 150 x 42 mm ±0.5 mm
Weight (net)	1.65 kg

Product specific data	
Vibration	10…55 Hz at 2 G (non operating 3 G), 3-minute period, 30 minutes along x, y, z axis
Shock	15 G (30 G non operating) for 11msec one time for each ±x, ±y, ±z axis

Article No.	Output voltage	Output current min	max	peak	Load regulation	Ripple & Noise
BES-630H	+3.3 V	0 A	20 A		±5 %	50 mV
	+5 V	0 A	25 A		±5 %	50 mV
	+12 V	1 A	15 A	18 A	±5 %	120 mV
	-12 V	0 A	0.8 A		±10 %	120 mV
	-5 V	0 A	0.3 A		±10 %	50 mV
	+5 V_{sb}	0.1 A	2 A		±5 %	50 mV

Max. output power is 300 W. Combined max. output load at +3.3 V and +12 V must not exceed 200 W. Combined max. output load at +3.3 V, +5 V and +12 V must not exceed 280 W. Peak output at +12 V is allowed for 5 seconds, changing the regulation range by ±10 %. Ripple and Noise was measured by a 15 MHz bandwidth limited oscilloscope with connected 47 µF electrolytic capacitor and 0.47 µF ceramic capacitor at each output. For better heat dissipation it is recommended to apply thermal contact to the power supply. 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.

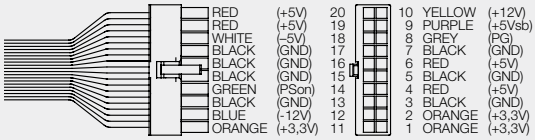
Drawing BES-630H



Tolerance ±0.5 mm

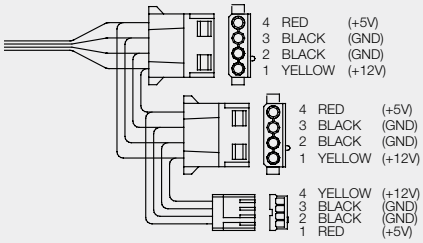
Cable harness BES-630H

ATX, 350 mm

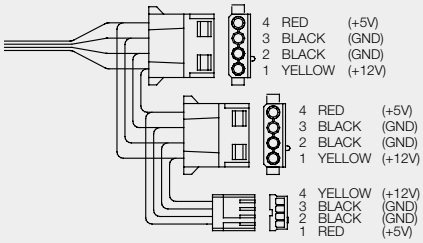


P4, 420 mm

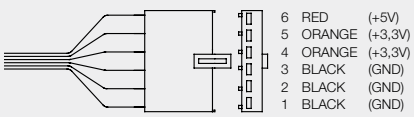
HD, 300 mm
HD, 155 mm
FDD, 200mm



HD, 460 mm
HD, 155 mm
FDD, 200 mm



AUX, 420 mm



Tolerance ±20 mm