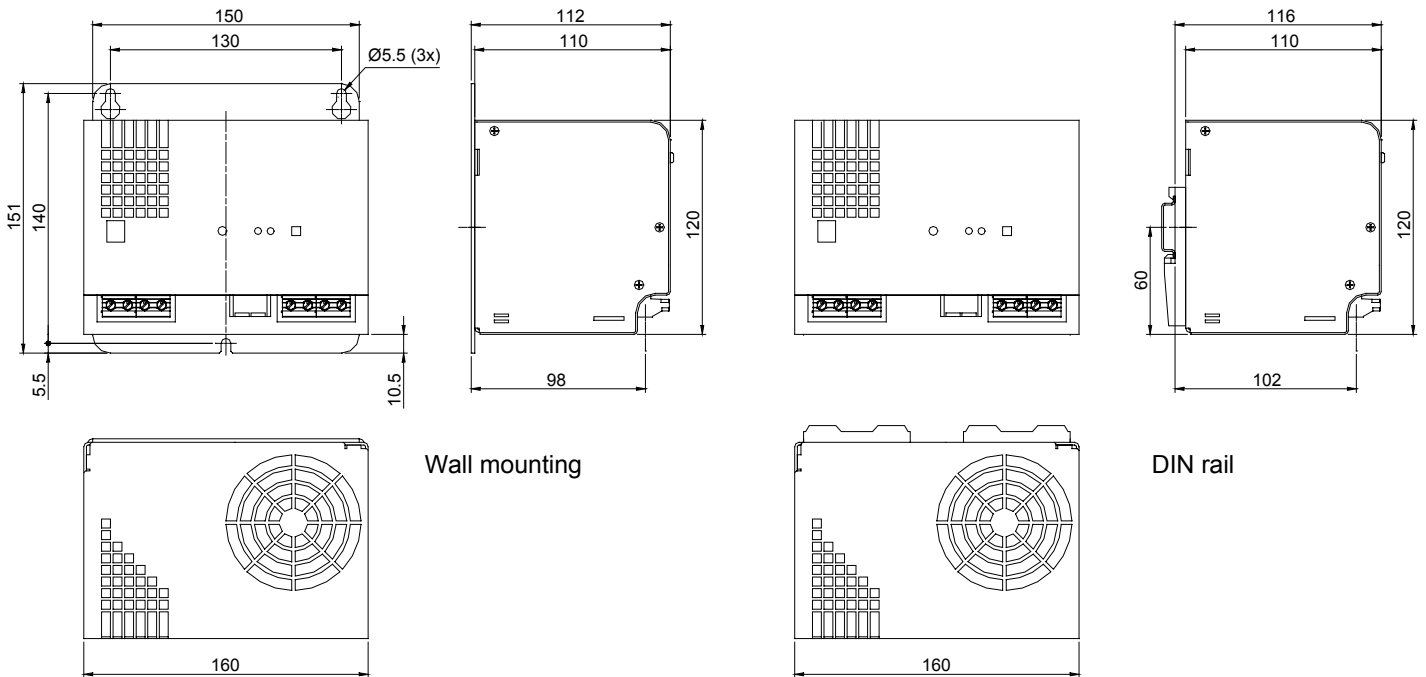


**AC-DC POWER SUPPLY
PRIMARY SWITCHED MODE
SINGLE OUTPUT
PH 520 SERIES**



- Input: 120 / 230 VAC switchable (DC 263 – 350V)
- Internal fuse
- Overtemperature protection
- Output adjustable *
- Parallel connection with load sharing *
- Power boost with high start-up current 140% Inenn *
- Control signals *
- Can be operated in any assembly position

* additional features, not included in PH 520-2420A model



Wall mounting

DIN rail

ORDER DATA			Order numbers in italics	
Vo V	Io A	Preset range Vo V	Type No. DIN-rail	Type No. Wall mounting
24	0 - 20	-	PH520-2420A <i>14.6040.120</i>	PH520-2420A <i>14.6040.125</i>
24	0 - 20	22,5 – 31,5 *	PH520-2420 <i>14.6040.100</i>	PH520-2420 <i>14.6040.105</i>
48	0 - 10	42,5 – 54	PH520-4810 <i>14.6040.300</i>	PH520-4810 <i>14.6040.305</i>

* max. output 540 watts


Further output voltages upon request.

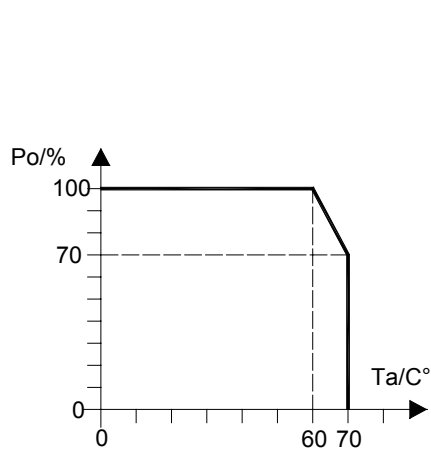
Redundancy version (PH520-...R) upon request.

Please ensure a distance of approx. 30mm between both the air-inlet openings at the front of the housing and the air-outlet openings at the top of the device and surrounding components or surfaces.

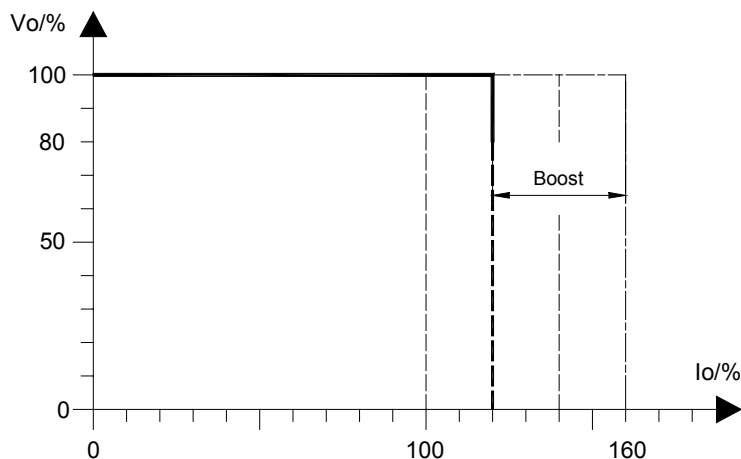
Also make sure that outgoing air is not sucked back into the device during installation.

**AC / DC POWER SUPPLY
PRIMARY SWITCHED MODE
SINGLE OUTPUT
P 520 SERIES**

INPUT		EMC	
Input voltage range	AC 187 – 264V, 50/60 Hz mechanical switchover to AC 90-134V DC 263 – 350V (on 230V) requiring external DC fuse	Mains feedback (PFC)	EN 61000-3-2 Class A
Efficiency	89%	Flicker	EN 61000-3-3
Input current limitation**	≤ 35 A _{peak} typ. in cold state ≤ 70 A _{peak} typ. in hot state	Interference suppression/ Interference immunity	EN 61000-6-2 Intensity 4 EN 61000-4-2 Noise level 10V/m EN 61000-4-3 Intensity 4 EN 61000-4-4 Intensity 4 EN 61000-4-5 Intensity 4 EN 61000-4-6 Noise level 10V/m EN61000-4-11 ENV 50204 Noise level 10V/m
Internal fuse	16ATH / 250V	Interference emission	EN 50081-1 EN 55011 / EN 55022 Class B Radiation depends on assembly
OUTPUT		OPERATING DATA	
Preset range Vo *	22.5 – 31.5V / 42.5 – 54V	Temperature range	-25°C to 70°C, integral temperature-controlled fan, air intake at front
Tolerance of Vo _{nominal}	+ - 0,1V (PH520-2420A 24V -0% / +4%)	Derating	3% / K at +60°C (see diagram)
Max. output	540W	Weight	1.6 kg
Operation indicator **	Green LED for Vo, red LED for error	MECHANICS	
Ripple	80 mV _{ss} typ.	Connection	Mains input: 3-pole, 0.6 - 0.7 Nm 0.75-4/6 mm ² strand/wire Load output: 4-pole, 0.6 - 0.7 Nm 0.75-4/6 mm ² strand/wire Control signals**: 4-pole, 0.79 Nm 0.15 – 2.5 mm (with plug connector)
Noise voltage	120 mV _{ss} typ.	Assembly	All systems can be snapped onto a symmetrical 35mm DIN-rail according to EN 50022 with a diameter of 1 to 2.5 mm or wall-mounted with mounting plates.
Temperature coefficient	0.025% / K	EXPLANATORY NOTES	
Switch on/switch off	No Vo overshoot (soft-start)	PE ⊕	Protective conductor Do not use supply without PE-connection!
Start-up delay	< 1 s	+ / -	Load connections
Rise time	15 ms typ., 350 ms at 100.000 µF load	Relais/OK/Fail *	Monitoring connections
PROTECTION AND CONTROLLING		Remote on/off*	Control connections
Overvoltage protection	33/58 V automatic repeat	Switching from single * to parallel operation mode	Use switch at the front of housing
Current limitation	105 – 120% I _{nominal} , output permanent short-circuit proof, boost time 1.5 s 140%I _{nominal} **	SAFETY	
Overtemperature protection	Switches off if overheated, reconnection with hysteresis	EN 60950 / VDE 0805 / VDE 113 Safety Class I, VDE 0100, IP 20 Sparking distance in air and leakage distance according to VDE 0160/pr / EN 50178 UL 508 listed / UL 1950 / CSA 22.2-950	
Mains buffering	10 ms typ.	* Additional features, not included in PH520-2420A model ** Values are different for PH520-2420A	
Power-Good-Signal* ("DC OK")	Relais contact (<60V/0.2A), changing at Vo 18-20V / 35-40V from OK to FAIL	 Please refer to the MGV user instructions before use. (also in internet: www.mgv.de)	
Remote on/off *	External switch-off with >3-24V / 4-60V or switch from Vo		



Derating



Current limiting characteristic

Start-up takes place with short-circuit current between 140% and 160% of the nominal current for a period of approx. 0.4 s. Start-up frequency is approx. 0.3 Hz. The average short-circuit current is about 125% I_{nominal}