

Order number

**DPNSW 2420**

## Technical Information

### Three Phase Power Supply DPNSW 2420



<b>Description</b>	<b>DPNSW 2420</b>
	Power supply unit for DIN rail assembly 24 V / 20 A with international wide-range input, for automation technology / switch cabinet installation
<b>Characteristics</b>	
	High level of cost-effectiveness
	International AC input range
	Slim housing: 85,5 mm
	High efficiency 92.5%
	Starting current limitation
	Short-circuit proof, overload-proof and surge protected
	Signaling: DC OK signal
<b>Output</b>	
Rated output voltage	24V
Rated current	20A
Output current range	0 ~ 20A
Rated power	480W
Ripple & noise interference voltage (max.)	150mVp-p
Adjustment range of output voltage	24 ~ 28 V
Output voltage tolerance	+/- 1% max.
Mains control	+/- 0.5% max.
Load control	+/- 1% max.
Switch-on time delay, rise time	1200ms, 60ms / 400 VAC    800ms, 60ms / 500 VAC at full load
Hold-up time	20ms / 400 VAC                      20ms / 500 VAC at full load
Terminal assignment	DC OK signal output (30 VDC / 1A) visual, LED green, relay optional
Cable receptacle at DC output	up to 4.0mm <sup>2</sup>

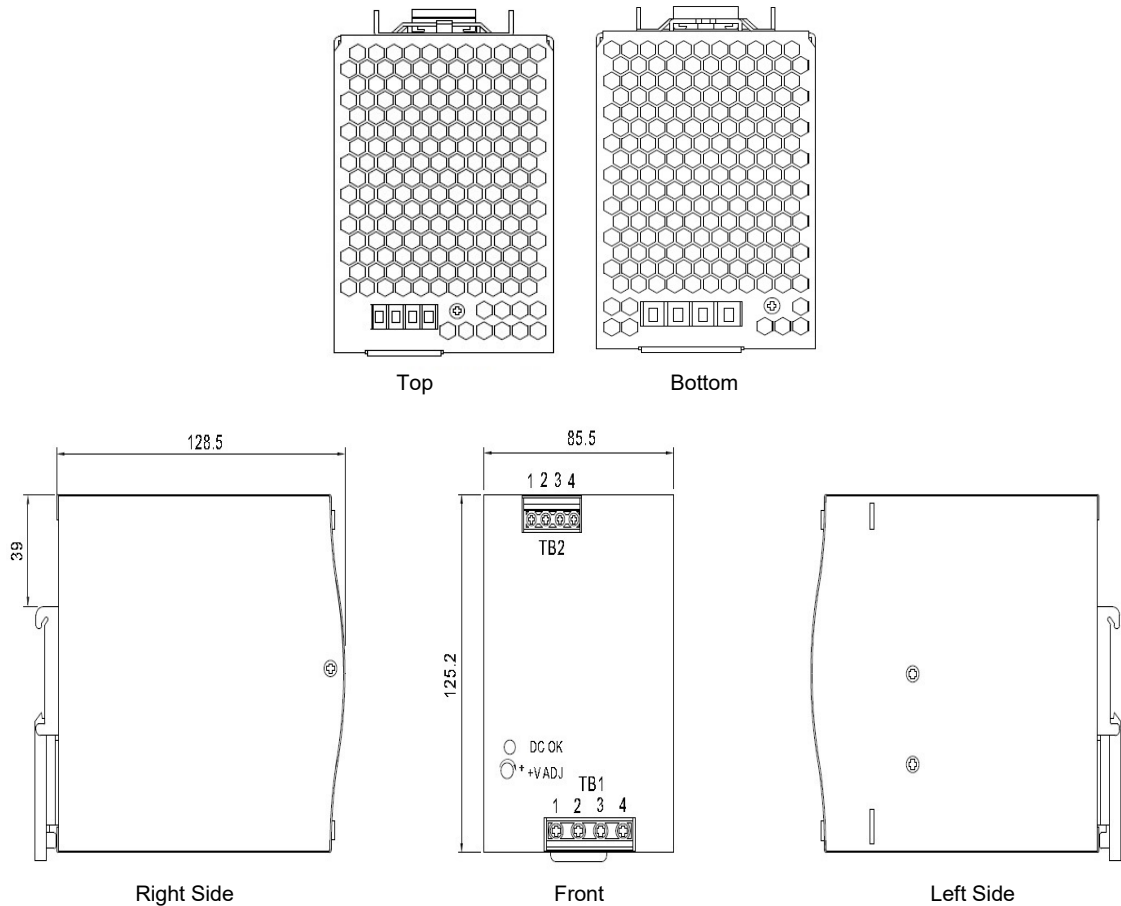
<b>Input</b>	
Input voltage range	Three-phase 340 ~ 550 VAC Two-phase connection under considering derating possible. 480-780 VDC
Frequency range	47 ~ 63 Hz
Power factor	0.9/400 V AC 0.88/500 V AC at full load
Efficiency / type.	92.5 %
Input current	0.85 A / 400 VAC 0.7 A / 500 VAC
Maximum starting current (cold start)	50 A
Ground leakage current	<3.5 mA / 530 VAC
Cable receptacle at AC input	up to 4.0mm <sup>2</sup>

<b>Safety/EMC</b>	
Safety standard	UL508, IEC62368-1 CB approved by UL, EAC TC TC 004 approved
Withstand voltage / test voltage	Input-output: 3KVAC Input housing: 2KVAC output housing: 0.5KVAC Output -DC OK: 0.5KVAC
Insulation resistance	Input-output, input housing, output housing: > 100M Ohms / 500VDC
EMC	EN55032, EN61204-3 Class B
Harmonics	EN61000-3-2 Class A
Interference immunity	EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3
MTBF – Mean Time between Failure	108.2 k h MIL-HDBK-217F (25°C), 391,7k h min. Telcordia SR-332 (Bellcore)

<b>Protection</b>	
Overload protection	105 ~ 130% constant current limit
Overvoltage protection	29 ~ 33 V Output switches off, switching on manually
Overtemperature protection	Output switches off, switching on automatically

<b>Environment</b>	
Operating temperature and humidity	-30 ~ +70°C (see diagram output derating) 20 ~ 95% relative humidity
Storage temperature and humidity	-40 ~ +85°C, 10 ~ 95% relative humidity
Temperature coefficient	+/- 0.03% / °C (0 ~ 50°C)
Vibration	10 ~ 500 Hz, 2G all axes, IEC 60068-2-6

**Weight and dimensions**



TB1: Terminal assignment

Pin No.	Assignment
1	PE $\oplus$
2	AC/L3
3	AC/L2
4	AC/L1

TB2: Terminal assignment

Pin No.	Assignment
1,2	DC OUTPUT +
3,4	DC OUTPUT -

Dimensions W x H x D in mm	85.5 x 125.2 x 128.5
Weight in kg	1.51
Torque clamps above	1.0 Nm
Torque clamps below	1.0 Nm
Distance air circulation/ heat dissipation	Recommended: Above: ca 40 mm Below: ca. 20 mm Left/right: Partial load range ca. 0.5 mm, full load range: ca. 15 mm

