

220-240 VAC Input, 24 VDC Output  
 Rugged design for harsh environment  
 Short circuit protection  
 Over temperature, over load and over voltage protection  
 LED-Indicator for DC ON  
 Cooling by free air convection  
 100% fully tested, incl. burn-in  
 3 year warranty



**SPECIFICATIONS**

**DN-120-24**

**DN-120-48**

**INPUT**

Voltage Range  
 Frequency Range  
 Current (Typ)  
 In-rush Current  
 Efficiency (Typ)

187 - 264 VAC  
 47 - 63 Hz  
 1.0 A  
 30 A  
 86%

187 - 264 VAC  
 47 - 63 Hz  
 1.0 A  
 30 A  
 87%

**OUTPUT**

Rated Current/Power  
 Current Range  
 Ripple and Noise  
 Voltage  
 Line / Load Regulation  
 Hold-up Time  
 Adjustable Output

5 A / 120W (note derating)  
 0 - 5 A  
 max 50 mVp-p  
 24.0±0.05 V  
 20 mV / 50 mV  
 > 25 ms  
 21 - 28 V

2.5 A / 120W (note derating)  
 0 - 2.5 A  
 max 50 mVp-p  
 48.0±0.1 V  
 20 mV / 50 mV  
 > 25 ms  
 40 - 55 V

**PROTECTION**

Overload  
 Short circuit  
 Over Voltage  
 Over Temperature

102 - 110%  
 Max 7.0A  
 Automatic recovery after fault removed  
 26 - 30 V  
 Unit shuts down and restarts after fault removed  
 Unit shuts down and recovers after cooldown

102 - 110%  
 Max 3.5A  
 56 - 59 V

**GENERAL**

Operating Temperature  
 Storage Temperature  
 Lifetime expectancy

-10...70°C (note derating)  
 -25...85°C  
 min 5.7 years

-10...70°C (note derating)  
 -25...85°C  
 min 6.8 years

**STANDARDS**

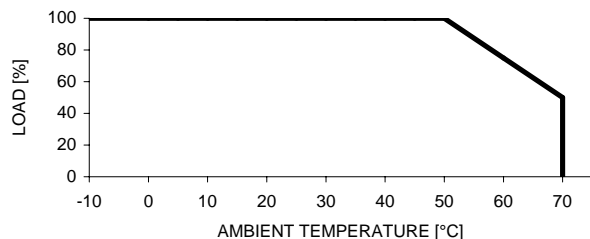
Safety  
 EMI  
 Harmonic current  
 Mains Fluctuations  
 EMS Immunity

EN 60950-1:2006, A11:2009  
 EN 55022:2006,A1:2007  
 EN 61000-3-2:2006,  
 Class A  
 EN 61000-3-3: 2008  
 EN 55024:1998,  
 A1:2001+A2:2003

EN 60950-1:2006, A11:2009  
 EN 55022:2006,A1:2007  
 EN 61000-3-2:2006,  
 Class A  
 EN 61000-3-3: 2008  
 EN 55024:1998,  
 A1:2001+A2:2003

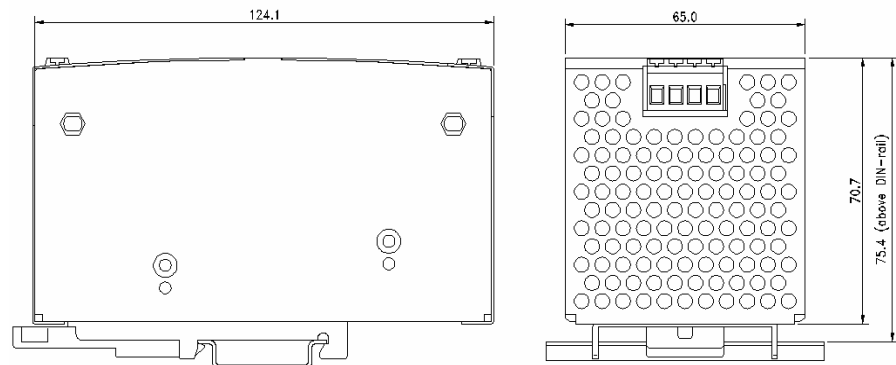
**DERATING**

Temperature Derating  
 2.5% / °C from T>50°C



**NOTES:**

Unit mounted vertically, 25 mm clearance to the side, ventilation slots not covered  
 Unless specified else, all values are given at rated load, 230VAC, 25°C ambient and after warm-up

**DIMENSIONS****MOUNTING****WIRING**

DIN-RAIL: TS35/7.5 or TS35/15 or according to EN 50022. Output wires at top.		
Input and Output	24 - 12AWG	0.5 - 2.5 mm <sup>2</sup>
Screw Torque	5 kgf cm	

**SAFETY NOTES****1. Read Instructions!**

Before working with this unit, read these instructions carefully and completely. Make sure that you have understood all the information and comply with all notes!

**2. Disconnect system from supply network!**

Before any installation, maintenance or modification work, disconnect your system from the supply network and ensure it cannot be reconnected inadvertently. Touching of any live components or improper handling of this power supply can result in failure, death, severe personal injury or substantial property damage

**3. Mounting Instructions**

- Snap unit vertically onto specified DIN-rail. Cages of output connectors shall face to the top. Insert unit with a hearable click onto rail. Shake unit to verify locking action.
- Sufficient air-cooling must be ensured, do not cover any ventilation holes! Leave sufficient space around the unit for cooling! Recommended is 25 mm

**4. Installation Instructions**

The power supplies are constructed in accordance with the safety requirements of IEC/EN60950-1.

Safe operation depends on proper storage, installation and operation.

- The unit must be installed and put into service appropriately by qualified personnel only
- When use stranded wires, all strands must be fastened in the terminal blocks
- Unit and power supply cables must be properly fused
- All output wires must be rated for the power supply output current and must be connected with the correct polarity
- Do not operate without PE connection! To comply with EMC and safety standards the power supply must be operated only if PE terminal is connected to the non-fused earth conductor
- Do not introduce any object into the unit! Keep away from fire and wet conditions or water!
- Only connect or disconnect plugs of connectors when power is off!
- The unit does not contain any service parts. For safety reasons, do not open the power supply. If malfunction occurs under normal operating conditions, return unit to factory for inspection. This also applies when internal fuse is blown.

**5. Recycling**

The unit contains elements that are suitable for recycling, and components that need special disposal. You are therefore requested to make sure that the power supply will be recycled at the end of its service life.

**6. Usage**

This power supply is Built-In Equipment, for Indoor Use only. It is an industrial device and must not be used in equipment where malfunctioning cannot cause severe personal injury, or threaten human life.

**7.Disclaimer**

Information given in this document is believed to be accurate and may changed without any notice