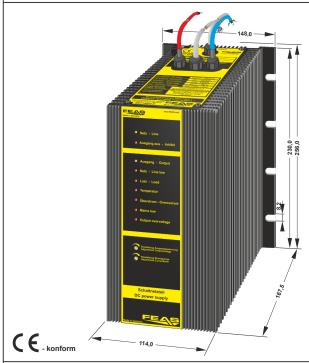
# Product specification Switch mode power supply SNT14024-K



# **Application**

The switch-mode power supplies of the SNT140-K series are powerful and robust devices and they are able to provide sensitive loads in a hard industrial environment with proper regulated voltage.

These features result of a modern construction with a good radio interference protection and high efficiency, integrated in a functional and stable housing fully potted with resin. The short circuit proof output DC voltage of this type can be adjusted from 23.0 to 30.0 V.

The output voltage can be increased up to 120% of the nominal value for a long period, which makes this power supply optimal suited for loads requiring high starting currents. The adjustable current limit, optional in connection with "Fuse-Mode", guarantees an optimal protection of the connected load.

# **Functional principle**

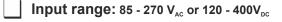
The series SNT140-K is designed as a full-bridge pushpull converter. This type of converter consists in principle two forward converters, which are connected in parallel.

Before the semiconductor-switches alternately being connecting to primary windings of the transformer, a bridge-rectifier rectify the input AC-voltage into a pulsing DC-voltage. Due to this circuit design the transformer core is used in bipolar operation, in order to double the magnetic flux of the core. Compared with a flyback or a forward converter much more power can be transformed with the same core design.

Even during great load fluctuations the push-pull converter generates a smoothed stable output voltage.

#### Design

Completely embedded with resin in aluminium housing for mounting on wall.



Output range: 23.0 - 30.0 V<sub>pc</sub> / 35A

Power: 840 W (nominal)

Boostfunction max. 120%

Permanent switch-off

Fuse-Mode when the current limit is exceeded

**Standby-Function** Output can be switched of

☐ IP65 - IP69K\* \*if poti openings are properly sealed

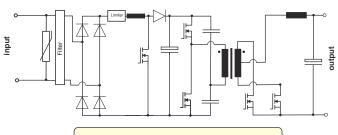
Extensive microprocessor controlled monitoring management

## LED displays

- input voltage control
- input and output voltage deviation
- mains low, output overvoltage
- standby and current-limiting
- load usage (nominal, overload, lout>current limit)
- temperature range (OK, critical, too high)
- short circuit

## Relay signals

- Overload / exceeding of the current limitation or the value set in the fusemode
- short circuit
- Overtemperature
- Output voltage adjustment via integrated 0-10V interface
- Short circuit proof, overload and open ciruit protected
- Parallel operation possible
  - Vibration proof, suitable for the tropics epoxy resin casted
- Conforms to EMC and low voltage directive
  - Output separated according to VDE0551
  - PFC according to IEC/EN 61000-3-2
  - Safety according to VDE, EN, UL, CSA





Please read the data sheets and the operating instructions for further information



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