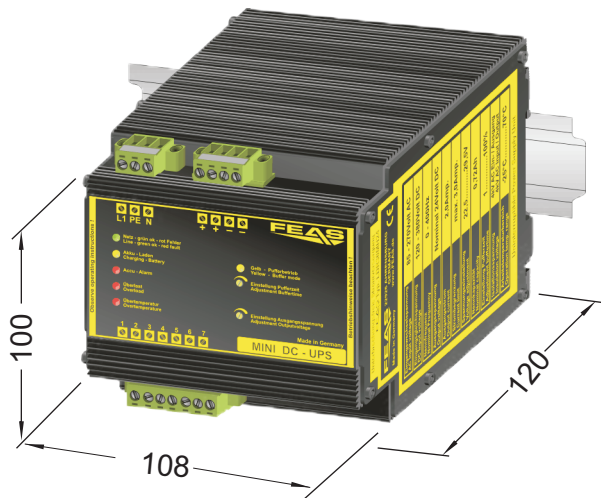


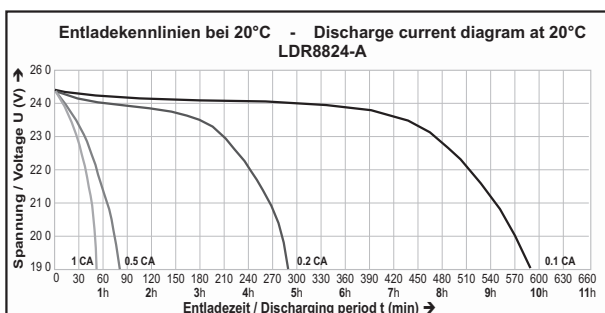
Power supply type LDR30MH24 for 24V_{DC} supply with output buffering and charge controller

Technical data



CE - compliant

- Buffering of the 24V_{DC} line at mains failure
- Integrated NiMH accumulator 0.72 Ah (exchangeable)
- Microprocessor controlled battery monitoring and charge status display
- Relay signals for mains failure, battery defect, overtemperature and battery voltage critical
- LED display for mains failure, overtemperature and overload
- 50% overload over some time possible
- Extra low safety potential PELV (EN 60204), SELV (EN 60950)
- Short circuit, overload and open circuit proof
- Suitable for the tropics epoxy resin casted
- Manual shut down in buffer mode "sleep mode"
- Buffer time terminable (1 up to 20 minutes and unlimited)
- Output potential free according to VDE0551
- Safety according to VDE, EN, UL and CSA



General data

Product specification	Power supply with buffered output
Type	LDR30MH24
FEAS article number	589960
Product function	Buffered DC power supply

Input data

Input voltage AC	85 - 270 V _{AC}
Frequency	0 - 400Hz
Input voltage DC	120 - 380 V _{DC}
Input current per phase at nominal load	at 230 V _{AC} max. 0.25 A
Peak input current	< 5.0 A at 270 V _{AC}
Protective circuit	Transient voltage suppressor varistor

Output data

Nominal output power	48W
Output voltage U _{nom}	24 V _{DC} (22.5 V _{DC} up to 29.5 V _{DC} adjustable)
Output current I _{nom}	2.0 A (3.0A boost)
Residual ripple (20MHz)	< 50 mV _{PP}
Accumulator type	NiMH, 24V, 0.72 Ah
Accumulator control, charge regulator	Microprocessor controlled
Relay contact rating	5A / 30V _{DC} - 5A / 250V _{AC}

Control data

Control deviation load	< 200 mV at load variation 10.....90%
Control deviation line	< 10 mV at line variation ±10%
Control response time	< 10 ms at load variation 10.....90%

Operation data

Duty cycle	100%
Degree of efficiency	ca. 91%
Operation temperature range	-20°C up to +70°C (battery charge -5°C up to 65°C)
Storage temperature range	-30°C up to +85°C (without battery)
Thermal derating	from 50°C with 3% per degree celsius
Cooling	selfcooling, recommended space 15mm each side

Safety devices

Input fuse	at 230V _{AC} 2.0 A delayed
Output fuse	not necessary short circuit proof
Overload protection	integrated
MTBF	>380,000 h without battery

Safety data

Test voltage transformer	5 kV _{AC} according to VDE 0551
High voltage resistance	Input/Output 3.75kV _{AC} acc. to VDE0806/IEC380
Air gap and creepage distance	Primary circuit - Secondary circuit >8mm according to VDE0110
EMI supression	according to VDE 0871B, EN 55022/B
Protection class	class 1 with PE connection (EN60950)
Extra low safety potential	PELV (EN60204), SELV (EN60950)
Ambient humidity	95% relative humidity yearly average bedewing possible, allowed for use in tropical ambient
Protective class enclosure	Ip65
Protective class terminals	IP 20 (BGV A3)
Vibration proof	>30g at 33Hz in X, Y and Z acc. to IEC68 and DIN41640 (without Battery)

Applied construction regulations

VDE	VDE0100, VDE0110, VDE0113, VDE0551, VDE0160/W2, VDE0806
IEC	IEC 60950, IEC61000-6-1-2-3-4, IEC60068-2-3, IEC 60068-2-11-52, IEC 60529, IEC 380
EN	EN60950, EN61140, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN55022, EN55011, EN61000-3-2, EN61000-3-3, EN50204, EN60204, EN60529, EN61000-4-2-3-4-5-6-8-11, EN60068-1
CSA/UL	CSA-C 22.2 / UL60950, UL508, UL1950

Mechanics

Mounting	DIN-rail mount
Dimensions (B x H x T)	108mm x 100mm x 120mm
Weight	approx. 2.3 kg

Advice / comment

FEAS

P.O. Box 1521
D - 22905 Ahrensburg

Phone: +49 4102 42082
Fax: +49 4102 40930

E-Mail: contact@feas.com
Internet: www.feas.com