

Switched-mode power supply unit, 24-28VDC, adjustable, 5A

Powering Business Worldwide*

Part no. SN3-050-EU8 Article no. 100643

Delivery programmo

Product range		SN3 switched-mode power supply units
Description		Primary pulsed power supply, power reserve from up to 50 % Up to 5 devices can be paralleled to increase power and for redundancy
Phases		1-phase
Input voltage range		85 - 264 V AC 100 - 350 V DC
Instructions		At = 264 V DC additionally suitable, use fuse.
Nominal input voltage		110 - 240 V DC 110 - 240 V DC
Rated output voltage		24 V DC (-1/5%)
Rated output current	Α	5
Setting range for the output voltage		22-28 V DC
Rated output power	W	120
For use with		easy MFD EC4P XC-CPU XIOC PS4

Technical data

General					
Standards			EN 61204, 2006/95/EC, 2004/108/EC, EN 50178, EN 60950, UL 60950, UL 508, SELV (EN 60950)		
Degree of protection					
Enclosures			IP20		
Terminals			IP20		
Protection class			according to EN 61140, Class 1		
Mounting			DIN rail (IEC/EN 60715), snap fixing		
Mounting position			Horizontal		
Heat dissipation		W	part no. ≦ 15		
Efficiency		%	88		
Dimensions					
Width		mm	57		
Height		mm	130		
Depth		mm	130		
Weight		kg	0.96		
Minimum distance to adjacent devices		mm	horizontal 10, vertical 80		
Terminal capacities					
			Only operate plug-in terminals off load.		
Input circuit					
Flexible with ferrule		mm^2	0.22.5 (2214 AWG)		
Flexible without ferrule		mm^2	0.22.5 (2214 AWG)		
Massive		mm^2	0.22.5 (2214 AWG)		
Output circuit					
Flexible with ferrule		mm^2	0.122.5 (2614 AWG)		
Flexible without ferrule		mm^2	0.122.5 (2614 AWG)		
Massive		mm ²	0.122.5 (2614 AWG)		
Environmental compatibility					
Ambient temperature, operation		°C	-25 - +70		

Ambient temporature, storage to IEC 40 - 45 5 - 40 - 45 5 5	Ambient temperature, full load	°C	0 - +60 (without derating)
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Section voltage 2			· · · · · · · · · · · · · · · · · · ·
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			FN 61000-6-2
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Each own HF			
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Current consumption A Approx. 22 12 At 110 240 V AC A Approx. 22 12 Power consumption W Normally 135 Inrush current limiter/f² (cold start) 223 A / ca. 0.9 A²s Mains failure bridging ms ***px. ≥ 100 Run-up time after mains voltage applied ms Normally ≥ 100 Transient overvoltage protection x Varistors Internal input fuse (device protection, not accessible) x 4.7 Sicharge current to PE mA 3.5 mA Output circuit y 120 Flated output power W 120 Rated output current T _u ≤ 60 °C A Normally ≤ 7.25 Read output current (power reserves) T _u ≤ 40 °C A Normally ≤ 7.25 Derating 80 °C ≤ T _u ⊆ 70 °C A Normally ≤ 3.5 Control deviation at Normally ≤ 3.5 Normally ≤ 1.00 Load change 1090 %, dynamic Normally ± 2.05 % Normally ≤ 3.5 Residual ripple and switching peaks Normally ≤ 3.00 Normally ≤ 3.05 % Residual ripple and switching peaks			
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Power consumption W Normally 135 Inrush current limitary 1² (toold start) 23 A / ca. 0.9 A² s Mains failure bridging ms Normally ≥ 100 Run-up time after mains voltage applied ms Normally ≥ 100 Transient overvoltage protection axistors Internal injust fuse (device protection, not accessible) mA <3.5 mA	·		
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Mains failure bridging Run-up time after mains voltage applied Run-up time after mains voltage increase (max 2 off) Run-up time after mains voltage approx 35 V AC Power factor correction (PFC) Status indication Run-up time after mains voltage increase (max 2 off) Yes, for voltage increase (max 2 off) Yes, for voltage increase (max 2 off) Yes, for voltage increase (max 2 off)	Inrush current limiter/i ² t (cold start)		\leq 23 A / ca. 0.9 A ² s
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Output circuit L+, L+, L-, L- Proof against short-circuit, no-load and overload Rated output power W 120 Rated output current T _u ⊆ 60 °C A 5 Peak output current (power reserves) Tu ⊆ 40 °C A Normally ⊆ 7.25 Derating 60 °C ⊆ T _u ⊆ 70 °C 2.5 % per Kelvin temperature increase Control deviation at Normally ± 0.05 % Load change 1090 %, dynamic Normally ± 3 % Controller acting time ms Normally ± 0.05 % Rise time 1090 % ms Normally ± 0.05 % Rise time 1090 % ms Normally ± 0.05 % Rise time 1090 % ms Normally ± 0.05 % Rise time 1090 % ms Normally ± 0.05 % Rise time 1090 % ms Normally ± 0.05 % Residual ripple and switching peaks 20 MHz typically < 50 mV _{ss} Can be switched in parallel yes, up to 5 devices for redundancy and for power increase, non symetrical current Series connection capability yes, for voltage increase (max. 2 off) Resistance to reverse feed yes, limited to approx. 35 V AC Power factor correction (PFC) Yes Sta	Discharge current to PE	mA	< 3.5 mA
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Input voltage deviation ±10 % Rise time 1090 % Residual ripple and switching peaks Can be switched in parallel Series connection capability Resistance to reverse feed Power factor correction (PFC) Status indication Normally ±0.05 % A power source in capability and for power increase, non symetrical current yes, for voltage increase (max. 2 off) yes, limited to approx. 35 V AC Yes OUTPUT OK: LED green			
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Can be switched in parallel yes, up to 5 devices for redundancy and for power increase, non symetrical current yes, for voltage increase (max. 2 off) yes, limited to approx. 35 V AC Yes Status indication OUTPUT OK: LED green		1113	
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Power factor correction (PFC) Yes Status indication OUTPUT OK: LED green			
Status indication OUTPUT OK: LED green			
	Power factor correction (PFC)		
Overload characteristics → AWA2727-2318 (www.moeller.net/support)	Status indication		-
	Overload characteristics		→ AWA2727-2318 (www.moeller.net/support)

Behaviour on short-circuit		continuously with current limitation
Current limitation at short-circuit	Α	Approx. 11
Short-circuit protection		Proof against sustained short circuit
Overload protection		thermal protection
Capacitive load starting		Not restricted

Notes

 $\rm At~U \stackrel{\ge}{=} 264~V~DC$ additionally suitable, use external fuse.

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	15
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
$10.2.3.3\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ abnormal\ heat\ and\ fire\ due\ to\ internal\ electric\ effects$			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Meets the product standard's requirements.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

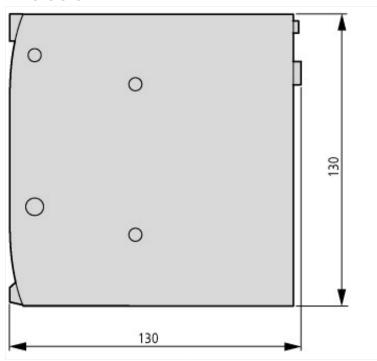
Technical data ETIM 5.0

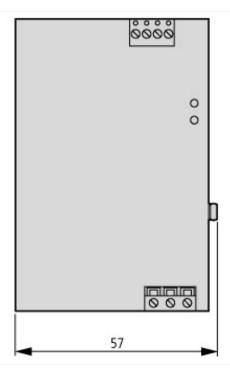
PLC's (EG000024) / PLC system power supply (EC000599)

1 Ed 3 (Eddoudz-1) 1 Ed 3/3tolli powel supply (Eddouds-3)			
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS system power supply (ecl@ss8-27-24-22-09 [AKE532010])			
Input voltage at AC 50 Hz	V	85 - 264	
Input voltage at AC 60 Hz	V	85 - 264	
Input voltage at DC	V	100 - 350	
Type of voltage (input voltage)		AC/DC	
Max. input current AC 50 Hz	Α	2.2	
Max. input current AC 60 Hz	Α	2.2	
Max. input current DC	Α	1.35	

Type of output voltage			DC
Output voltage at AC 50 Hz	,	V	0 - 0
Output voltage at AC 60 Hz	,	V	0 - 0
Output voltage at DC	,	V	0 - 0
Max. output current AC 50 Hz	1	Α	0
Max. output current AC 60 Hz	,	A	0
Max. output current DC	,	A	5
Redundancy			Yes
Suited for safety functions			Yes
Width	1	mm	130
Height	1	mm	130
Depth	ı	mm	57

Dimensions





Additional product information (links)

IL05012005Z (IL05012005Z) Power supply unit

IL05012005Z (IL05012005Z) Power supply unit