

SIMATIC ET200PRO PS/1AC/24VDC/8A/IP67

SIMATIC ET200pro PS
Regulated power supply in
protection type IP67 input: 3 AC
400-480 V output: 24 V/8 A DC

Input	
Input	3-phase AC
Rated voltage value V_{in} rated	400 ... 480 V
Voltage range AC	340 ... 550 V
<ul style="list-style-type: none"> Note 	320 ... 340 V for max. 1 min
Wide-range input	Yes
Overvoltage resistance	Implemented internally with varistors
Mains buffering	at $V_{in} = 400$ V
Mains buffering at I_{out} rated, min.	15 ms; at $V_{in} = 400$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	45 ... 66 Hz
input current	
<ul style="list-style-type: none"> at rated input voltage 400 V 	0.5 A
Switch-on current limiting (+25 °C), max.	40 A
I^2t , max.	3.5 A ² ·s
Built-in incoming fuse	T 4 A
Protection in the mains power input (IEC 898)	Required: Circuit breaker 3RV2011-1DA10 or 3RV2711-1DD10 (UL 489)
Output	
Output	Controlled, isolated DC voltage
Rated voltage V_{out} DC	24 V
<ul style="list-style-type: none"> output voltage at output 1 at DC rated value 	24 V
Total tolerance, static \pm	3 %
Static mains compensation, approx.	0.5 %
Static load balancing, approx.	0.5 %
Residual ripple peak-peak, max.	200 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	250 mV
product function output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for 24 V OK
Signaling	max. 30 V, 10 mA; Power-Good (High-Pegel 1L+ for V_{out} in range 21.3 ... 29 V); Overtemperature warning at least 30 s before switch-off (high level 1L+ when the max. internal temperature is exceeded)
On/off behavior	Overshoot of $V_{out} < 2$ %
Startup delay, max.	1.5 s
Voltage rise, typ.	40 ms
Rated current value I_{out} rated	8 A
Current range	0 ... 8 A
supplied active power typical	192 W
short-term overload current	
<ul style="list-style-type: none"> on short-circuiting during the start-up typical 	50 A
<ul style="list-style-type: none"> at short-circuit during operation typical 	50 A
duration of overloading capability for excess current	
<ul style="list-style-type: none"> on short-circuiting during the start-up 	100 ms
<ul style="list-style-type: none"> at short-circuit during operation 	100 ms

Parallel switching for enhanced performance	No
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	88 %
Power loss at Vout rated, Iout rated, approx.	25 W
Closed-loop control	
Dynamic mains compensation (Vin rated ± 15 %), max.	0.5 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout \pm typ. setting time maximum	1 % 2 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	9.4 A
property of the output short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
• maximum	10 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
galvanic isolation	Protective extra low output voltage Vout according to EN 60950-1 and EN 50178
Protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	0.4 mA
Degree of protection (EN 60529)	IP67, enclosure type 5 indoor
Approvals	
CE mark	Yes
UL/cUL (CSA) approval	UL-Listed (UL 508) according to NFPA compatibility (National Fire Protection Association), see operating instructions
Explosion protection	-
certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
certificate of suitability EAC approval	Yes
Marine approval	-
EMC	
Emitted interference	EN 55022 Class A
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
• during operation	-25 ... +55 °C
— Note	with natural convection
• during transport	-40 ... +70 °C
• during storage	-40 ... +70 °C
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
Connection technology	screw-type terminals
Connections	
• Supply input	L1, L2, L3, PE: Plug connector HAN Q4/2 (counterpart see "Electrical accessories")
• Output	L+, M: 2 x 1.5 mm ² each (4-pole cable for +/- with open, labeled ends, 4 x 1.5 mm ²)
• Auxiliary	Alarm signals: M12 plug-in connector 5-pin
width of the enclosure	310 mm
height of the enclosure	135 mm
depth of the enclosure	90 mm
Weight, approx.	2.8 kg

product feature of the enclosure housing can be lined up	No
Installation	Can be mounted onto ET200pro mounting rail
electrical accessories	Power connector (Input: 3RK1911-2BE30 (6 mm ²)) (Output: 3RK1911-2BF10 (4 mm ²))
MTBF at 40 °C	196 354 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

