

SIMATIC ET200PRO PS STABILIZED POWER SUPPLY DEGREE OF PROTECTION IP67 INPUT: 400-480 V 3 AC OUTPUT: 24 V DC / 8 A



### Technical specifications

Product	SIMATIC ET200pro PS
Power supply, type	24 V/8 A

### Input

Input	3-phase AC
Rated voltage value $V_{in}$ rated	400 ... 480 V
Voltage range AC	340 ... 550 V
• Note	320 ... 340 V for max. 1 min
Wide-range input	Yes
Overvoltage resistance	Implemented internally with varistors
Mains buffering at $I_{out}$ rated, min.	15 ms; at $V_{in} = 400$ V
Rated line frequency	50 ... 60 Hz
Rated line range	45 ... 66 Hz
Input current at rated input voltage 400 V Rated value	0.5 A
Switch-on current limiting (+25 °C), max.	40 A
$I^2t$ , max.	3.5 A <sup>2</sup> ·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
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 Vout 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 Vout < 2 %
Startup delay, max.	1.5 s
Voltage rise, typ.	40 ms
Rated current value Iout rated	8 A
Current range	0 ... 8 A
Active power supplied typical	192 W
Short-term overload current on short-circuiting during the start-up typical	50 A
Duration of overloading capability for excess current on short-circuiting during the start-up	100 ms
Short-term overload current at short-circuit during operation typical	50 A
Duration of overloading capability for excess current 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 $\pm 15$ %), max.	0.5 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout $\pm$ typ.	1 %
Setting time maximum	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 $V_{out}$ according to EN 60950-1 and EN 50178
Protection class	Class I
Leakage current maximum	3.5 mA
Leakage current typical	0.4 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	UL-Listed (UL 508) according to NFPA compatibility (National Fire Protection Association), see operating instructions
Explosion protection	No
Certificate of suitability IECEx	No
Certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
Marine approval	No
Degree of protection (EN 60529)	IP67, enclosure type 4 indoor

## EMC

Emitted interference	EN 55022 Class A
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2

## Operating data

Ambient temperature during operation	-25 ... +55 °C
• Note	with natural convection
Ambient temperature during transport	-40 ... +70 °C
Ambient temperature during storage	-40 ... +70 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

## Mechanics

Connection technology	screw-type terminals
Connections Supply input	L1, L2, L3, PE: Plug connector HAN Q4/2 (counterpart see "Electrical accessories")
Connections Output	L+, M: 2 x 1.5 mm <sup>2</sup> each (4-pole cable for +/- with open, labeled ends, 4 x 1.5 mm <sup>2</sup> )
Connections 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 property of the enclosure housing for side-by-side mounting	No
Installation	Can be mounted onto ET200pro mounting rail
Electrical accessories	Power connector (Input: 3RK1911-2BE30 (6 mm <sup>2</sup> )) (Output: 3RK1911-2BF10 (4 mm <sup>2</sup> ))

