

# Switch Mode Power Supply

# S82S (3/7.5-W Models)

CSM\_S82S\_DS\_E\_4\_3



## Miniature DIN Rail Mounting DC-DC Power Supplies

- 65 mm depth enables mounting onto control panels with 100 mm depth.
- Inputs: 10.2 to 27.6 VDC (DC input)
- 7.5-W models provide both  $\pm 12$ -V and  $\pm 15$ -V outputs.
- A complete lineup with 10 different models.
- UL and CSA approved.
- RoHS-compliant



Refer to *Safety Precautions for All Power Supplies*.

## Model Number Structure

### Model Number Legend

**Note:** Not all combinations are possible. Please refer to *List of Models* in *Ordering Information*, below.

S82S -      
           1      2      3

#### 1. Input Voltage

7: 12 to 24 VDC

#### 2. Power Ratings

3: 3 W

7: 7.5 W

#### 3. Output Voltage

05: 5 V

12: 12 V

15: 15 V

24: 24 V

27:  $\pm 12$  V

28:  $\pm 15$  V

## Ordering Information

### List of Models

**Note:** For details on normal stock models, contact your nearest OMRON representative.

Power ratings	Output voltage	Output current	Model
3 W	5 V	0.6 A	S82S-7305
	12 V	0.25 A	S82S-7312
	15 V	0.2 A	S82S-7315
	24 V	0.13 A	S82S-7324
7.5 W	5 V	1.5 A	S82S-7705
	12 V	0.6 A	S82S-7712
	15 V	0.5 A	S82S-7715
	24 V	0.3 A	S82S-7724
	$\pm 12$ V	0.3 A (+12 V)/0.2 A (-12 V)	S82S-7727
	$\pm 15$ V	0.2 A (+15V)/0.2A (-15 V)	S82S-7728

# Specifications

## ■ Ratings/Characteristics

Item			DC input		
			3 W	Single output 7.5 W	Dual Output 7.5 W
Efficiency (typical)			60% min.	66% min.	64% min.
Input	Voltage	AC	No		
		DC	10.2 to 27.6 VDC		
	Current (See note 1.)	0.6 A max.	1.2 A max.		
Output (See note 2.)	Voltage adjustment range		±5% (See note 3.)		None (See note 4.)
	Ripple (See note 1.)		2% (p-p) max.		
	Input variation influence		0.5% max.		
	Load variation influence		1.5% max.	+V: 1.5% max. -V: 3% max.	
	Temperature variation influence		0.05%/°C max.		
Additional function	Overload protection (See note 5.)		105% min., voltage drop, automatic reset		
Other	Ambient operating temperature		Refer to the derating curve in <i>Engineering Data</i>		
	Storage temperature		-25 to 65°C		
	Ambient operating humidity		25% to 85% (storage humidity: 20% to 90%)		
	Dielectric strength		1.5 kVAC for 1 min. (between all input terminals and all output terminals/PE terminals), current off: 10 mA		
	Insulation resistance		100 MΩ min. (between all output terminals and all input terminals/PE terminals) at 500 VDC		
	Vibration resistance		10 to 55 Hz, 0.375-mm single amplitude for 2 hours each in X, Y, and Z directions		
	Shock resistance		294 m/s <sup>2</sup> , 3 times each in ±X, ±Y, ±Z directions		
	Output indicator		Yes (color: green)		
	Approved standards		Refer to <i>List of Certified Models</i> for details.		
	Weight		150 g max.		

**Note:** 1. A 100% load for rated input voltage.

2. Output characteristics are measured at the power supply output terminals.

3. If the output voltage adjuster (V.ADJ) is turned, the voltage will increase by more than 50% of the voltage adjustment range. When adjusting the output voltage, confirm the actual output voltage from the Power Supply and be sure that the load is not damaged.

4. The settings for the output voltage must be within the following range:

+V: ±1% of the rated value

-V: ±5% of the rated value

5. Refer to *Overload Protection* on page 4 for details.