5-V Models (Basic Block: S8TS-02505□)

Item			Single operation
Efficiency (typical)			62% min. (with rated input, 100% load)
Input	Voltage (See note 1.)		100 to 240 VAC (85 to 264 VAC)
	Frequency (See note 1.)		50/60 Hz (47 to 63 Hz)
	Current	100 V input	0.7 A max.
		200 V input	0.4 A max.
	Power factor		0.8 min. (with rated input, 100% load)
	Harmonic current emissions		Conforms to EN61000-3-2
	Leakage current	100 V input	0.35 mA max.
		240 V input	0.7 mA max.
	Inrush current (See note 5.)	100 V input	25 A max. (for a cold start at 25°C)
		200 V input	50 A max. (for a cold start at 25°C)
Output (See note 4.)	Voltage adjustment range		5 V ± 10% (with V. ADJ) (See note 2.)
	Ripple		2% (p-p) max.
	Input variation influence		0.5% max. (with 85 to 264 VAC input, 100% load)
	Temperature variation influence		0.05%/°C max. (with rated input and output)
	Load variation influence		1.5% max. (with rated input, 10% to 100% load)
	Startup time (See note 5.)		1,000 ms max.
	Hold time (See note 5.)		20 ms min. (with 100/200 VAC, rated input)
Additional functions	Overload protection (See note 5.)		105% to 125% of rated load current, voltage drop, automatic reset
	Overvoltage protection (See notes 5 and 6.)		Yes
	Parallel operation		No
	N+1 redundant system		No
	Series operation		Yes (with the external diode)
	Undervoltage indicator (See note 5.)		Yes (color: red)
	Undervoltage detection output (See note 5.)		Yes (open collector output), 30 VDC max., 50 mA max.
Other	Ambient operating temperature (See note 5.)		Refer to the derating curve in *Engineering Data.*
	Storage temperature		−25 to 65°C (with no icing or condensation)
	Ambient operating humidity		25% to 85%, Storage: 25% to 90%
	Dielectric strength		3.0 kVAC, 50/60 Hz for 1 minute (between all inputs and all outputs; detection current: 20 mA)
			2.0 kVAC, 50/60 Hz for 1 minute (between all inputs and PE terminal; detection current: 20 mA)
			1.0 kVAC for 1 minute (between all outputs and PE terminal; detection current: 20 mA)
	Insulation resistance		100 MΩ min. (between all outputs and inputs/PE terminal) at 500 VDC
	Vibration resistance (See note 7.)		10 to 55 Hz, 0.375-mm single amplitude for 2 h each in X, Y, and Z directions
	Shock resistance (See note 7.)		150 m/s^2, 3 times each in ±X, ±Y, and ±Z directions
	Output indicator		Yes (color: green)
	EMI	Conducted Emission	Conforms to EN61204-3 EN55011 Class B and based on FCC Class A
		Radiated Emission	Conforms to EN61204-3 EN55011 Class B
	EMS		Conforms to EN61204-3 High severity levels
	Approved standards	UL: cUL: cUR: EN/VDE:	UL508 (Listing; Class 2: Per UL1310) (See note 3.), UL60950-1, UL1604 (Listing; Class I/Division 2, Groups A, B, C, D, Hazardous Locations) CSA C22.2 No. 14 (Class 2: Per No. 223) (See note 3.), No. 213 (Class I/Division 2, Groups A, B, C, D, Hazardous Locations) No. 60950-1 EN50178 (=VDE0160), EN60950-1 (=VDE0805 Teil 1)
	Weight		450 g max.

Note: 1. Do not use an inverter output for the Power Supply. Inverters with an output frequency of 50/60 Hz are available, but the rise in the internal temperature of the Power Supply may result in ignition or burning.
2. If set to less than −10%, the undervoltage detection function may operate. Ensure that the output capacity and output current after adjustment do not exceed the rated output capacity and rated output current respectively. If the output voltage adjuster (V. ADJ) is turned, the voltage will increase by more than 10% of the output voltage, confirm the actual output voltage from the Power Supply and be sure that the load is not damaged.
3. Class 2 approval does not apply to parallel operation.
4. The output current is specified at power output terminals.
5. Refer to the explanations of functions on page 4 for details.
6. To reset the protection, turn OFF the input power for one minute or longer and then turn it back again.
7. Be sure to mount End Plates (PFP-M) on both ends of the Power Supply.

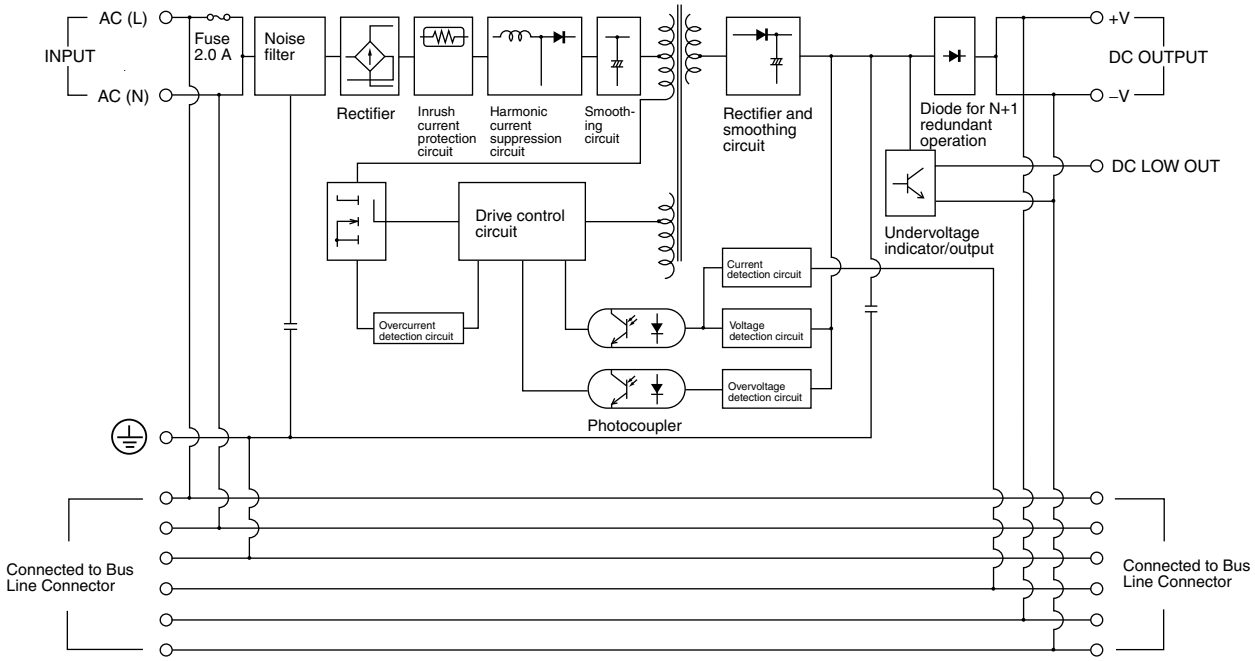
■ Reference Value

Item	Value	Definition
Reliability (MTBF)	250,000 hrs min.	MTBF stands for Mean Time Between Failures, which is calculated according to the probability of accidental device failures, and indicates reliability of devices. Therefore, it does not necessarily represent the life of the product.
Life expectancy	10 yrs min.	The life expectancy indicates average operating hours under the ambient temperature of 40°C and a load rate of 50%. Normally this is determined by the life expectancy of the built-in aluminum electrolytic capacitor.

Connections

■ Block Diagrams

S8TS-06024□ and S8TS-03012□



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