



- Very low cost
- Small size
- Power factor corrected
- Wide range AC Input
- Convection or fan cooled
- Three year warranty
- 41mm high (for 1U racking)
- 250W peak rating on 24 & 36V models

LS200 Series

Single Output 150 - 200W
General Purpose Power Supplies

Key Market Segments & Applications

Test and Measurement	Light Industrial
Automated Service	Kiosks
LED Lighting & Displays	

LS200 Features and Benefits

Features

- High MTBF
- High efficiency
- -25 to +70°C operating temperature
- Low derating above 50°C (up to 60% load available at 70°C)
- Curve B EMC

Benefits

- Superior reliability
- Easier system cooling
- Suitable for indoor & outdoor enclosures
- Improved system power optimisation
- Assists system compliance

Specifications

MODEL		LS200 (enclosed style with internal fan)	LS200/L (U channel style - no internal fan)
ITEMS			
AC Input Voltage (300VAC for 5s)	VAC	85 - 264VAC	
Input Frequency	Hz	47 - 63Hz	
DC Input Voltage	VDC	120 - 373VDC	
Inrush Current (230VAC, cold start)	A	60	
Power Factor	-	Meets EN61000-3-2, -3 (Typical PF 0.98/0.95) (1)	
Input Current (115/230VAC)	A	3.5 / 1.7 (typical)	
Temperature Coefficient	-	<0.02%/°C (0 - 50°C)	
Overcurrent Protection (2)	-	> 105% of nominal or peak. Constant current style	
Overvoltage Protection (2)	V	3.3V: 3.8 - 4.45V, 5V: 5.75 - 6.75V, 7.5V: 8.6 - 8.1V, 12V: 15.1 - 17.75V 15V: 17.25 - 20.25V, 24V: 30.25 - 35.5V, 36V: 41.4 - 48.6V, 48V: 60 - 69.6V	
Hold Up Time (115/230V input)	ms	20ms	
Leakage Current (230VAC 60Hz)	mA	<1mA	
Remote Sense	-	Yes	
Remote On/Off	-	On: 0 - 0.8V; Off: 3 - 12V	
LED Indicator	-	Green LED = On	
Operating Temperature	-	-25 to +70°C see derating curves	
Storage Temperature	°C	-40 to +85°C	
Operating Humidity	-	20 - 90% RH (non condensing)	
Storage Humidity	-	10 - 95% RH (non condensing)	
Cooling	-	Fan cooled (exhaust from fan end)	Convection or customer supplied airflow
Withstand Voltage	-	Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.	
Isolation Resistance	-	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz: 19.6m/s ² constant sweep 1 min X, Y, Z for 1 hour	
Shock	-	< 196.1 m/s ² (20G)	
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11	
Safety Agency Approvals	-	UL60950-1, CSA60950-1 (cUL), IEC60950-1 2nd Edition, CE Mark	
Conducted & Radiated EMI	-	EN55011/EN55022-B, FCC--B	
MTBF (MIL-HDBK-217F)	hrs	300,000	
Weight (Typ)	g	700	600
Size (LxWxH)	mm	199 x 98 x 41	
Warranty	yrs	3	

Notes (1) 115 / 230VAC input

(2) Recycle AC to reset



Model Selector

Model	Voltage	Adjust Range Range (V)	Max Current (A) (3)	Max Current Convection (A)	Peak Current <10s, >35% DC (A)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % (1)
LS200-3.3	3.3V	3.0 - 3.6	40	N/A	-	40	16	80	67 / 68
LS200-5	5V	4.75 - 5.5	40	N/A	-	40	20	80	72 / 75
LS200-7	7.5V	6.8 - 8.2	26.7	N/A	-	40	20	80	74 / 77
LS200-12	12V	10.8 - 14.4	16.7	N/A	-	96	48	120	76 / 79
LS200-15	15V	13.5 - 16.5	13.4	N/A	-	120	60	120	80 / 83
LS200-24	24V	22 - 28.8	8.4	N/A	10.4	192	96	120	82 / 84
LS200-36	36V	32 - 40	5.6	N/A	6.9	288	144	150	82 / 85
LS200-48	48V	42 - 57.6	4.2	N/A	-	384	192	200	82 / 85
LS200-3.3/L	3.3V	3.0 - 3.6	40	32	-	40	16	80	67 / 68
LS200-5/L	5V	4.75 - 5.5	40	32	-	40	20	80	72 / 75
LS200-7/L	7.5V	6.8 - 8.2	26.7	21.36	-	40	20	80	74 / 77
LS200-12/L	12V	10.8 - 14.4	16.7	15	-	96	48	120	76 / 79
LS200-15/L	15V	13.5 - 16.5	13.4	12	-	120	60	120	80 / 83
LS200-24/L	24V	22 - 28.8	8.4	7.5	10.4	192	96	120	82 / 84
LS200-36/L	36V	32 - 40	5.6	5	6.9	288	144	150	82 / 85
LS200-48/L	48V	42 - 57.6	4.2	3.78	-	384	192	200	82 / 85

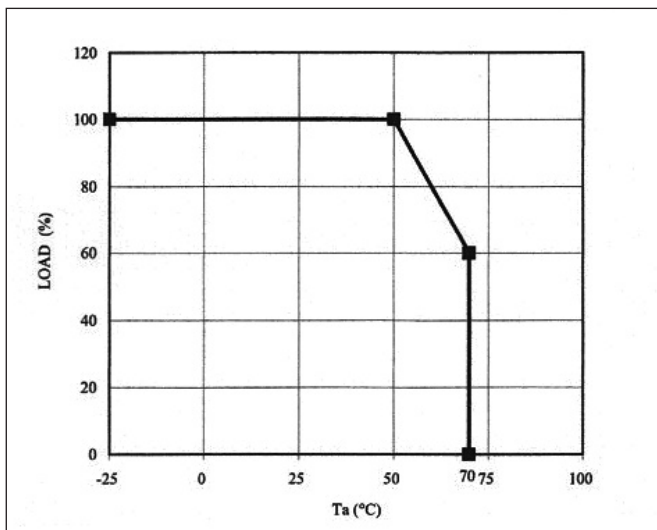
Notes

(3) Internal fan version or customer supplied airflow for /L models

Options

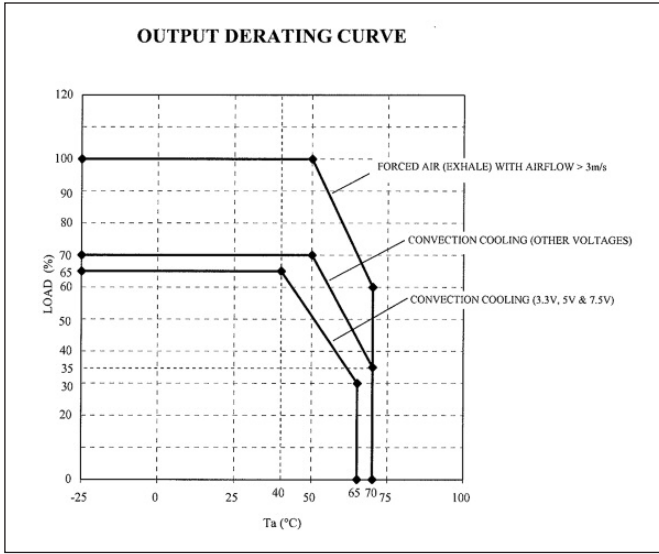
Suffix	Description
/L	No cover or fan (U channel)
Blank	Cover and fan

Derating Curve LS200





Derating Curve LS200/L



Outline Drawing LS200 Series

SIGNAL CONNECTOR INFORMATION

1. +V ₁	2. +S
3. -V ₁	4. -S
5. NC	6. NC
7. CNT+	8. CNT-

SIGNAL CONNECTOR USED

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S10B-PHDSS(LF)(SN) (CN2)	JST

MATCHING HOUSINGS, PIN & TOOL

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-10VS (CN2)	JST
TERMINAL PINS	SPHD-002T-P05(AWG28-24) SPHD-001T-P05(AWG28-22)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	JST

==ACCESSORIES==

* SHORT PIECE _____
 SHORTING +V₁ → +S, -V₁ → -S, CNT+ → CNT-
 (ATTACHED ON CN2 AT SHIPMENT)

NAME PLATE

SEE NOTE A

Dimensions: 199.0±1.0, 70.0, 65.0±0.3, 117.0±0.3, 48.0±0.3, 88.0±1.0, 19.1±0.3, 8, 4.0±0.1, 20.5±0.3, 25.0±0.3, 8.0, 11 (MAX), 7.1, 25.0, 117.0±0.3, 48.0±0.3, 88.0±1.0, 19.1±0.3, 8.

Terminal labels: AC(L), AC(N), (FG), -V, -V, +V, +V, LED, VOLTAGE ADJUSTMENT, CN2, NAME PLATE.

SEE NOTE B, SEE NOTE C.

NOTES

A. MODEL NAME NOMINAL OUTPUT VOLTAGE AND MAXIMUM OUTPUT CURRENT ARE SHOWN IN THE NAME PLATE IN ACCORDANCE WITH THE SPECIFICATION.

B. M4 COUNTERSUNK & EMBOSSED HOLES (2) FOR CUSTOMER CHASSIS MOUNTING SCREW MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 5mm.

C. M4 COUNTERSUNK & EMBOSSED HOLES (8) FOR CUSTOMER CHASSIS MOUNTING SCREW MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 8mm.



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