

Model Selector

Model	Voltage (V)	Adjust Range (V)	Max Curr. (A)	Peak ⁽³⁾ Curr. (A)	Max. Power (W)	Peak ⁽³⁾ Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Over voltage (V)	Efficiency ⁽¹⁾ typ %
HWS50-3/HD	3.3	2.97 - 3.96	6		20		40	20	120	4.13 - 4.95	70/73
HWS50-3/HD	3.3	2.97 - 3.96	10		33		40	20	120	4.13 - 4.95	76/78
HWS100-3/HD	3.3	2.97 - 3.96	20		66		40	20	120	4.13 - 4.95	78/81
HWS150-3/HD	3.3	2.97 - 3.96	30		99		40	20	120	4.13 - 4.95	78/81
HWS300-3/HD	3.3	2.64 - 3.96	60		198		30	20	120	4.13 - 4.95	74/77
HWS600-3/HD	3.3	2.64 - 3.96	120		396		30	20	120	4.13 - 4.95	75/78
HWS1000-3/HD	3.3	2.64 - 3.96	200		660		40	20	120	4.12 - 4.62	71/73
HWS1500-3/HD	3.3	2.64 - 3.96	300		990		60	36	200	4.12 - 4.62	72/75
HWS30-5/HD	5	4.0 - 6.0	6		30		40	20	120	6.25 - 7.25	77/80
HWS50-5/HD	5	4.0 - 6.0	10		50		40	20	120	6.25 - 7.25	82/84
HWS100-5/HD	5	4.0 - 6.0	20		100		40	20	120	6.25 - 7.25	83/86
HWS150-5/HD	5	4.0 - 6.0	30		150		40	20	120	6.25 - 7.25	83/86
HWS300-5/HD	5	4.0 - 6.0	60		300		30	20	120	6.25 - 7.25	79/82
HWS600-5/HD	5	4.0 - 6.0	120		600		30	20	120	6.25 - 7.25	80/83
HWS1000-5/HD	5	4.0 - 6.0	200		1000		30	20	120	6.25 - 7.0	76/78
HWS1500-5/HD	5	4.0 - 6.0	300		1500		60	36	200	6.25 - 7.0	77/81
HWS1000-6/HD	6	4.8 - 7.2	167		1002		30	20	150	7.5 - 8.4	79/81
HWS1500-6/HD	6	4.8 - 7.2	250	300	1500	1800	60	36	200	6.25 - 7.0	79/82
HWS1000-7/HD	7.5	6.0 - 9.0	134	160	1005	1200	30	20	150	9.37 - 10.5	80/82
HWS1500-7/HD	7.5	6.0 - 9.0	200	240	1500	1800	60	40	200	9.37 - 10.5	81/83
HWS30-12/HD	12	9.6 - 14.4	2.5		30		96	48	150	15.0 - 17.4	81/83
HWS50-12/HD	12	9.6 - 14.4	4.3		51.6		96	48	150	15 - 17.4	81/83
HWS100-12/HD	12	9.6 - 14.4	8.5		102		96	48	150	15 - 17.4	83/86
HWS150-12/HD	12	9.6 - 14.4	13		156		96	48	150	15 - 17.4	83/86
HWS300-12/HD	12	9.6 - 14.4	27		324		72	48	150	15 - 17.4	80/83
HWS600-12/HD	12	9.6 - 14.4	53		636		72	48	150	15 - 17.4	80/83
HWS1000-12/HD	12	9.6 - 14.4	88	100	1056	1200	72	48	150	15 - 17.4	82/85
HWS1500-12/HD	12	9.6 - 14.4	125		1500		72	48	150	15 - 17.4	82/85
HWS30-15/HD	15	12.0 - 18.0	2		30		120	60	150	18.8 - 21.8	81/84
HWS50-15/HD	15	12.0 - 18.0	3.5		52.5		120	60	150	18.8 - 21.8	81/83
HWS100-15/HD	15	12.0 - 18.0	7		105		120	60	150	18.8 - 21.8	83/86
HWS150-15/HD	15	12.0 - 18.0	10		150		120	60	150	18.8 - 21.8	83/86
HWS300-15/HD	15	12.0 - 18.0	22		330		90	60	150	18.8 - 21.8	80/83
HWS600-15/HD	15	12.0 - 18.0	43		645		90	60	150	18.8 - 21.8	81/84
HWS1000-15/HD	15	12.0 - 18.0	70	80	1050	1200	90	60	150	18.7 - 21.8	83/85
HWS1500-15/HD	15	12.0 - 18.0	100		1500		90	60	150	18.7-21.8	83/87
HWS30-24/HD	24	19.2 - 28.8	1.3		31.2		192	96	200	30 - 34.8	83/86
HWS50-24/HD	24	19.2 - 28.8	2.2		52.8		192	96	150	30 - 34.8	82/84
HWS100-24/HD	24	19.2 - 28.8	4.5		108		192	96	150	30 - 34.8	84/87
HWS150-24/HD	24	19.2 - 28.8	6.5		156		192	96	150	30 - 34.8	85/88
HWS300-24/HD	24	19.2 - 28.8	14	16.5	336	396	144	96	150	30 - 34.8	82/85
HWS600-24/HD	24	19.2 - 28.8	27	31	648	744	144	96	150	30 - 34.8	82/85
HWS1000-24/HD	24	19.2 - 28.8	46	58.5	1104	1404	144	96	150	30 - 34.8	85/87
HWS1500-24/HD	24	19.2 - 28.8	65/70	105	1560/1680	2520 ⁽¹⁾	144	96	200	30 - 34.8	84/88
HWS1000-36/HD	36	28.8 - 43.2	30.7	39	1104	1404	150	144	200	45 - 49.7	85/88
HWS1500-36/HD	36	28.8 - 43.2	42/46.5	70	1512/1674	2520 ⁽¹⁾	150	144	200	45 - 49.7	84/88
HWS30-48/HD	48	38.4 - 52.8	0.65		31.2		384	192	200	55.2 - 64.8	82/83
HWS50-48/HD	48	38.4 - 52.8	1.1		52.8		384	192	200	55.2 - 64.8	83/85
HWS100-48/HD	48	38.4 - 52.8	2.1		100.8		384	192	200	55.2 - 64.8	84/87
HWS150-48/HD	48	38.4 - 52.8	3.3		158.4		384	192	200	55.2 - 64.8	85/88
HWS300-48/HD	48	38.4 - 52.8	7		336		288	192	350	55.2 - 64.8	82/85
HWS600-48/HD	48	38.4 - 52.8	13		624		288	192	350	55.2 - 64.8	83/86
HWS1000-48/HD	48	38.4 - 52.8	23	29.2	1104	1404	288	192	200	55.2 - 60.0	86/88
HWS1500-48/HD	48	38.4 - 52.8	32		1536		288	192	200	55.2 - 64.8	86/90
HWS1000-60/HD	60	48.0 - 66	18.4	23.4	1104	1404	360	240	400	69.0 - 75.0	85/88
HWS1500-60/HD	60	48.0 - 66	28	42	1536	2520	360	240	400	69.0 - 75.0	86/90

Options

Suffix	Description
Blank	No cover (except HWS300-1500 cover fitted as standard)
/A	Cover fitted (eg HWS100-24/HDA) Deratings apply

Notes: (3) Peak load for 10s maximum on time,
35% duty cycle at >200V input

NOTES

A : MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

B : M3 EMBOSSED, TAPPED AND COUNTERSUNK HOLES (2) FOR CUSTOMER CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6m/m.

C : M3 TAPPED HOLES (2) FOR CUSTOMER CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6m/m.

ACCESSORIES

* SHORT PIECE (NET 2) FOR SHORTING PURPOSE
 (+S~+V, -S~-V) : MOUNTED AT TIME OF SHIPMENT.

Top View:

- Overall width: 82 ± 1 mm (56.8 mm)
- Pin pitch: 20 ± 1 mm
- Pin 1 location: (15.1) mm from left edge
- Bus bar spacer (RED) and (BLACK) locations
- Name plate location
- Input terminal location: SEE NOTE E
- Output terminal location: SEE NOTE E

Side View:

- Overall height: 7.25 mm
- Terminal height: 1.12 ± 0.5 mm
- Mounting hole diameter: $\phi 4$ mm
- Mounting hole position: 20 ± 1 mm from left edge
- Mounting hole position: 46 MAX mm from right edge
- AIR FLOW direction indicated

Front View:

- Overall width: 260 ± 0.5 mm
- Overall height: 69 ± 0.5 mm
- Pin pitch: 20 ± 1 mm
- Pin 1 location: (15.1) mm from left edge
- Input terminal location: SEE NOTE C
- Output terminal location: SEE NOTE C
- Mounting hole diameter: $\phi 4$ mm
- Mounting hole position: 20 ± 1 mm from left edge
- Mounting hole position: 46 MAX mm from right edge

Callouts:

- NAME PLATE (NONE SCALE)
- SEE NOTE A
- SEE NOTE B
- SEE NOTE C
- SEE NOTE D
- SEE NOTE E

ACCESSORIES

- * ATTACHED CONNECTOR
- SHORTING +S+V, -S-V, PV-REF & CNT-TDG ATTACHED ON CN01 AT SHIPMENT

NOTES

- MODEL NAME, OPTION, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
- COUNTRY OF MANUFACTURE IS SHOWN HERE.
- M4-TAPPED HOLES (16) FOR CUSTOMER CHASSIS MOUNTING.
(SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6m/m).

D : I/O SIGNAL CONNECTOR

- CONNECTOR : S12B-PHDSS(LF)(SN) (JST)
- MATCHING HOUSING : PHDR-12VS (JST)
- MATCHING CONTACT : SPHD-002T-P0.5(AWG28~24) (JST) OR SPHD-001T-P0.5(AWG26~22) (JST)
- HAND CRIMPING TOOL : YFS-620(SPHD-002T-P0.5) (JST), YC-610R(SPHD-001T-P0.5) (JST), YC-610R(BPHD-001T-P0.5) (JST)

E : RECOMMENDED TORQUE FOR THE TERMINAL PIECE.

- INPUT TERMINAL (M4 SCREW) : 1.27N·m
- OUTPUT TERMINAL (M8 BOLT & NUT) : 10.8N·m
- OUTPUT TERMINAL (M4 SCREW) : 1.27N·m

SIGNAL CONNECTOR INFORMATION

CN01,CN02 PIN ASSIGN	
S12B-PHDSS (JST)	1. +V 7. PV
	2. +S 8. REF
	3. -V 9. CNT
	4. -S 10. TCG
	5. PC 11. PF
	6. COM 12. TOG

PIN ASSIGNMENT TABLE:

Pin No.	Signal Name	Description
1	+V	Power Supply (+V)
2	+S	Power Supply (+S)
3	-V	Power Supply (-V)
4	-S	Power Supply (-S)
5	PC	Power Control (PC)
6	COM	Common (COM)
7	PV	Power Voltage (PV)
8	REF	Reference (REF)
9	CNT	Control (CNT)
10	TCG	Temperature Control (TCG)
11	PF	Power Factor (PF)
12	TG	Temperature (TG)



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