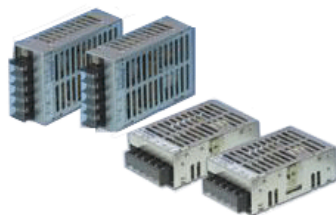




NVD-SC/NVD-SD

100W



FEATURES

- Light weight, compact size
- High efficiency, high reliability
- Input under voltage protection
- Over current, over voltage, thermal protection
- UL, cUL, CE
- **Isolated Power Supply**



MODEL/CHANNEL		Unit	NVD3.3-SC24-U1	NVD05-SC24-U1	NVD12-SC24-U1	NVD15-SC24-U1	NVD24-SC24-U1
OUTPUT (Single)	Output Current 24VDC	Vdc	3.3	5	12	15	24
	Output Current	A	20	20	9	7	5
MODEL/CHANNEL		Unit	NVD3.3-SC48-U1	NVD05-SC48-U1	NVD12-SC48-U1	NVD15-SC48-U1	NVD24-SC48-U1
OUTPUT (Single)	Output Current 48VDC	Vdc	3.3	5	12	15	24
	Output Current	A	20	20	9	7	5
MODEL/CHANNEL		Unit	NVD3.3-SD-U1	NVD05-SD-U1	NVD12-SD-U1	NVD15-SD-U1	NVD24-SD-U1
OUTPUT (Single)	Output Current 110VDC	Vdc	3.3	5	12	15	24
	Output Current	A	20	20	9	7	5
MODEL/CHANNEL		Unit	NVD3.3-SC12-U1	NVD05-SC12-U1	NVD12-SC12-U1	NVD15-SC12-U1	NVD24-SC12-U1
OUTPUT (Single)	Output Voltage	Vdc	3.3	5	12	15	24
	Output Current 12VDC	A	20	15	6.8	5.4	3.4
	Line Regulation	mV	26	40	96	120	190
	Load Regulation	mVp	30	45	108	135	216
	Ripple and Noise	mVp	150	150	220	250	350
	Voltage Adjustment Range	-	10% of Rated Output Voltage				
	Rise Time	-	200mS(500mS for NVDxSD Series)(maximum) at 25C and rated input/output				
	Temp. Coefficient	°C	0.03%/°C				
	Drift	mV	32	40	75	90	135
	Dynamic Load Regulation	mV	±150	±200	±360	±450	±720
Recovery Time	mS	20					
MODEL/CHANNEL		Unit	NVD3.3-SC12-U1	NVD05-SC12-U1	NVD12-SC12-U1	NVD15-SC12-U1	NVD24-SC12-U1
INPUT	Input Voltage 12V	Vdc	12				
	Input Voltage Range	Vdc	9.6-16				
	Input Current	A	6.18	8.33	8.24	8.33	8.26
	Efficiency	%	89	90	91	90	92
	Ref. MTB	H	495,000		560,000	576,000	549,000
	Switching Frequency	kHz	125fix.				





MODEL/CHANNEL	Unit	NVD3.3-SC24-U1	NVD05-SC24-U1	NVD12-SC24-U1	NVD15-SC24-U1	NVD24-SC24-U1
Input Voltage 24V	Vdc	24				
Input Voltage Range	Vdc	19~32				
Input Current	A	3.3	4.53	4.89	4.75	5.4
Efficiency	%	90	92	92	92	92
Ref. MTBF	H	496,000		555,000	571,000	556,000
Switching Frequency	kHz	125fix.				

MODEL/CHANNEL	Unit	NVD3.3-SC48-U1	NVD05-SC48-U1	NVD12-SC48-U1	NVD15-SC48-U1	NVD24-SC48-U1
Input Voltage 48V	Vdc	48				
Input Voltage Range	Vdc	38V~63				
Input Current	A	1.65	2.24	2.39	2.33	2.64
Efficiency	%	91	93	94	94	94
Ref. MTBF	H	554,000			569,000	562,000
Switching Frequency	kHz	125fix.				

MODEL/CHANNEL	Unit	NVD3.3-SD-U1	NVD05-SD-U1	NVD12-SD-U1	NVD15-SD-U1	NVD24-SD-U1
Input Voltage 110V	Vdc	110				
Input Voltage Range	Vdc	85~140				
Input Current	A	0.725	0.977	1.055	1.02	1.16
Efficiency	%	91	93	93	93	94
Ref. MTBF	H	480,000		550,000		
Switching Frequency	kHz	91fix.	125fix.			

MODEL/CHANNEL	Unit		
Environment	Operating Temperature	°C	-10 to 71°C
	Operating Humidity	%	20-80%/RH (non-condensing)
	Storage Temperature	°C	-20 to +85°C
	Withstand Voltage Primary-Secondary	%	Primary-Secondary AC2,000V at 10mA for 1 minute/Primary-Frame Ground AC2,000V at 10mA for 1 minute/Secondary-Frame Ground AC1,000V at 10mA for 1 minute
	Derating	-	3.5%/°C (50°C to 71°C)
	Storage Humidity	-	20 to 90%/RH
	Isolation Resistance	-	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester
	Shock	-	196m/s ²
	Cooling	-	Convection
	Vibration	-	5-10Hz: 10mm double amplitude, 10-55Hz: 19.6m/s ² , 20minutes period for 30 minutes each along X, Y, Z axes(non-operating)
Protection	Safety	-	UL60950, C-UL(CSA60950), CE
	Over Current Protection	A	Current Limiting
	Over Voltage Protection	-	Latch Type (output shutdown)
	Input Voltage Protection	-	Output shutdown when input voltage remains under the input range for 3 seconds (typ.)
Dimension	Thermal Protection	-	Output shutdown when input voltage remains under the input range for 3 seconds (typ.)
	Size(WxLxH) / Weight	mm/g	65Wx101Lx34H mm(Not include output terminal)/250g

* Input fuse is installed in unit

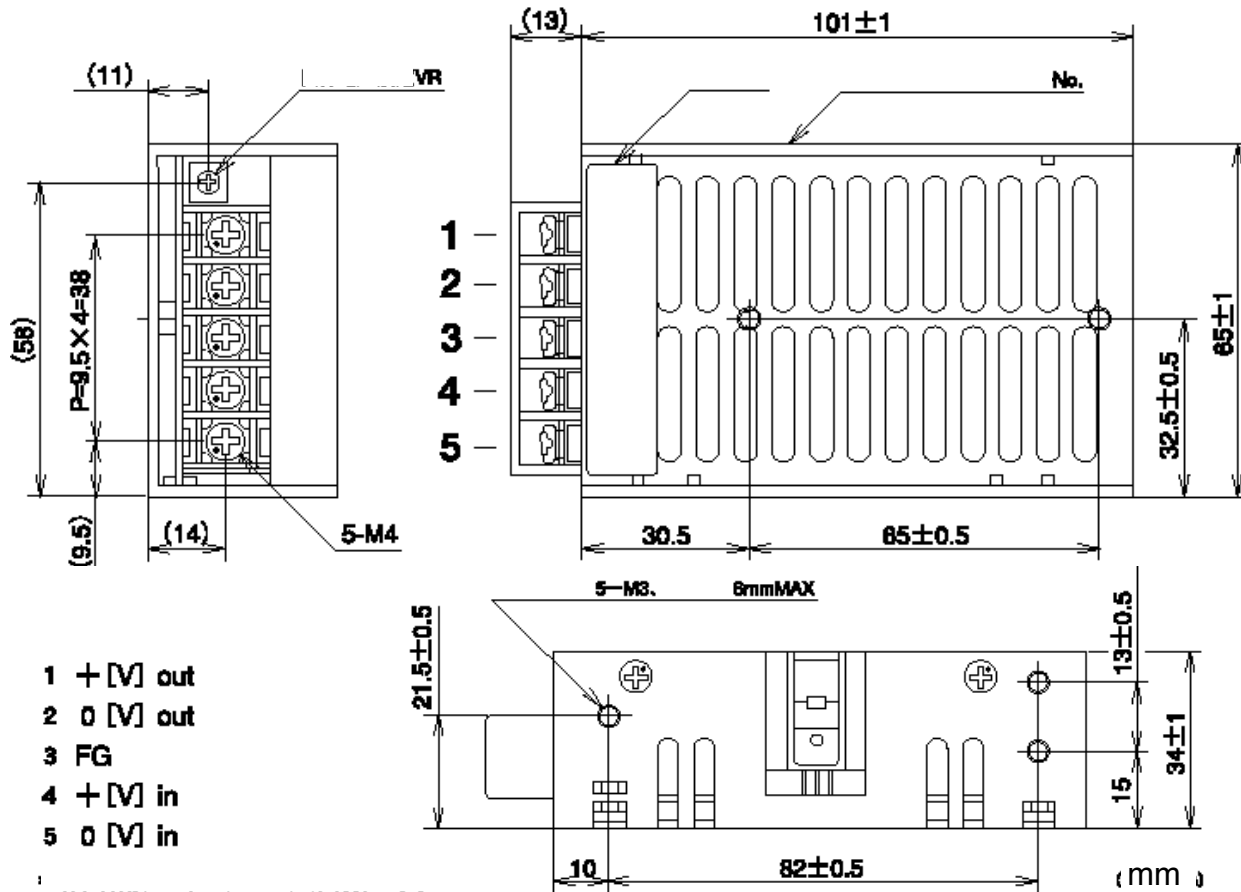
* Common mode filter is installed at the input side of unit





Dimension Diagram (mm)

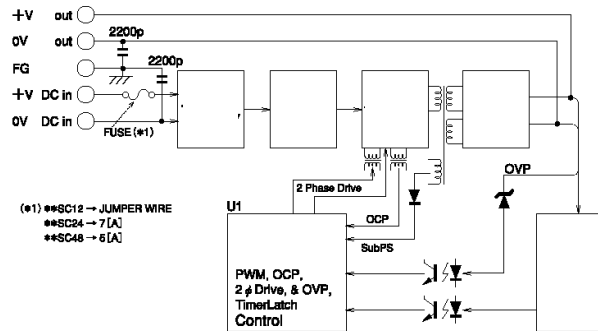
100W



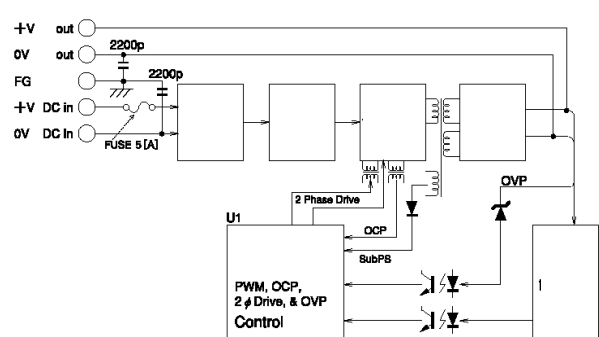
Block Diagram

100W

A. NVDxSCx BLOCK DIAGRAM



B. NVDxSD BLOCK DIAGRAM

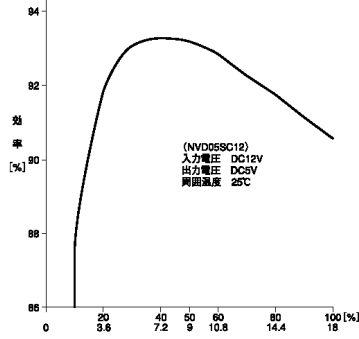




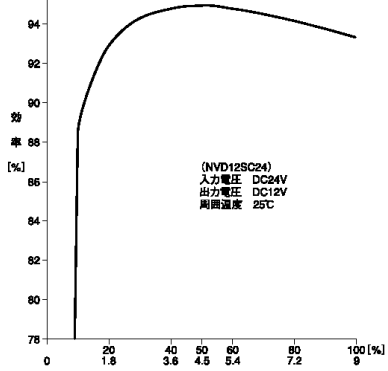
Temperature Derating Curve

100W

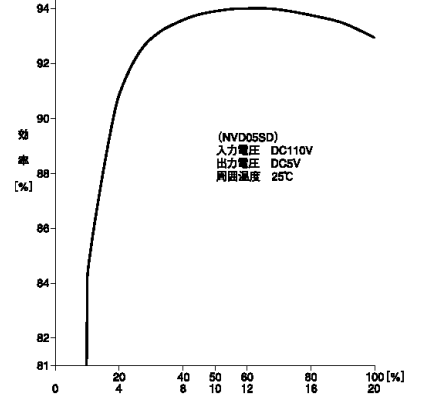
A. NVDxSC12



B. NVDxSC24



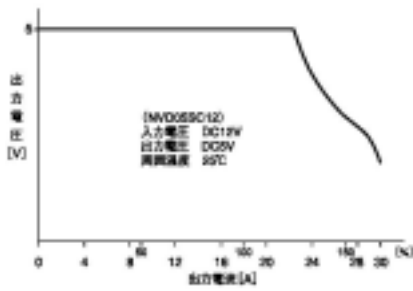
C. NVDxSD



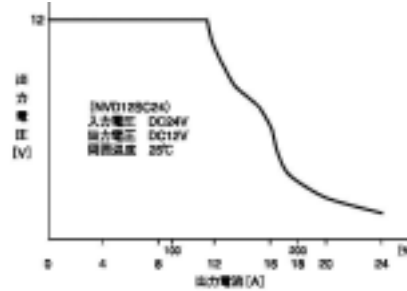
OCP Curve

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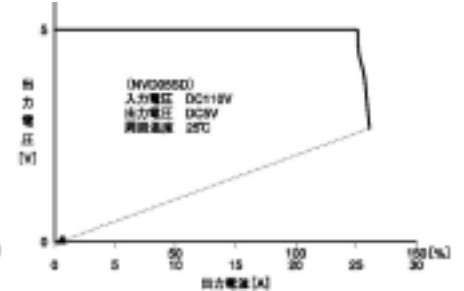
A. NVDxSC12



B. NVDxSC24



C. NVDxSD



Temperature Derating Curve

100W

