

## ■ VSF50-S SPECIFICATIONS

	MODEL	VSF50-05	VSF50-09	VSF50-12	VSF50-15	VSF50-24
INPUT	VOLTAGE, FREQUENCY	AC100-240V (AC85~264V or DC120~370V), 50/60Hz (47~440Hz or DC)				
	CURRENT	100V~1.2A, 200V~0.6A				
	EFFICIENCY (AC220V)	70% typ	73% typ	74% typ	77% typ	78% typ
	INRUSH CURRENT	20A typ(ACIN 110V, I <sub>o</sub> =100%), 40A typ(ACIN 220V, I <sub>o</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	5	9	12	15	24
	CURRENT [A]	10	5.5	4.2	3.3	2.1
	REGULATION, LINE [mV]	25 Max	45 Max	60 Max	75 Max	120 Max
	REGULATION, LOAD [mV]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE [mVp-p]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE, NOISE [mVp-p]	100 Max	140 Max	170 Max	200 Max	290 Max
	TEMPERATURE DRIFT 0~+50°C [mV]	75 Max	135 Max	180 Max	225 Max	360 Max
	RISE TIME [ms]	100 Max (ACIN 85V I <sub>o</sub> =100%)				
	HOLDING TIME [ms]	10 typ (ACIN 85V I <sub>o</sub> =100%)				
PROTECTION CIRCUIT	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	Works at 115~140% of rating				
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC1,500V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC1,500V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	-10~+50°C, 20~90% RH(Non condensing)				
	STORAGE TEMPAND HUMID	-20~+75°C, 20~90% RH(Non condensing)				
	VIBRATION	10~55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms once on each X, Y and Z axis				
SAFETY	SAFETY REGULATION	-				
	LINE CONDUCTED RF VOLTAGE	-				

## ■ VSF50A-S SPECIFICATIONS

	MODEL	VSF50A-05	VSF50A-09	VSF50A-12	VSF50A-15	VSF50A-24
INPUT	VOLTAGE, FREQUENCY	AC100-120V / 200~240V (AC85~132V / 180~264V or DC240~370V), 50/60Hz (47~440Hz or DC)				
	CURRENT	100V~0.4A, 200V~0.2A				
	EFFICIENCY (AC220V)	70% typ	73% typ	74% typ	77% typ	78% typ
	INRUSH CURRENT	20A typ(ACIN 110V, I <sub>o</sub> =100%), 40A typ(ACIN 220V, I <sub>o</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	5	9	12	15	24
	CURRENT [A]	10	5.6	4.2	3.3	2.1
	REGULATION, LINE [mV]	25 Max	45 Max	60 Max	75 Max	120 Max
	REGULATION, LOAD [mV]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE [mVp-p]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE, NOISE [mVp-p]	100 Max	140 Max	170 Max	200 Max	290 Max
	TEMPERATURE DRIFT 0~+50°C [mV]	75 Max	135 Max	180 Max	225 Max	360 Max
	RISE TIME [ms]	1000 Max (ACIN 110V/220V, I <sub>o</sub> =100%)				
	HOLDING TIME [ms]	10 typ (ACIN 110V/220V, I <sub>o</sub> =100%)				
PROTECTION CIRCUIT	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	Works at 115~140% of rating				
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC3,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC2,000V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	-10~+50°C, 20~90% RH(Non condensing)				
	STORAGE TEMPAND HUMID	-20~+75°C, 20~90% RH(Non condensing)				
	VIBRATION	10~55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms once on each X, Y and Z axis				
SAFETY	SAFETY REGULATION	-				
	LINE CONDUCTED RF VOLTAGE	-				

## VSFL50-S SPECIFICATIONS

MODEL		VSFL50-05	VSFL50-09	VSFL50-12	VSFL50-15	VSFL50-24
INPUT	VOLTAGE, FREQUENCY	AC100-240V (AC90~264V or DC130~370V), 50/60Hz (47~440Hz or DC)				
	CURRENT	100V~1.2A, 200V~0.6A				
	EFFICIENCY (AC220V)	70% typ	75% typ	75% typ	70% typ	77% typ
	INRUSH CURRENT	20A typ(ACIN 110V, I <sub>0</sub> =100%), 40A typ(ACIN 220V, I <sub>0</sub> =100%) at cold start.				
OUTPUT	VOLTAGE [V]	5	9	12	15	24
	CURRENT [A]	10	5.5	4.2	3.3	2.1
	REGULATION, LINE [mV]	25 Max	45 Max	60 Max	75 Max	120 Max
	REGULATION, LOAD [mV]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE [mVp-p]	50 Max	90 Max	120 Max	150 Max	240 Max
	RIPPLE, NOISE [mVp-p]	100 Max	140 Max	170 Max	200 Max	290 Max
	TEMPERATURE DRIFT 0~+50°C [mV]	75 Max	135 Max	180 Max	225 Max	360Max
	RISE TIME [ms]	600 Max (ACIN 110V/220V, I <sub>0</sub> =100%)				
	HOLDING TIME [ms]	16 typ (ACIN 110V/220V, I <sub>0</sub> =100%)				
PROTECTION CIRCUIT	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	Works at 115~140% of rating				
ELECTRICALLY ISOLATED	INPUT-OUTPUT	AC1,500V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	INPUT-CASE, FG	AC1,500V 1 minute current 20mA, DC 500V 100MΩ (At room temperature & Humidity)				
	OUTPUT-CASE, FG	AC500V 1 minute current 100mA, DC 500V 100MΩ (At room temperature & Humidity)				
ENVIRONMENT	OPERATING TEMP AND HUMID	-10~+50°C, 20~90% RH(Non condensing)				
	STORAGE TEMPAND HUMID	-20~+75°C, 20~90% RH(Non condensing)				
	VIBRATION	10~55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis				
	IMPACT	10G for 20ms once on each X, Y and Z axis				
SAFETY	SAFETY REGULATION	-				
	LINE CONDUCTED RF VOLTAGE	-				

## VSF50, 50A, L50-S EXTERNAL VIEW

