

400 NSB 750 M110 W00

$$V_{In\ Nom} = 600\ V_{DC}, 750\ V_{DC}$$

$$V_{out\ Nom} = 110\ V \quad I_A = 2,75\ A \quad (5,5A\ for\ t \leq 2s)$$

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
INPUT						
V_{In}	Operating Input Voltage Range	continuous $t \leq 5\ Min.$ EN 50163	450 900		900 950	V_{DC} V_{DC}
	Input Voltage Range dynamic	V_{In} for $t \leq 20\ ms$			1269	V_{DC}
	Surge	V_{In} for $t \leq 1\ ms$	3			kV_{DC}
$V_{In\ min}$	Turn OFF Voltage Range		370		395	V_{DC}
$V_{In\ max}$	Turn OFF Voltage Range		1270	1300	1350	V_{DC}
	Input Current Time Integral				1	A^2s
$I_{in\ max}$	Input Current	$400V \leq V_{In} \leq 950V, T_A, I_{Out} = 5.5\ A$			2.5	A
	Input Fuse	4kV 10mm x 85mm	4 A			
	Reverse Polarity Protection	On request	-			

OUTPUT						
$P_{Out\ Nom}$	Output Power continuous	$450\ V \leq V_{In} \leq 900\ V$		300		W
P_{Out}	Output Power	$400\ V \leq V_{In} \leq 450\ V$	100		150	W
P_{Out}	Repetition Rate ON: 2 s OFF 12 Min	$450\ V \leq V_{In} \leq 900V$		600		W
$V_{Out\ Nom}$	V_{Out} Factory Adjust	$V_{In} = 750\ V \quad I_{Out} = 2.75\ A$	105	110	115	V
ΔV_{Out}	Regulation Accuracy static	$0\ A \leq I_{Out} \leq 5.5\ A$ $T_A = -40^\circ C + 70^\circ C$ Temp. class T3	20 % $V_{Out\ Nom}$			V
$V_{Out\ rms}$	Output Voltage Noise	BW 300 kHz			3	V_{ss}
$V_{Aout\ ss}$	Spikes	Nominal Load and BW 20 MHz			2,5	V
t_{on}	Start Time V_{Out} see Diagram page 2	$400\ V \leq V_{In} \leq 900\ V$ $0\ A \leq I_{Out} \leq 2.75\ A$ Push Button Pin 3 connected to Pin 4		2	3	s
I_{Out}	Output Current I_{Out}		2.75		5.5	A
	Current Limitation I_{Out} static dynamic	Threshold value	3.9 5.8			A
I_{OC}	Max. Output Short Circuit Current	Continuous Short Circuit + V_O and - V_O			3.2	A
C_{Out}	Ext. output capacity converter	Max. allowed ext. connected capacity			470	μF
K1	V_{Out} ON see Timing Diagram	Push Button closed	Bridge between Pin 11 and 12			

COMMON DATAS

f	Switching Frequency			15		kHz
η	Efficiency	$V_{In} = 750\ V_{DC}, P_{Out} = 300\ W$		80		%
	Usage Time		20			Years
	MTBF @ SN 29500 $T_A = +40^\circ C$	$V_{In} = 750\ V_{DC} \quad P_{Out} = 300\ W$		400'000		h
	No Load and Short Circuit Condition			continuous		

SAFETY / DIMENSIONS

	Overtemperature TURN - OFF	Transformer Temperature Monitor	105°C - 5 K, + 10 K			
	Transformer Partial Discharge Test Type Test, see diagram		2650 V, 10 pC			
	PCB FR4, $V_0\ TG = 140^\circ C$ CTI 250					
	Creepage / Clearance (PD2) acc. EN 50124 - 1 0V 3	Primary - Secondary Primary - Case Secondary - Case	36 36 18 18 2 2			mm mm mm
	Isolation Test Voltage Piece Unit Test rampe funct. 5s - 10s - 5s) Creepage Type test	Primary - Secondary Primary - Case Secondary - Case		5.2 3.0 0.5		kV_{AC} kV_{AC} kV_{DC}
	Connector	Input: + V_{In} and - V_{In} Output: + V_{Out} and - V_{Out} Protection:	Ettinger 13.44.656 WAGO 721 - 442/001-000 on Mounting AL plate			
	Protection class, - degree		I, IP 00			
	Dimension incl. Mounting Plate	B x H x T	430 x 300 x 75			mm
	Mounting Direction: recommend vertical	Chassis Mounting with Screws	6 x M6			
	Weight		6.3			kg
	Temperature Measurement Reference	10 cm below DB Starter Unit				

