POWER CONTROL SYSTEMS
POWER SUPPLY UNITS

M311-X

FEATURES

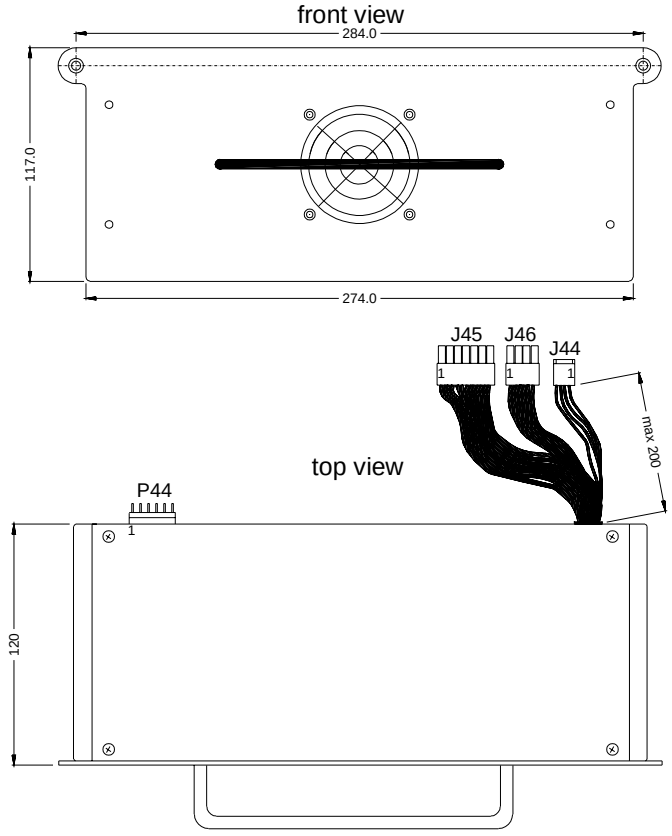
Input voltage
85÷276Vac
Input frequency
50/60Hz
Efficiency
75% typ.
Switching operating frequency
60KHz typ.
Power factor
>=0.9
Input protections
• Mains filter
• Start-up peak current limitation
• Fuses: external
Leakage current to GND
<1mA
See table for
• Output voltages and currents
• Outputs protections
• Output Tolerance(Line+Load+Therm. regulation)
• Output Ripple
Output protections
• Over load protection on all outputs
• Over voltage on outputs: A,B,C,D,E,F
• Under voltage on outputs: A,B
• Thermal shut-down (85°C typ.)
Hold up time
20msec typ.
Output power
272W
Output signals
• INIT low active TTL compatible
• THERM. FAIL low active TTL compatible
• (all signals are referred to GNDdgt)
Operating temperature
5°C to 40°C
Storage temperature
-10°C to 50°C
Temperature drift
0.01%/°C
Cooling
Controlled forced vent. (by VFAN)
Dielectric withstand voltage
• Input - Output :1750Vac
• Input -P.E.: 1750Vac
Isolation
• Output - P.E.:500Vdc
Comply with
• EN 61010 and CSA 1010
• UL 1262 / UL 3101
• EN 55011 (CEI 110-6)ClasseB(1991)
• EN 50082-1 (1997)
• EN 61000-3-2
• EN 61000-3-3
Power-off input signals
Low active TTL comp., disables outputs VE,VF
Vprog controls VFAN
Vprog 0÷9V (VFAN 6÷15V)

POWER SUPPLY VIEW

FEATURES TABLE

COMMON	OUT	Vout setting value V	Iout min A	Iout A	OVP V	UVP V	Tolerance %	Ripple & Noise (0÷20MHz) mVpp
GNDdgt	+5Vdgt	5	0	7.5	>=6.2	<=4	±2	<50
GNDdgt	+12Vdgt	12	0	2.5	>=15	<=11	±5	<100
GNDan	+15Van	15	0	1.5	>=18	-	±1	<20
GNDan	-15Van	-15	0	1.5	>=18	-	±1	<20
GNDpwr	+24Vpwr	24	0.1	4	>=27	-	±5	<240
GNDpwr	+16Vpwr	16	0.1	3	>=19	-	±5	<160
GNDdgt	VFAN	6÷15	0	1	-	-	±5	<150

DIMENSIONS AND CONNECTIONS



J45		J46	
1)GNDan	8)-15Van	1)+24Vpwr	5)+24Vpwr
2)GNDan	9)+15Van	2)GNDpwr	6)GNDpwr
3)+12Vdgt	10)+5Vdgt	3)GNDpwr	7)GNDpwr
4)+5Vdgt	11)+5Vdgt	4)+16Vpwr	8)+16pwr
5)GNDdgt	12)GNDdgt		
6)GNDdgt	13)GNDdgt		
7)GNDdgt	14)VFAN		

J44	P44
1)INIT/	1)ACinputL
2)PWR OFF/	2)N.C.
3)VPROG	3)ACinputN
4)THERMFAIL	4)N.C.
	5)N.C.
	6)P.E.

POWER CONTROL SYSTEMS S.p.A. · 31020 Zoppe' di San Vendemiano (TV) · Italy
Tel: +39 0438 771311 Fax: +39 0438 771301 e-mail: pcs@powercontrolsystems.com