

## 100-240V AC/DC-Converters

5V, 12V, 15V  
24V

15-405W  
15-30W



NEW

Output Voltage	5V		12V					12V				±12V	24V		
Output Current	3A	5A	1.3A	3.4A	4.2A	4.5A	4.5A	7.5A	15A	16A	30A	2.5A	0.63A	1.3A	1.3A
Adjustment Range	5-5.5V	5-5.5V	12-15V	10-12V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	12-15V	±12-15V	24-28V	24-28V	24-28V
Output Current	3.0A	5.0A	1.3-1.0A	3-2.5A	4.2-3.4A	4.5-3.6A	4.5-3.6A	7.5-6A	15-13.5A	16-12.8A	30/27A	2.5A a)	0.63-0.54A	1.3-1.1A	1.3-1.1A
Output Power	15W	25W	15W	30W	50W	54W	54W	90W	180W	192W	360/405W	36W	15W	30W	30W
Power Reserves	-	-	-	-	-	-	-	-	50%	20%	20%	-	-	-	-
Ripple & Noise max. [mV <sub>pp</sub> ]	50mV	50mV	75mV	10mV	100mV	50mV	50mV	50mV	50mV	50mV	100mV	50mV	50mV	50mV	50mV
AC Input Voltage	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-120V/ 220-240V -15%/+10% auto select	AC 100-240V ±15% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range	AC 100-240V -15%/+10% wide range
Harmonic Correction	-	-	-	-	-	-	-	-	active	active	active	-	-	-	-
EN 61000-3-2 (PFC-Norm)	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled
Power Factor, typ.	0.44	0.53	0.44	0.53	0.52	0.5	0.44	0.55	0.92	0.96	0.95	0.53	0.44	0.53	0.49
Input Inrush Current Limiter	NTC	NTC	NTC	NTC	NTC	NTC	active	NTC	active	active	active	NTC	NTC	NTC	NTC
Input Inrush Current	16A/31A <sup>b)</sup>	17A/35A <sup>b)</sup>	16A/31A <sup>b)</sup>	17A/35A <sup>b)</sup>	17A/35A <sup>b)</sup>	16A/32A <sup>b)</sup>	6A/6A <sup>c)</sup>	22A/37A <sup>b)</sup>	4A/7A <sup>d)</sup>	6A/9A	9A/7A <sup>d)</sup>	17A/35A <sup>b)</sup>	16A/31A <sup>b)</sup>	17A/35A <sup>b)</sup>	18A/35A <sup>b)</sup>
External Input Fuse Recommendation	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 10A or C - 6A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 4A	B - 6A or C - 6A	B - 10A or C - 10A	B - 10A or C - 6A	B - 6A or C - 3A	B - 10A or C - 6A	B - 6A or C - 3A
DC Input Voltage	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 290V -25%/+30%	DC 110-150V -20%/+25%	DC 110-150V ±20%	-	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%
Efficiency, typ.	77.2%	80.0%	82.5%	84.0%	90.0%	87.2%	87.6%	88.5%	91.8%	94.3%	92.6%	86.0%	85.1%	87.5%	89.4%
Power Losses, typ.	4.5W	6.3W	3.2W	5.8W	6.0W	7.9W	7.6W	11.7W	16.1W	11.6W	28.8W	5.9W	2.7W	4.3W	3.7W
MTBF (+40°C, SN 29500)	2686 kh	1963 kh	3811 kh	650 kh	600 kh	1690 kh	1571 kh	500 kh	631 kh	t.b.d.	554 kh	600 kh	4369 kh	650 kh	2405 kh
Operat. Temperature Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-40°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Derating +60°C to +70°C	0.4W/°C	0.5W/°C	0.4W/°C	0.8W/°C	1.3W/°C	1.4W/°C	1.4W/°C	2.5W/°C	5W/°C	4.8W/°C	0.75A/°C	1W/°C	0.4W/°C	0.8W/°C	0.8W/°C
Connection Terminals	screw terminals	spring terminals	screw terminals	spring terminals	spring terminals	screw terminals	screw terminals	spring terminals	spring terminals	screw terminals	screw terminals	spring terminals	screw terminals	spring terminals	screw terminals
Dimensions WxHxD	22.5x75x91mm	45x75x91mm	22.5x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	72.5x75x103mm	60x124x117mm	39x124x117	65x124x127mm	45x75x91mm	22.5x75x91mm	45x75x91mm	22.5x75x91mm
Weight	130g	240g	130g	250g	260g	250g	250g	360g	930g	600g	1000g	240g	130g	230g	140g
DC-OK Signal	-	-	-	-	-	-	-	-	yes	yes	yes	-	-	-	-
Special Features				very low output noise			-40°C version				shutdown input	dual-output voltage			
Order Number	ML15.051	ML30.101	ML15.121	ML30.102	ML50.102	ML60.121	ML60.122	ML100.102	QS10.121	CP10.121	CPS20.121	ML30.106	ML15.241	ML30.100	ML30.241

a) Both outputs can be flexibly loaded to this power as long as the output power of 36W retaining inter less current at lower load output should be at least 5% of the more highly loaded output. b) Peak current at 120Vac / 230Vac, ambient temperature of +40 ° C and cold start c) between -40°C and +70°C d) Peak current at 120Vac / 230Vac, independent of temperature