

# PLW12K-400-400

Constant Voltage Mode				Constant Power Mode			
CVH Range	0.000	~	400.0 V	CPH Range	0.000	~	12,000 W
CVM Range	0.000	~	200.0 V	CPM Range	0.000	~	6,000 W
CVL Range	0.000	~	40.00 V		@ lin	≤	200.0 A
				CPL Range	0.000	~	1,200 W
					@ lin	≤	40.00 A
Transient Time Range				Transient Time Range	Same As CC Mode		
Fast Band(Default,Osc1)	0.500	~	51.19 ms				
Slow Band(Osc2,Osc3)	0.500	~	511.9 ms				
Temperature Coefficient	100 ppm/°C of Rated Voltage			Temperature Coefficient	300 ppm/°C of Rated Power		
Program				Program			
CVH Resolution*2		25.00	mV	CPH Resolution*2		0.750	W
CVM Resolution*2		12.50	mV	CPM Resolution*2		0.375	W
CVL Resolution*2		2.500	mV	CPL Resolution*2		0.075	W
CVH Accuracy*2	0.05%	±	0.400 V	CPH Accuracy*2	1.00%	±	90.00 W
CVM Accuracy*2	0.05%	±	0.400 V		@ lin	>	20.00 A
CVL Accuracy*2	0.05%	±	0.400 V		& Vin	>	40.00 V
Transient Time Accuracy	10.0%	±	50% of Minimum Time	CPM Accuracy*2	1.00%	±	90.00 W
					@ lin	>	4.000 A
Readback					& Vin	>	40.00 V
CVH Resolution		25.00	mV	CPL Accuracy*2	1.00%	±	90.00 W
CVM Resolution		12.50	mV		@ lin	>	0.400 A
CVL Resolution		2.500	mV		& Vin	>	40.00 V
CVH Accuracy	0.05%	±	0.400 V		1.00%	±	90.00 W
CVM Accuracy	0.05%	±	0.400 V		@ lin	>	0.400 A
CCL Accuracy	0.05%	±	0.400 V		& Vin	>	80.00 V
				Transient Time Accuracy	10.0%	±	50% of Minimum Time
Constant Current Mode				Constant Resistor Mode			
CCH Range	0.000	~	400.0 A	CRH Range	10.00	~	500.0 Ω
CCM Range	0.000	~	200.0 A		@ lin	≤	40.00 A
CCL Range	0.000	~	40.00 A	CRM Range	1.000	~	250.0 Ω
Transient Time Range				CRL Range	0.0045	~	1.000 Ω
Fast Band(Default,Osc1)	0.050	~	51.19 ms	Transient Time Range			
Slow Band(Osc2,Osc3)	0.500	~	511.9 ms	CRM/CRH	Same As CC Mode		
Minimum Voltage(I <sub>Max</sub> )		1.800	V	CRL	Same As CV Mode		
Temperature Coefficient	100 ppm/°C of Rated Current			Temperature Coefficient			
				CRM//H	300 ppm/°C of Minimum Resistance		
Program				CRL	300 ppm/°C of Maximum Resistance		
CCH Resolution*2		25.00	mA	Program			
CCM Resolution*2		12.50	mA	CRH Resolution*2		0.006	mS
CCL Resolution*2		2.500	mA	CRM Resolution*2		0.063	mS
CCH Accuracy*2	0.05%	±	0.400 A	CRL Resolution*2		0.063	mΩ
CCM Accuracy*2	0.05%	±	0.400 A	CRH Accuracy*2	1.00%	±	0.500 mS
CCL Accuracy*2	0.05%	±	0.400 A		@ lin	>	0.400 A
Transient Time Accuracy	10.0%	±	50% of Minimum Time		& Vin	>	80.00 V
				CRM Accuracy*2	1.00%	±	2.000 mS
Readback					@ lin	>	4.000 A
CCH Resolution		25.00	mA		& Vin	>	40.00 V
CCM Resolution		12.50	mA		1.00%	±	2.000 mS
CCL Resolution		2.500	mA		@ lin	>	4.000 A
CCH Accuracy	0.05%	±	0.400 A		& Vin	>	40.00 V
CCM Accuracy	0.05%	±	0.400 A	CRL Accuracy*2	1.00%	±	1.000 mΩ
CCL Accuracy	0.05%	±	0.400 A		@ lin	>	40.00 A
					& Vin	>	0.400 V
Programmable Protection				Transient Time Accuracy	10.0%	±	50% of Minimum Time
Power(OPP)				External			
Range	15.75	~	12,600 W	Program	0~10 Volts Input yields		
Resolution		1.575	W		0~selected full scaled loading in all modes		
Accuracy	0.50%		31.50 W	Accuracy	Same As Internal ± 0.1% Rating		
Voltage(OVP)				Input Impedance	400.0	±	1 % KΩ
Range	0.263	~	420.0 V	BandWidth(-3dB)	Limited By Internal Adjustable Transient Time		
Resolution		0.026	V	Monitor output Signal	0~10 Volts output for 0~full scaled Value		
Accuracy	0.20%	±	0.525 V	VMON Accuracy	0.10%	±	0.400 V
Current(OCP)				IMON Accuracy	0.10%	±	0.400 A
Range	0.263	~	420.0 A				
Resolution		0.026	A				
Accuracy	0.20%	±	0.525 A				
Under Voltage Lockout(UVL)				Others			
Mode	Input On/Continuous			Transient Mode			
Range	0.300	~	400.0 V	Frequency Range	0.100	~	10,000 Hz
Resolution		0.100	V	Accuracy		0.1%	
Accuracy	2.50%	±	0.500 V	Duty Range	1.000	~	100.0 %
Anti-Oscillation				Accuracy		0.1%	
	Default/Osc1/Osc2/Osc3/Disable						
Protection				Remote Interface	GPIOB/RS-232/ETHERNET/USB		
Over Power Protection(OP)	12,600	±	240.0 W	Fluid			
Over Voltage Protection(OV)	420.0	±	8.000 V	Valve	Normal Close(Power On Thermal Control)		
Over Current Protection(OC)	440.0	±	4.190 A	Flow Rate(Pmax)	≥ 3.0 GPM @ 15°CFluid In		
Over Temperature Protection(OTP)	50.00	±	5.000 °C	Derating for higher temperatures	(-)3% Rated Power/°C		
Reverse Maximum Current(RCP)	440.0		A	Pressure	<80 PSI		
Short Maximum Current		408.0	A	Pipe Size	1/2" NPT Female		
Remote Inhibit(RI)	Short			Decondensation	Valve Thermal Control		
Fault Indicator	SPDT Relay (30VDC/0.5A or 125VAC/0.25A)			General			
				AC Input	85~240 Vac 48~62 Hz		
				Power Consumption	120 VA		
				Operating Temperature	5 °C ~ 40 °C		
				Dimension	27.5(L)x17(W)x3.5(H)		
				Weight	90 LBS		
Dielectric Strength							
Primary Circuit To Chassis	1500 VAC for 1 MIN						
Primary Circuit To Load Terminal	1500 VAC for 1 MIN						
Load Terminal To Chassis	1500 VDC for 1 MIN						

\*1 All Mode Specification measure by slow band and 25°C room temperature unless otherwise specified

\*2 Transient Mode Specification must be x2. AMREL reserves the right to change limits, test conditions, and dimensions without notice

PLW12K-400-400 (400V,400A,12KW) OPERATIONAL CURVE

