

Product Datasheet - Technical Specifications



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ELP/DCM97-98 series programmable DC electronic load

6000 W – 15 kW load



FEATURES

- Six high speed operation modes: CC,CR,CV,CW,CC+CV,CR+CV
- High-luminance VFD screen with 2 lines & 4 channels display channels
- Battery testing and short-circuit function
- Available of dynamic testing and rising edge and falling edge setting
- External current waveform monitor terminal
- Power-on-self-test, software calibration and standard rack mount
- Over current, over voltage, over power, over heat, reversed protection
- 1000/1200 V on request
- Soft start time setting, carrying the power supplier according to the voltage value set
- Supporting external trigger input and output
- Supporting remote voltage compensation and multidata storage
- Communication mode: GPIB/RS232/RS485/USB (Option)
- Customer specific models on request

Model	ELP/DCM9718		ELP/DCM9718B		ELP/DCM9718D		ELP/DCM9718E		
Input Rating	Power	6000 W		6000 W		6000 W		6000 W	
	Current	0 - 240 A		0 - 120 A		0 - 240 A		0 - 120 A	
	Voltage	0 - 150 V		0 - 500 V		0 - 500 V		0 - 600 V	
CC Mode	Range	0 - 24 A	0 - 240 A	0 - 12 A	0 - 120 A	0 - 24 A	0 - 240 A	0 - 12 A	0 - 120 A
	Resolution	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA
	Accuracy	0,05%+0,05%FS	0,1%+0,05%FS	0,05%+0,05%FS	0,1%+0,05%FS	0,05%+0,05%FS	0,1%+0,05%FS	0,05%+0,05%FS	0,01%+0,08%FS
CV Mode	Range	0,1 - 19.999 V	0,1 - 150 V	0,1 - 19.999 V	0,1 - 500 V	0,1 - 19.999 V	0,1 - 500 V	0,1 - 19.999 V	0,1 - 600 V
	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,05%FS	0,03%+0,02%FS	0,03%+0,05%FS	0,03%+0,02%FS	0,03%+0,05%FS
CR Mode (Voltage and current input value > 10% full messument)	Range	0,3 - 10 K Ω	0,3 - 5 K Ω	0,03 - 10 K Ω	0,03 - 5 K Ω	0,03 - 10 K Ω	0,03 - 5 K Ω	0,03 - 10 K Ω	0,03 - 5 K Ω
	Resolution	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit
	Accuracy	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,15%FS
CW Mode (Voltage and current input value > 10% full messument)	Range	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W
	Resolution	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW
	Accuracy	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,15%FS
V Measurement	Voltage	0 - 19.999 V	0 - 150 V	0 - 19.999 V	0 - 500 V	0 - 19.999 V	0 - 500 V	0 - 19.999 V	0 - 600 V
	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,05%FS	0,015%+0,03%FS	0,015%+0,05%FS	0,015%+0,03%FS	0,015%+0,05%FS
I Measurement	Current	0 - 24 A	0 - 240 A	0 - 12 A	0 - 120 A	0 - 24 A	0 - 240 A	0 - 12 A	0 - 120 A
	Resolution	0,1 mA	1 mA	0,1 mA	1 mA	0,1 mA	1 mA	0,1 mA	1 mA
	Accuracy	0,03%+0,08%FS	0,1%+0,08%FS	0,03%+0,08%FS	0,1%+0,08%FS	0,03%+0,05%FS	0,1%+0,05%FS	0,05%+0,01%FS	0,01%+0,01%FS
W Measurement (Voltage and current input value > 10% full messument)	Watt	100 W	6000 W	100 W	6000 W	100 W	6000 W	100 W	6000 W
	Resolution	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW
	Accuracy	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,1%FS	0,1%+0,15%FS

Battery Test	Battery Input: 0,5 - 120 V; Max. Measurement: Capacity = 999 AH; Resolution = 0,1 mA; Time Range = 15 - 32 HS
Dynamic Test	Transition List: 0 - 25 kHz; 2,5 A/uS; T1 & T2: 60 uS - 999 S; Accuracy: +/- 15 % offset + 10 % FS
CC soft-startup Time	1 mS; 2 mS; 5 mS; 10 mS; 20 mS; 50 mS; 100 mS; 200 mS; Accuracy: +/- 15 % offset + 10 % FS

Short Circuit	Current CC	= 26,4 A	= 264 A	= 13,2 A	= 132 A	= 26,4 A	= 264 A	= 13,2 A	= 132 A
	Voltage CV	0 V		0 V		0 V		0 V	
	Resistance RC	= 7 mΩ		= 35 mΩ		= 30 mΩ		= 35 mΩ	
Temperature	Operating	0 - 40 °C		0 - 40 °C		0 - 40 °C		0 - 40 °C	
	Nonoperating	-10 °C - 70 °C		-10 °C - 70 °C		-10 °C - 70 °C		-10 °C - 70 °C	
Dimension	WxHxD (mm)	19" x 8U x 538,5		19" x 8U x 538,5		19" x 8U x 538,5		19" x 8U x 538,5	
Weight	Kg	70		70		70		70	

Model		ELP/DCM9718F		ELP/DCM9834		ELP/DCM9835		ELP/DCM9835B	
Input Rating	Power	6000 W		10000 W		15000 W		15000 W	
	Current	0 - 480 A		0 - 500 A		0 - 500 A		0 - 240 A	
	Voltage	0 - 150 V		0 - 150 V		0 - 150 V		0 - 500 V	
CC Mode	Range	0 - 48 A	0 - 480 A	0 - 50 A	0 - 500 A	0 - 50 A	0 - 500 A	0 - 24 A	0 - 240 A
	Resolution	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA
	Accuracy	0,1%+0,15%FS	0,1%+0,15%FS	0,1%+0,05%FS	0,15%+0,2%FS	0,1%+0,05%FS	0,15%+0,2%FS	0,1%+0,05%FS	0,15%+0,1%FS
CV Mode	Range	0,1 - 19.999 V	0,1 - 150 V	0,1 - 19.999 V	0,1 - 150 V	0,1 - 19.999 V	0,1 - 150 V	0,1 - 19.999 V	0,1 - 500 V
	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,02%FS	0,03%+0,05%FS
CR Mode (Voltage and current input value > 10% full messument)	Range	0,3 - 10 K Ω	0,3 - 5 K Ω	0,3 - 10 K Ω	0,3 - 5 K Ω	0,3 - 10 K Ω	0,3 - 5 K Ω	0,3 - 10 K Ω	0,3 - 5 K Ω
	Resolution	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit
	Accuracy	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS
CW Mode (Voltage and current input value > 10% full messument)	Range	0 - 6000 W	0 - 6000 W	0 - 7500 W	0 - 15000 W	0 - 7500 W	0 - 15000 W	0 - 12000 W	0 - 15000 W
	Resolution	1 mW	10 mW	10 mW	100 mW	10 mW	100 mW	10 mW	100 mW
	Accuracy	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS
V Measurement	Voltage	0 - 19.999 V	0 - 150 V	0 - 19.999 V	0 - 150 V	0 - 19.999 V	0 - 150 V	0 - 19.999 V	0 - 500 V
	Resolution	0,1 mV	1 mV	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,03%FS	0,015%+0,05%FS
I Measurement	Current	0 - 48 A	0 - 480 A	0 - 50 A	0 - 500 A	0 - 50 A	0 - 500 A	0 - 24 A	0 - 240 A
	Resolution	0,1 mA	1 mA	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA
	Accuracy	0,05%+0,01%FS	0,01%+0,015%FS	0,1%+0,05%FS	0,15%+0,2%FS	0,1%+0,05%FS	0,15%+0,2%FS	0,1%+0,05%FS	0,15%+0,1%FS
W Measurement (Voltage and current input value > 10% full messument)	Watt	100 W	6000 W	100 W	15000 W	100 W	15000 W	100 W	15000 W
	Resolution	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW	1 mW	10 mW
	Accuracy	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,1%FS	0,2%+0,15%FS

Battery Test	Battery Input: 0,5 - 120 V; Max. Measurement: Capacity = 999 AH; Resolution = 0,1 mA; Time Range = 1S - 32 HS
Dynamic Test	Transition List: 0 - 25 kHz; 2,5 A/ μ S; T1 & T2: 60 μ S - 999 S; Accuracy: +/- 15 % offset + 10 % FS
CC soft-startup Time	1 mS; 2 mS; 5 mS; 10 mS; 20 mS; 50 mS; 100 mS; 200 mS; Accuracy: +/- 15 % offset + 10 % FS

Short Circuit	Current CC	= 52,8 A	= 528 A	= 55 A	= 550 A	= 55 A	= 550 A	= 26,4 A	= 264 A
	Voltage CV	0 V		0 V		0 V		0 V	
	Resistance RC	= 5 m Ω		= 5 m Ω		= 5 m Ω		= 9 m Ω	
Temperature	Operating	0 - 40 °C		0 - 40 °C		0 - 40 °C		0 - 40 °C	
	Nonoperating	-10 °C - 70 °C		-10 °C - 70 °C		-10 °C - 70 °C		-10 °C - 70 °C	
Dimension	WxHxD (mm)	19" x 8U x 538,5		1880 x 700 x 700		1880 x 700 x 700		1880 x 700 x 700	
Weight	Kg	70		300		300		300	

Model		M9718G-800		M9718H-1200V	
Input Rating	Power	6000 W		6000 W	
	Current	0 - 120 A		0 - 120 A	
	Voltage	0 - 800 V		0 - 1200 V	
CC Mode	Range	0 - 12 A	0 - 120 A	0 - 12 A	0 - 120 A
	Resolution	1 mA	10 mA	1 mA	10 mA
	Accuracy	0.05%+0.05% FS	0.1%+0.05% FS	0.05%+0.05% FS	0.05%+0.1% FS
CV Mode	Range	0.1 - 19.999 V	0.1 - 800 V	0,1 - 19.999 V	0,1 - 1200 V0
	Resolution	1 mV	10 mV	1 mV	10 mV
	Accuracy	0.03%+0.02% FS	0.03%+0.05% FS	0,03%+0,05% FS	0,05%+0,05% FS
CR Mode (Voltage and current input value > 10% full messument)	Range	0.03 Ω - 2K	0.03 Ω - 5K	0.03 Ω - 2K	0.03 Ω - 5K
	Resolution	16 digit	16 digit	16 bit	16 bit
	Accuracy	0.1%+0.2% FS	0.1%+0.2% FS	0,1%+0,2% FS	0,2%+0,25% FS
CW Mode (Voltage and current input value > 10% full messument)	Range	0 - 6000 W	0 - 6000 W	0 - 6000 W	0 - 6000 W
	Resolution	1 mW	10 mW	1 mW	10 mW
	Accuracy	0,1%+0,1%FS	0,2%+0,15%FS	0,1%+0,2% FS	0,2%+0,25%FS
V Measurement	Voltage	0 - 19.999 V	0 - 800 V	0 - 19.999 V	0 - 1200 V
	Resolution	1 mV	10 mV	1 mV	10 mV
	Accuracy	0.015%+0.05% FS	0.03%+0.05% FS	0,015%+0,03% FS	0,015%+0,05% FS
I Measurement	Current	0 - 12 A	0 - 120 A	0 - 12 A	0 - 120 A
	Resolution	0,1 mA	1 mA	0.1 mA	1 mA
	Accuracy	0.1%+0.2% FS	0.1%+0.2% FS	0.2%+0.2% FS	0.2%+0.15% FS
W Measurement (Voltage and current input value > 10% full messument)	Watt	100 W	6000 W	100 W	6000 W
	Resolution	1 mW	10 mW	1 mW	10 mW
	Accuracy	0.2%+0.2% FS	0.2%+0.2% FS	0,1%+0,2% FS	0,2%+0,25% FS

Battery Measurement	Battery Input: 0.1 - 800 V Max. Measurement: Capacity=999/H Resolution=0.1 mA Time Range=1 S - 16 HS	Battery Input: 0.1 - 1200 V Max. Measurement: Capacity=999/H Resolution=0.1 mA Time Range=1 S - 16 HS
Dynamic Measurement	Transition List: 0 - 25 kHz 5A/uS; T1&T2: 60 uS - 999 S Accuracy: +15% offset +10% FS	Transition List: 0 - 25 kHz; 5 A/uS T1&T2: 60 uS - 999 S Accuracy: +15% offset +10% FS
CC soft-startup Time	1 mS; 2 mS; 5 mS; 10 mS; 20 mS; 50 mS; 100 mS; 200 mS Accuracy: + 15% offset +10% FS	1 mS; 2 mS; 5 mS; 10 mS; 20 mS; 50 mS; 100 mS; 200 mS Accuracy: +15% offset +10% FS

Short Circuit	Current CC	= 13.2 A	= 132 A	= 13.2 A	= 132 A
	Voltage CV	0 V		0 V	
	Resistance RC	= 30 mΩ		= 30 mΩ	
Temperature	Operating	0 - 40 °C		0 - 40 °C	
	Nonoperating	-10 °C - 70 °C		-10 °C - 70 °C	
Dimension	WxHxD (mm)	19" x 8 HE x 538,5		19" x 8 HE x 538,5	
Weight	Kg	70		70	