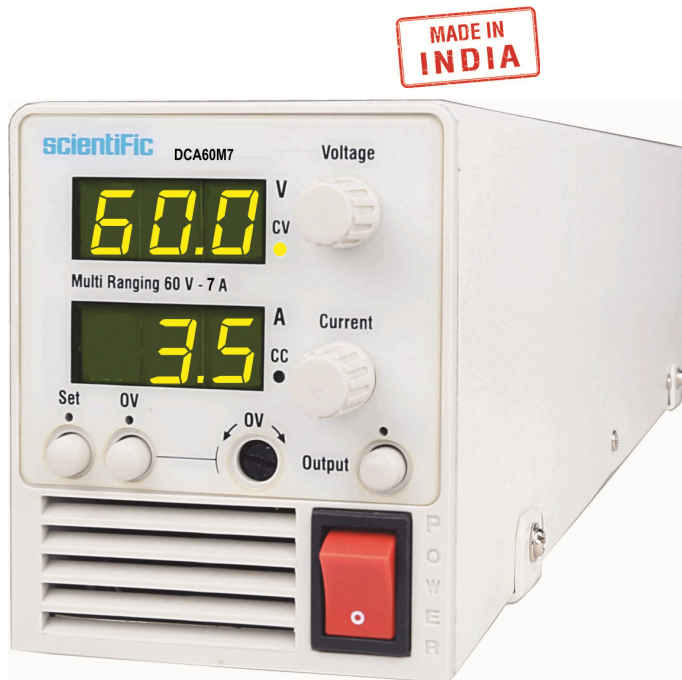
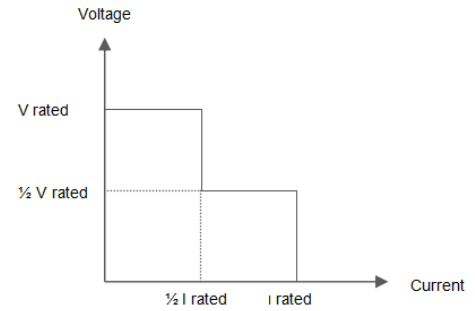


## 200 W Programmable DC Power Supply



### Multi-Ranging Output



### Technical Specifications

	DCA 10M40	DCA 20M20	DCA 30M14	DCA 60M7	DCA 80M5	DCA 160M2.5
<b>Output Voltage (V)</b>	10	20	30	60	80	160
<b>Output Profile</b>	Multi Ranging (Stepped)					
<b>Output Current (A)</b>	40	20	14	7	5	2.5
<b>Rated Power</b>	200 Watts					
<b>Efficiency at 230 V (%)</b>	78	80	81	81	82	82
<b>Constant Voltage Mode</b>						
<b>Load regulation 0 ~ 100% (mV)</b>	3	3	5	5	15	15
<b>Line Regulation (mV)</b>	2	2	3	3	5	5
<b>Ripple (mVrms) BW=20 MHz</b>	5	8	10	10	15	18
<b>Ripple (mVpp) BW=20 MHz</b>	30	40	50	50	60	65

	DCA 10M40	DCA 20M20	DCA 30M14	DCA 60M7	DCA 80M5	DCA 160M2.5
<b>Constant Current Mode</b>						
<b>Load regulation 0 ~ 100 % (mA)</b>	10	10	8	8	5	5
<b>Line Regulation (mA)</b>	2	2	2	2	2	2
<b>Ripple (mArms) BW=20 MHz</b>	50	40	25	20	15	10
<b>Ripple (mApp) 20 MHz</b>	150	120	75	60	50	30
<b>Remote sense drop (V)</b>	1	2	2	2	2	2
<b>Programming Speed</b>						
<b>Rise time ( 10% to 90% ) into resistive load</b>						
<b>Time 100% load (ms)</b>	5V :9 10V: 18	10V:18 20V:35	15V:18 30V:40	30V:40 60V:80	40V:40 80V:90	80V: 90 160V:200
<b>Time 10% load (ms)</b>	5V : 8 10V: 15	10V:15 20V:30	15V:16 30V:35	30V:35 60V:75	40V:38 80V:80	80V: 80 160V:190
<b>Fall time ( 90% to 10% ) into resistive load</b>						
<b>Time 100% load (ms)</b>	5V : 5 10V: 10	10V:10 20V:30	15V:15 30V:30	30V:30 60V:90	40V:28 80V:50	80V: 50 160V:150
<b>Time 10% load (ms)</b>	5V : 60 10V: 100	10V:100 20V:250	15V:120 30V:250	30V:250 60V:800	40V:265 80V:500	80V: 500 160V:1.500
<b>Recovery Time</b>						
<b>Recovery within (mV)</b>	50	50	80	80	100	100
<b>Time @ 50 – 100 % load step (µs)</b>	100	100	100	100	100	100
<b>Max deviation @ 230 V mains (mV)</b>	5V:160 10V:160	10V:160 20V:160	15V:150 30V:150	30V:150 60V:150	40V:500 80V:500	80V:500 160V:500
<b>Output Impedance</b>						
<b>CV, 0-1kHz (mΩ) CV, 1-100kHz (mΩ)</b>	< 10 < 30					
<b>Temperature Coefficients</b>	CV : 80 ppm/°C CC : 90 ppm/°C after 30 min of warm up time					
<b>Output Stability</b>	CV : 100 ppm CC : 100 ppm after warm up of 30 min and during 8 hrs					

	DCA 10M40	DCA 20M20	DCA 30M14	DCA 60M7	DCA 80M5	DCA 160M2.5
<b>Analog Programing (Rear panel 9 pin D connector)</b>						
<b>Programing:</b>	Voltage : 0 ~ 5 V, Accuracy : 1 % of Vout rated Input impedance : 1 M $\Omega$ Current : 0 ~ 5 V, Accuracy : 1 % of Iout rated Input impedance : 1 M $\Omega$					
<b>Monitoring:</b>	Voltage : 0 ~ 5 V, Accuracy : 1 % of Vout rated Output impedance : < 2 $\Omega$ / 0.4 mA max Current : 0 ~ 5 V, Accuracy : 1 % of Iout rated Output impedance : 2 $\Omega$ / 0.4 mA max					
<b>V reference</b>	5 V $\pm$ 20 mV					
<b>Status outputs:</b>	Power Supply OK = PS OK = Logic High, Any Fault: PS OK = Logic LOW					
<b>Remote shutdown</b>	With +5V or relay contacts.					
<b>Front Panel controls:</b>	Mains ON/ OFF, Voltage and Current setting with multi-turn potentiometer, OVP Limit Setting					
<b>Indicators:</b>	Voltage, Current, CV, CC, Output ON, Over-Voltage Fault					
<b>Display</b>						
<b>Resolution</b>	3 digit, voltage and current separately					
<b>Accuracy</b>	$\pm$ (0.5 % + 2 d)					
<b>Voltage</b>	0 ~ 10.0	0 ~ 20.0	0 ~ 30.0	0 ~ 60.0	0 ~ 80.0	0 ~160
<b>Current</b>	0 ~ 40.0 A	0 ~ 20.0 A	0 ~ 14.0 A	0 ~ 7.00 A	0 ~ 5.00 A	0 ~ 2.50 A
<b>Protections</b>	Over voltage: Adjustable from 0.5 V ~ 105 % of Vmax, Output shut-down, reset by Output switch.					
	Over current: Selectable from CV to CC mode output switched OFF.					
	Over temperature: Output gets OFF, after preset internal safe temperature					
	AC Fail: Output gets OFF, if input Voltage out of Safe Range					
<b>Output Terminals</b>	Bus bar and Remote sense Terminal					
<b>Parallel operation</b>	Upto 6 units					
<b>Serial operation</b>	2 units in series of same model					

	DCA 10M40	DCA 20M20	DCA 30M14	DCA 60M7	DCA 80M5	DCA 160M2.5
<b>Mains Input</b>	Universal AC input, Single phase, 90 ~ 270V, 50 / 60 Hz (47 ~ 63Hz) Input connector: IEC320/C14, EN 60320/14 Standby Power: 13 Watts @ 230V (V & I zero) Internal Fuse L: 6 A Fast, 5 X 20 mm ceramic fuse.					
<b>Power Factor</b>	0.9 @ full load / 0.98 @ 50% load					
<b>Turn On Delay</b>	600 ms after mains switched ON					
<b>Inrush current</b>	<25A					
<b>Hold up Time</b>	20ms					
<b>Environment Conditions</b>						
<b>Operating Temperature</b>	0 ~ +50°C with 100% load; derated to 75% at 60°C					
<b>Storage</b>	-40 ~ + 85°C					
<b>Humidity</b>	max. 95% non condensing at 40°C max. 75% non condensing at 50°C					
<b>Safety</b>	Insulation: Input to Output: 3750 V for 1 min Input to case: 2500 Vrms, Output to case: 600 V Insulation resistance: 100 MΩ at 25°C, 70% RH, 500 Vdc					
<b>Dimension</b>	W x D x H: 70 x 403 x 85 mm (2U, 1/6 <sup>th</sup> 19" Rack size) excluding connectors, terminals, switches, front and back panel controls, handles etc.					
<b>Weight</b>	2.9 kg					
<b>Cooling</b>	Forced, temperature controlled variable Fan speed					
<b>Accessories Supplied</b>	Mains cable					

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