



# CP Power & Automation Ltd

## LAB/TC Technical Data

Part Number	Power	Voltage	Current	Case Size (WxHxD)
LAB/TC 10/50	10kW	0-50Vdc	0-250A	19" x 6U x 495mm
LAB/TC 10/52	10kW	0-52Vdc	0-250A	19" x 6U x 495mm
LAB/TC 10/60	10kW	0-60Vdc	0-208A	19" x 6U x 495mm
LAB/TC 10/100	10kW	0-100Vdc	0-125A	19" x 6U x 495mm
LAB/TC 10/200	10kW	0-200Vdc	0-63A	19" x 6U x 495mm
LAB/TC 10/400	10kW	0-400Vdc	0-31A	19" x 6U x 495mm
LAB/TC 10/500	10kW	0-500Vdc	0-25A	19" x 6U x 495mm
LAB/TC 10/600	10kW	0-600Vdc	0-20A	19" x 6U x 495mm
LAB/TC 10/1000	10kW	0-1000Vdc	0-13A	19" x 6U x 495mm
LAB/TC 16/50	16kW	0-50Vdc	0-400A*	19" x 6U x 495mm
LAB/TC 16/52	16kW	0-52Vdc	0-400A*	19" x 6U x 495mm
LAB/TC 16/60	16kW	0-60Vdc	0-333A*	19" x 6U x 495mm
LAB/TC 16/100	16kW	0-100Vdc	0-200A*	19" x 6U x 495mm
LAB/TC 16/200	16kW	0-200Vdc	0-100A	19" x 6U x 495mm
LAB/TC 16/400	16kW	0-400Vdc	0-50A	19" x 6U x 495mm
LAB/TC 16/500	16kW	0-500Vdc	0-40A	19" x 6U x 495mm
LAB/TC 16/600	16kW	0-600Vdc	0-32A	19" x 6U x 495mm
LAB/TC 16/1000	16kW	0-1000Vdc	0-20A	19" x 6U x 495mm
LAB/TC 20/50	20kW	0-50Vdc	0-500A*	19" x 9U x 590mm
LAB/TC 20/52	20kW	0-52Vdc	0-500A*	19" x 9U x 590mm
LAB/TC 20/60	20kW	0-60Vdc	0-417A	19" x 9U x 590mm
LAB/TC 20/100	20kW	0-100Vdc	0-250A	19" x 9U x 590mm
LAB/TC 20/200	20kW	0-200Vdc	0-125A	19" x 9U x 590mm
LAB/TC 20/400	20kW	0-400Vdc	0-63A	19" x 9U x 590mm
LAB/TC 20/500	20kW	0-500Vdc	0-50A	19" x 9U x 590mm
LAB/TC 20/600	20kW	0-600Vdc	0-40A	19" x 9U x 590mm
LAB/TC 20/1000	20kW	0-1000Vdc	0-25A	19" x 9U x 590mm
LAB/TC 32/50	32kW	0-50Vdc	0-600A*	19" x 9U x 590mm
LAB/TC 32/52	32kW	0-52Vdc	0-600A*	19" x 9U x 590mm
LAB/TC 32/60	32kW	0-60Vdc	0-500A*	19" x 9U x 590mm
LAB/TC 32/100	32kW	0-100Vdc	0-300A*	19" x 9U x 590mm
LAB/TC 32/200	32kW	0-200Vdc	0-200A*	19" x 9U x 590mm
LAB/TC 32/400	32kW	0-400Vdc	0-100A*	19" x 9U x 590mm
LAB/TC 32/500	32kW	0-500Vdc	0-80A*	19" x 9U x 590mm
LAB/TC 32/600	32kW	0-600Vdc	0-64A*	19" x 9U x 590mm
LAB/TC 32/1000	32kW	0-1000Vdc	0-40A*	19" x 9U x 590mm

\* These models have ambient temperature restrictions. Please refer to the individual technical summaries. No derating if power supply has optional liquid cooling.

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## LAB/TC Technical Data

### Options

<b>/HMI</b>	Front panel control and display in English or German (user switchable)
<b>/RXTS</b>	Extended internal resistance range of 0-12 $\Omega$
<b>/LC</b>	Integrated liquid cooling of the power stage
<b>/RCU 19</b>	Remote control unit built into 19" x 3U x 290mm (W x H x D) rack
<b>/RCU DT</b>	Remote control unit provided as a desktop unit measuring 355x100x290mm (W x H x D)
<b>/RS422</b>	Upgrade of RS232 interface to RS422 standard
<b>/IEEE</b>	Parallel to serial converter to allow GPIB operation via RS232 interface.
<b>/CANCABLE</b>	Connecting cable for multi unit operation
<b>/CANOPEN</b>	Field BUS interface
<b>/INTERBUS</b>	Field BUS interface
<b>/PROFIBUS</b>	Field BUS interface
<b>/DEVICENET</b>	Field BUS interface

Accelerated down programming and voltage overshoot clipping are also optionally available. Please contact us to discuss your requirements.

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## LAB/TC Technical Data

### Technical Data

The following table details common specification points for the LAB/TC range. Unit specific technical summaries are available on request.

Input Voltage	3 x 360-440 VAC
Input Frequency	48 - 62Hz
Mains Connection Type	3L + PE (no neutral)
Operating Modes	Constant Voltage (0-100% of Vmax)
	Constant Current (0-100% of Imax)
	Constant Power (5-100% of Pmax)
Internal Resistance Range	0-1000 mΩ (option 0-12Ω)
Interfaces	Analogue & RS232
Remote Sense	10% Vnom
Efficiency	Up to 95%
Load Regulation (CV, CC)	< ±0.1%
Line Regulation (CV, CC)	< ±0.1%
Response Time (10%-90%)	<2ms
Over Voltage Protection	0 to 110% of Vmax
Over Current Protection	0 to 110% of Imax
Output Ripple (300Hz)	< 0.4% rms
Output Noise (40kHz 1MHz)	< 0.1Vrms
Stability (CV, CC)	< ± 0.05%
Operating Temperature	5 to 40° C
Temperature Coefficient (CV)	0.02% per °C
Temperature Coefficient (CC)	0.03% per °C



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