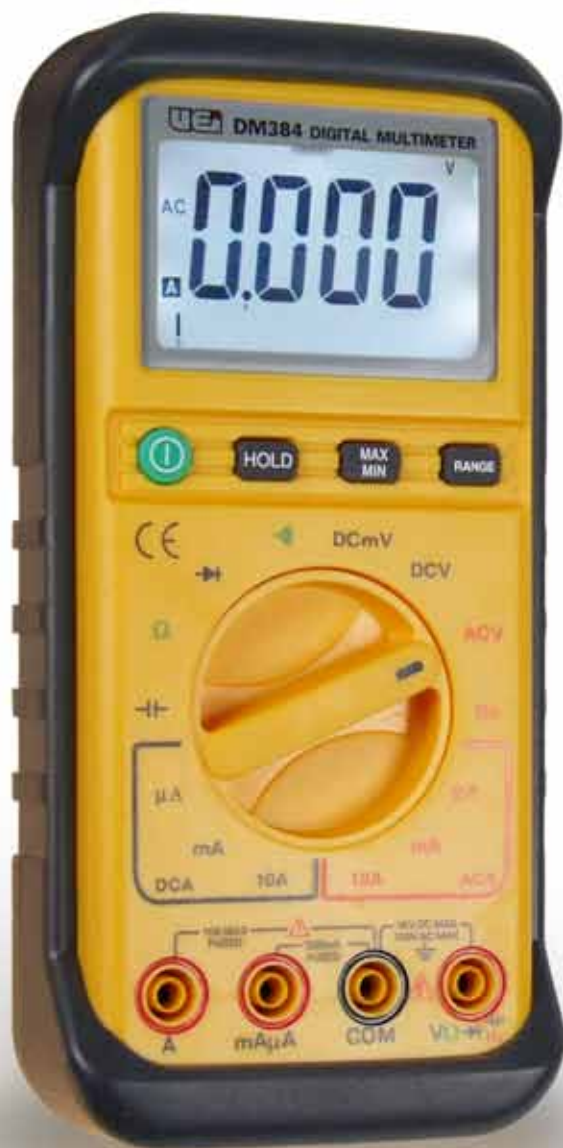




DM384 HVAC Multimeter

The DM384 is a full-sized multimeter specifically upgraded to meet the needs of today's HVAC/R technicians, plant maintenance professionals, and electricians. Features include MIN/MAX capture for unattended monitoring, capacitance for checking run/start capacitors, and frequency for quick verification of generators, inverters, and control circuit operation.

**Also included in this
Data Sheet**

**DM393, DM391,
DM383B, DM200, DM5B**

QUICK COMPARISON



FUNCTIONS	DM393	DM391	DM384	DM383B	DM200	DM5B
True-RMS	X	-	-	-	-	-
AC Volts	1000	1000	1000	1000	600	750
DC Volts	1000	1000	750	750	600	750
AC Amps	10	10	10	10	-	5
DC Amps	10	10	10	10	-	5
Resistance	400Ω ~ 10MΩ	400Ω ~ 10MΩ	400Ω ~ 40MΩ	400Ω ~ 40MΩ	200Ω	30MΩ
Continuity	X	X	X	X	X	X
Capacitance	40nF ~ 100 μF	40nF ~ 100 μF	4nF ~ 40,000 μF	-	-	-
Frequency	0.5Hz ~ 10MHz	0.5Hz ~ 10MHz	4kHz ~ 40MHz	-	-	-
Diode Test	X	X	X	X	-	X
Temperature °F	-40° ~ 2,372°	-	-	-	-	-
Temperature °C	-40° ~ 1,300°	-	-	-	-	-

FEATURES

Display Count	4,000	4,000	4,000	4,000	2,000	4,000
Low Battery Indicator	X	X	X	X	X	X
Auto Power Off	X	X	-	-	X	X
Data Hold	X	X	X	X	-	X
MIN/MAX	X	-	X	MAX	-	-
Backlit Display	X	X	X	X	-	-
Relative Mode	X	X	-	-	-	-
Closed Case Calibration	X	X	-	-	-	-
Analog Bar Graph	-	-	X	-	-	-

Accessories Included

Test Leads	ATL55	ATL55	ATL55	ATL55	ATL55	ATL250
Alligator Clips	AAC	AAC	AAC	AAC	AAC	AAC
Battery	9V	9V	9V	9V	9V	AB13 (2)
Fuse	AF38, AF39	AF38, AF39	AF155, AF160	AF155, AF160	-	AF250/AF251
Temperature Probe	ATT29	-	-	-	-	-
Temperature Plug Adapter	ATT70	-	-	-	-	-

Warranty & Safety Rating

Limited Warranty	5yr	5yr	5yr	5yr	1yr	3yr
Safety Ratings	UL CAT III 1000V	UL CAT III 1000V	UL CAT III 600V	UL CAT III 600V	UL CAT II 600V	-

CAN'T FIND THE METER YOU ARE LOOKING FOR?...

UEi offers a variety of digital and analog multimeters not included on this data sheet, including a wide range of clamp meters. We have grouped our products specifically to make it easy to find what you're looking for. Here are a few related products and data sheets. For a complete list visit: www.ueitest.com

Product Part

DM397 **L645**

Digital Clamp Meters (DL369, DL379, DL389, CH3, DL49, DL99B, DL235)..... **L333**

Analog Clamp & Multimeters (M110A, M75A, M20, M1K, MCP9A, MCP4)..... **L339**

DM397

Our most advanced diagnostic multimeter made for HVAC/R. Designed specifically for engineers for electrical and industrial process diagnosis.



Functions

Features

Includes

Specifications



DM393



- True RMS AC Volts and Amps
- 1000V AC/DC
- 10A AC/DC
- 0.5% basic DC accuracy
- Frequency 10Mhz
- Capacitance 100µF
- Temperature: -40° to 2372°F
- Resistance 40MΩ
- Diode test 4V
- Continuity >10Ω
- All inputs, ranges and functions protected to 1000 V CAT III
- Access to battery and fuses without breaking calibration
- 4,000 count backlit display
- Relative mode
- Hold
- Autoranging
- Five year limited warranty

ATL55, AAC3, ATT29, ATT70, 9V Bat., AF38, AF39



DM391



- 1000V AC/DC
- 10A AC/DC
- 0.5% basic DC accuracy
- Frequency 10Mhz
- Capacitance 100µF
- Resistance 40MΩ
- Diode test 4V
- Continuity >10Ω
- All inputs, ranges and functions protected to 1000 V CAT III
- Access to battery and fuses without breaking calibration
- 4,000 count backlit display
- Relative mode
- Hold
- Autoranging
- Five year limited warranty

ATL55, AAC3, 9V Bat., AF38, AF39

Range	Resolution	Accuracy		Range	Resolution	Accuracy		Range	Resolution	Accuracy	
DC Volts		DM393	DM391	DC Current		DM393	DM391	Frequency & Duty Cycle		DM393	DM391
400mV	100µV	0.5% + 2	0.5% + 2	400µA	0.1µA	1.0% + 2	1.0% + 2	5Hz	0.001Hz	0.05% + 3	0.05% + 3
4V	1mV			4000µA	1µA			50Hz	0.01Hz		
40V	10mV			40mA	10µA			500Hz	0.1Hz		
400V	100mV			400mA	100µA			5kHz	1Hz		
1000V	1V	0.75% + 3	0.75% + 3	4A	1mA	1.5% + 5	1.5% + 5	50kHz	10Hz		
				10A	10mA			500kHz	100Hz		
								5MHz	1kHz		
								10MHz	10kHz		
AC Current											
				400µA	0.1µA	1.0% + 5 (40-400Hz)	1.0% + 5	Temperature			
				4000µA	1µA			-40°C to -10°C	1°C	3% ± 5°C	-
				40mA	10µA			(-40°F to 14°F)	1°F	(3% ± 5°F)	-
				400mA	100µA			-10°F to 400°F	1°C	1% ± 3°C	-
				400mA	1mA	1.5% + 5 (400Hz-10kHz)		(14°F to 752°F)	1°F	(1% ± 3°F)	-
				4A-10A	10mA	1.5% + 10 (40-400Hz)	1.5% + 10	400°C to 1300°C	1°C	3% of reading	-
						1.5% + 5 (400Hz-10kHz)		(752°F to 2372°F)	1°F	(3% of reading)	-
Resistance											
				400Ω	0.1Ω	1.0% + 5	1.0% + 5	Frequency Counter Sensitivity			
				4000Ω	1Ω			Range Minimum Sensitivity (RMS Sine Wave)			
				40kΩ	10Ω						
				400kΩ	100Ω	0.5% + 3	0.5% + 3	40Hz - 10kHz	500mV	10Hz - 20kHz	500mV
				4MΩ	1kΩ	1.0% + 5	1.0% + 5	V (4V - 1000V)			
				10MΩ	10kΩ	1.5% + 10	1.5% + 10	µA (400µA - 4mA)	>15% F.S. of AC Range		Not Specified
								mA (40mA - 400mA)	>15% F.S. of AC Range		Not Specified
								A (4.0A - 10A)	>45% F.S. of AC Range		Not Specified
Continuity											
								Burden Voltage			
								Function	Range	Burden Voltage (Typical)	
								mA/µA	400µA	150µV/µA	
									4000µA	150µV/µA	
									40mA	3.3mV/mA	
									400mA	3.3mV/mA	
								A	4A	0.03V/A	
									10A	0.03V/A	
Capacitance											
				40nF	10pF	2.5% + 10	2.5% + 10				
				400nF	100pF						
				4µF	1nF						
				40µF	10nF						
				100µF	100nF						



DM384



- 750 Volts AC & 1000 Volts DC
- 10 Amps AC & DC
- Resistance to 40 MΩ
- .01 μA DC resolution for flame safe guard circuit testing
- Frequency to 40 MHz
- Capacitance to 40,000 Microfarad
- Diode Test
- Continuity

- 3-3/4" Digit, 4000 count display
- Analog bar graph
- MIN/MAX
- Data hold
- EasyView display
- Low Battery Indicator
- On-screen range and function indicators
- CE and UL listed 600V CAT III
- Five year limited warranty

ATL55, AAC3, 9V Bat., AF155, AF160



DM383B



- 750 Volts AC & 1000 Volts DC
- 10 Amps AC & DC
- Resistance to 40 MΩ
- 0.1 μA DC resolution for flame safe guard circuit testing
- Diode Test
- Continuity

- New – EasyView Display
- 3 3/4" Digit, 4000 count display
- Max capture mode
- Data hold
- On-screen range and function indicators
- CE and UL listed 600V CAT III
- Five year limited warranty

ATL55, AAC3, 9V Bat., AF155, AF160

Range	Resolution	Accuracy		Range	Resolution	Accuracy	
DC Volts		DM384	DM383B	Resistance		DM384	DM383B
400mV	100μV	±(0.5% Rdg + 3)	±(0.5% Rdg + 1)	400Ω	0.1Ω	±(1.0% Rdg + 3)	±(0.8% Rdg + 2)
4V	1mV			4000Ω	1Ω		
40V	10mV			40kΩ	10Ω		
400V	100mV			400kΩ	100Ω		
1000V	1V			4MΩ	1kΩ		
				40MΩ	10kΩ	±(3.0% Rdg + 7)	±(2.0% Rdg + 3)
AC Volts (50 - 500Hz)				Capacitance			
400mV	100μV	±(1.5% Rdg + 3)	±(1.5% Rdg + 3)	4nF	.001nF	±(3.0% Rdg + 4)	-
4V	1mV			40nF	.01nF		-
40V	10mV			400nF	.1nF		-
400V	100mV			4μF	.001MF		-
750V	1V	±(2.0% Rdg + 4)	±(2.0% Rdg + 4)	40μF	.01MF		-
DC Current				400μF	.1MF		-
400μA	0.1μA	±(1.0% Rdg + 3)	±(1.0% Rdg + 2)	4mF	.001mF		-
4000μA	1μA			40mF	.01mF		-
40mA	10μA						
400mA	100μA	±(1.5% Rdg + 3)	±(1.0% Rdg + 2)				
10A	10mA	±(2.0% Rdg + 2)	±(2.0% Rdg + 2)				
AC Current (50 - 500Hz)							
400μA	0.1μA	±(1.5% Rdg + 3)	±(1.5% Rdg + 3)				
4000μA	1μA						
40mA	10μA						
400mA	100μA						
400mA	1mA						
4A	10mA	±(3.0% Rdg + 5)	±(2.0% Rdg + 3)				
10A	10mA	±(3.0% Rdg + 5)	±(2.5% Rdg + 4)				



DM200



- Volts 600 AC & DC
- Continuity
- Resistance to 200 ohms

- Manual ranging
- 3-1/2" digit, 2000 count display
- Protective rubber boot
- One year limited warranty

ATL55, AAC3, 9V Bat.



DM5B

- 750 Volts AC & DC
- 5 Amps AC & DC
- Continuity
- Resistance to 40MΩ

- Pocket-sized
- Auto ranging
- Data hold
- Fuse protected current ranges
- Three year limited warranty

ATL250, AF250, AF251, AB13

Range	Resolution	Accuracy
DC Volts		
20V	100mV	$\pm(1.5\% \text{ Rdg} + 3)$
200V	10mV	
600V	1V	
AC Volts (45 - 450Hz)		
200V	10mV	$\pm(1.5\% \text{ Rdg} + 5)$
600V	1V	
Resistance		
200Ω	0.1Ω	$\pm(1.5\% \text{ Rdg} + 3)$
Continuity		
Beeper sounds @ <50Ω		

Range	Resolution	Accuracy	Protection
DC Volts			
300mV	100μV	$\pm(1.2\% \text{ Rdg} + 2)$	1000V
3V	1mV	$\pm(0.5\% \text{ Rdg} + 2)$	
30V	10mV	$\pm(1.2\% \text{ Rdg} + 2)$	
300V	100mV		
750V	1V	$\pm(1.5\% \text{ Rdg} + 3)$	
AC Volts			
3V	1mV	$\pm(2.0\% \text{ Rdg} + 3)$	1000V
30V	10mV		
300V	100mV		
750V	1V	$\pm(2.0\% \text{ Rdg} + 4)$	
DC Current			
30mA	10μA	$\pm(1.5\% \text{ Rdg} + 2)$	500mA, 250V
300mA	100μA		
5A	10mA	$\pm(3.0\% \text{ Rdg} + 4)$	5A, 250V
AC Current			
30mA	10μA	$\pm(2.0\% \text{ Rdg} + 4)$	500mA, 250V
300mA	100μA		
5A	10mA	$\pm(3.0\% \text{ Rdg} + 4)$	5A, 250V
Resistance			
300Ω	0.1Ω	$\pm(1.2\% \text{ Rdg} + 3)$	500V
3KΩ	1Ω		
30kΩ	10Ω		
300kΩ	100Ω		
3MΩ	1kΩ		
30MΩ	10kΩ	$\pm(3.0\% \text{ Rdg} + 5)$	
Diode Test			
Resolution	Max Current	Max Voltage	
1mV	0.8mA	3.3V	500V

ACCESSORIES

INCLUDED

Test Leads

- ATL55** UL listed Insulated test leads for industry standard multimeters. (DM393, DM391, DM384, DM383B, DM200)
- ATL250** Insulated test leads for DM5B.
- AAC3** Screw-on alligator clips



Temperature Probes (DM393)

- ATT29** 4' Standard fiber glass coated K-Type Temperature probe. (-40° to 950°F / -40° to 510°C)
- ATT70** K-Type Temperature Probe adapter
- NOTE: for use with meters that include temperature function*



Batteries & Fuses

- AB13** Battery, A76VP DM5B
- AF38** Fuse, 440mA, 1000V DM393, DM391
- AF39** Fuse, 11A, 1000V DM393, DM391
- AF155** Fuse, 500mA, 1000V DM384, DM383B
- AF160** Fuse, 12A, 1000V DM384, DM383B
- AF250** Fuse, .5A, 600V DM5B
- AF251** Fuse, 5A, 600V DM5B



NOTE: 9V Battery is standard.

OPTIONAL ACCESSORIES

Clips & Adapters

- ATHA1** Gas Valve Thermocouple Adapter (Measure mV during use)
- CA30** Clamp-on Adapter (AC / DC)
- CA30MA** Low Amp Clamp-on Adapter (AC / DC)
- CA383B** Clamp-on Adapter (AC ONLY)
- DLMAT2** Micro Amp Adapter



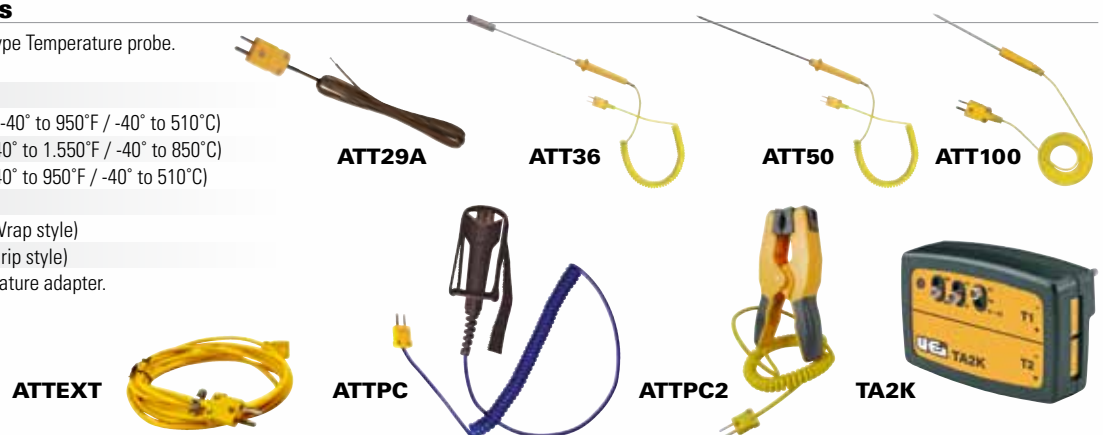
Test Leads

- AAC** Push-on Alligator clips with insulators for pointed test leads
- ATL60** Test Lead, Microwave Diode booster for all DMM (except DM5B)
- ATL301KIT** Deluxe Test Lead Kit
- ATLFSG** Flame safeguard relay kit, w/ test lead and alligator clip



K type Temperature Probes

- ATT29A** 4' Standard teflon coated K-Type Temperature probe. (-40° to 950°F / -40° to 510°C)
- ATT29APACK** ATT29A (10 Pack)
- ATT36** 8" Surface Probe and handle (-40° to 950°F / -40° to 510°C)
- ATT50** 8" Liquid Probe and handle (-40° to 1.550°F / -40° to 850°C)
- ATT100** 6" Liquid Probe and handle (-40° to 950°F / -40° to 510°C)
- ATTEXT** 10' K-Type extension
- ATTPC** K-Type Pipe Clamp Adapter (Wrap style)
- ATTPC2** K-Type Pipe Clamp Adapter (Grip style)
- TA2K** Dual input differential temperature adapter. (For use with DC mV input)



USA

1-800-547-5740 • Fax: (503) 643-6322
www.ueitest.com • Email: info@ueitest.com

8030 SW Nimbus Ave.
Beaverton, OR 97008

CANADA

1-877-475-0648 • Fax: (604) 278-8299
www.ueitest.com • Email: info@ueitest.com

150-13571 Verdun Place
Richmond, B.C.
V6V 1W6

EUROPE

+44 1707 375550 • Fax: +44 1707 393277