

**TECHNICAL DATA** 

## Fluke 377 FC, 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meters with iFlex



### MEASURE VOLTAGE AND CURRENT With your clamp jaw

FASTER, SAFER TESTING

All without touching a live wire - using FieldSense™ technology

POWER QUALITY INDICATOR

Shows whether equipment or power line is faulty

COMPLETE 3-PHASE VOLTAGE AND CURRENT TESTS

in 3 quick steps



# Voltage and current measurements with FieldSense™ technology

The Fluke 377 FC and 378 FC true-rms clamp meters use Field-Sense<sup>™</sup> technology to make testing faster and safer, all without touching a live conductor. You get accurate voltage and current measurements through the clamp jaw. Simply clip the black test lead to any electrical ground, put the clamp jaw around the conductor and see reliable, accurate voltage and current values on the display.

### Power quality indicator shows whether a problem is in the equipment or the power line (378 FC only)

The 378 FC clamp meter includes a unique PQ function that senses power quality issues automatically. When making FieldSense measurements, the 378 FC will detect and display power quality issues, relating to current, voltage, power factor or any combination of the three. Now you can quickly determine if an upstream supply problem exists, or if there is a downstream equipment problem.



The 378 FC includes a power quality test that provides quick indication of whether an incoming power problem or an equipment problem exists.



## Voltage and current measurements with FieldSense<sup>™</sup> technology

No more hand-written notes or complicated math.

- Complete 3-phase voltage and current tests in 3 easy steps
- Full set of phase-to-ground and phase-tophase values calculated
- Displayed on your smart phone and saved to the cloud via Fluke Connect software
- Phase rotation calculated and shown on the Fluke Connect software

# Measure extremely high current with iFlex<sup>™</sup> probe

Use the included iFlex flexible current probe to measure ac current as high as 2500 Å. The iFlex probe provides access to large conductors in tight spaces.

## Easy to see, easy to use with included tools

Your job will get easier when you use the 377FC and 378 FC clamp meter:

- The display turns green when a stable Field-Sense measurement is detected.
- Visual Continuity provides a bright green screen for easy detection of continuity in noisy work areas.
- The TPAK magnetic hanging kit, with 9 inch (23 cm) hanging strap, lets you hang your clamp wherever you need: to a steel cabinet door; around a pipe; on a nail or screw head.
- The included carrying case holds the clamp, iFlex probe, test leads and the included black grounding clip.

# Record, analyze, share results with Fluke Connect<sup>™</sup> software

With Fluke Connect software you can remotely log, trend and monitor measurements to pinpoint intermittent faults. Fluke Connect also allows you to gather data as the basis for a preventive maintenance program.



Fluke Connect allows measurements to be sent to a smartphone for logging, collaboration and analysis.



Fluke Connect pulls all data related to three-phase measurements including phase rotation and presents the full set of data for analysis at a glance.



Data gathered by Fluke Connect can pinpoint elusive intermittent faults. Data collected over regular intervals can be used to spot small changes before they grow into major problems.



## **Specifications**

General specifications		
General Maximum voltage (between any terminal and earth ground)	1000 V	
Battery		
Туре	2 AA IEC LR6 alkaline	
Life	200 hours	
Display	Dual readout	
Automatic Power Off	20 minutes	
AC Current: Jaw		
Range	999.9 A	
Resolution	0.1 A	
Accuracy	2 % $\pm$ 5 digits (10 Hz to 100 Hz) 2.5 % $\pm$ 5 digits (100 Hz to 500 Hz)	
Crest Factor (50/60 Hz)	3 @ 500 A 2.5 @ 600 A 1.42 @ 1000 A Add 2 % for C.F. >2	
AC Current: Flexible Current Probe		
Range	2500 A	
Resolution	1 A (≤ 2500 A) 0.1 A (≤ 999.9 A)	
Accuracy	3 % ±5 digits (5 Hz to 500 Hz)	

Distance from Optimum	i2500-10 Flex	i2500-18 Flex	Error
A	0.5 in (12.7 mm)	1.4 in (35.6 mm)	± 0.5 %
В	0.8 in (20.3 mm)	2.0 in (50.8 mm)	± 1.0 %
Ç	1.4 in (35.6 mm)	2.5 in (63.5 mm)	± 2.0 %
Measurement uncertainty assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temper ture range.			

DC Current	
Range	999.9 A
Resolution	0.1 A
Accuracy	2 % ±5 digits
AC Voltage: FieldSense	
Range	1000 V
Resolution	1 V (≤ 1000 V)
Accuracy	
$\leq$ 4/0 AWG	3 % ±5 digits (45 Hz to 66 Hz)
≥ 4/0 AWG	5 % ±5 digits (45 Hz to 66 Hz)



Position wire as close as possible to jaw opening (see illustration).



## **Specifications (continued)**

Range         600.0 V 1000 V           Resolution         0.1 V (≤ 600.0 V)           Accuracy         1 % ±5 digits (20 Hz to 500 Hz)           DC Voltage         600.0 V           Range         600.0 V           Resolution         0.1 V ≤ 600.0 V)           Accuracy         1 % ± 5 digits           MV dc         1 % ± 5 digits           Range         500.0 mV           Resolution         0.1 mV           Accuracy         1 % ± 5 digits           Amps Frequency: Jaw         1 % ± 5 digits           Range         5.0 Hz to 500.0 Hz           Range         5.0 Hz to 500.0 Hz           Resolution         0.1 Hz           Accuracy         1 % ± 5 digits           Trigger Level         5 Hz to 10 Hz, ≥ 10 A           100 Hz to 100 Hz, ≥ 5 A         100 Hz to 500.0 Hz           Range         5.0 Hz to 500.0 Hz <t< th=""><th>AC Voltage: Test Leads</th><th></th></t<>	AC Voltage: Test Leads	
I         V ( $\pm$ 1000 V)           Accuracy         1 % ±5 digits (20 Hz to 500 Hz)           DC Voltage         1000 V           Range         600.0 V           1000 V         1000 V           Resolution         0.1 V ≤ 600.0 V)           Accuracy         1 % ± 5 digits           mV de         000 V           Range         500.0 mV           Resolution         0.1 mV           Accuracy         1 % ± 5 digits           Amps Frequency: Jaw         1           Range         5.0 Hz to 500.0 Hz           Resolution         0.1 Hz           Accuracy         0.5 % ± 5 digits           Trigger Level         5 Hz to 10 Hz, ≥ 10 A           10 Hz to 100 Hz, ≥ 5 A         100 Hz to 500.0 Hz           Range         5.0 Hz to 500.0 Hz           Range         0.	Range	600.0 V 1000 V
DC Voltage600.0 VRange $600.0 V$ Resolution $0.1 V \le 600.0 V$ )1 V ( $\le 1000 V$ ) $1 V (\le 1000 V)$ Accuracy $1 \% \pm 5$ digitsmV dc $0.1 mV$ Range $500.0 mV$ Resolution $0.1 mV$ Accuracy $1 \% \pm 5$ digitsAmps Frequency: Jaw $0.1 mV$ Range $5.0 Hz to 500.0 Hz$ Resolution $0.1 Hz$ Accuracy $0.5 \% \pm 5$ digitsTrigger Level $S Hz to 100 Hz \ge 10 A$ $10 Hz to 100 Hz \ge 5 A$ $100 Hz to 500 Hz$ Range $5.0 Hz to 500.0 Hz$ Range $5.0 Hz to 500.0 Hz$ Resolution $0.1 Hz \ge 10 A$ $10 Hz to 100 Hz \ge 25 A$ $100 Hz to 500 Hz$ Range $5.0 Hz to 500.0 Hz$ Range $6.000 k\Omega$ $6000 \Omega$ $100 Hz \ge 25 A$ $20 Hz to 100 Hz, \ge 25 A20 Hz to 100 Hz, \ge 20 A100 Hz to 500 Hz, \ge 25 ARange6.000 k\Omega6000 \Omega10 L (s 600.0 \Omega)10 \Omega (s 60.00 k\Omega)Accuracy0.1 \Omega (s 60.00 \Omega)10 \Omega (s 60.00 k\Omega)Accuracy1 \% \pm 5 digitsCapacitance0.1 \Omega (s 60.00 k\Omega)10 \Omega (s 60.00 k\Omega)Accuracy1 \% \pm 5 digitsCapacitance0.1 \mu (s 10.00 \mu F)Resolution0.1 \mu (s 10.00 \mu F)$	Resolution	
Range $600.0 \ V$ $1000 \ V$ Resolution $0.1 \ V \le 600.0 \ V$ $1 \ V \le 1000 \ V$ Accuracy $1 \ \psi \pm 5 \ \text{digits}$ mV dc $0.1 \ w \le 5 \ \text{digits}$ Range $500.0 \ mV$ Resolution $0.1 \ mV$ Accuracy $1 \ \psi \pm 5 \ \text{digits}$ Amps Frequency: Jaw $0.1 \ mV$ Range $5.0 \ \text{Hz} \ to 500.0 \ \text{Hz}$ Resolution $0.1 \ \text{Hz}$ Accuracy $0.5 \ \psi \pm 5 \ \text{digits}$ Trigger Level $0.5 \ \psi \pm 5 \ \text{digits}$ Trigger Level $0.1 \ \text{Hz} \ to 100 \ \text{Hz} \ge 5.4 \ \text{Loo 100 \ \text{Hz}} \ge 6.4 \ 100 \ \text{Hz} \ to 500 \ \text{Hz}$ Range $5.0 \ \text{Hz} \ to 500.0 \ \text{Hz}$ Range $5.0 \ \text{Hz} \ to 500.0 \ \text{Hz}$ Range $0.1 \ \text{Hz} \ to 100 \ \text{Hz} \ge 5.4 \ 100 \ \text{Hz} \ to 100 \ \text{Hz} \ to 500 \ \text{Hz} \ \text{Hz} \ to 100 \ \text{Hz} \ Hz$	Accuracy	1 % ±5 digits (20 Hz to 500 Hz)
1000 V           Resolution         0.1 V ≤ 600.0 V)           Accuracy         1 % ± 5 digits           mV dc	DC Voltage	
ImageImageAccuracy1 % ± 5 digitsmV dc0.1 mVResolution0.1 mVAccuracy1 % ± 5 digitsAmps Frequency: Jaw0.1 mVRange5.0 Hz to 500.0 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level5 Hz to 10 Hz, ≥ 6 A 100 Hz to 500 Hz, ≥ 5 A 100 Hz, ≥ 5 A 100 Hz to 500.0 HzRange5.0 Hz to 500.0 HzRange5.0 Hz to 500.0 HzRange5.0 Hz to 500.0 HzAmps Prequency: Flexible Current ProbeRange5.0 Hz to 500.0 HzRange5.0 Hz to 500.0 HzRange5.0 Hz to 500.0 HzRange6.0 Hz to 500.0 HzRange5.0 Hz to 500.0 HzRange6.0 N ± 5 digitsTrigger Level2 S A 100 Hz, ≥ 25 AResistance60.00 kl 6000 0 6000 0 1 0 (≤ 6000 0) 10 00 µF	Range	
InV dcRange $500.0 \text{ mV}$ Resolution $0.1 \text{ mV}$ Accuracy $1\% \pm 5 \text{ digits}$ Amps Frequency: JawRange $5.0 \text{ Hz}$ to $50.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5\% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $10 \text{ Hz} \ge 10 \text{ A}$ $10 \text{ Hz}$ to $100 \text{ Hz} \ge 5 \text{ A}$ $100 \text{ Hz}$ to $50.0 \text{ Hz}$ Amps Frequency: Flexible Current $7 \text{ Hz}$ $100 \text{ Hz}$ to $500.0 \text{ Hz}$ Probe $5.0 \text{ Hz}$ to $500.0 \text{ Hz}$ Range $5.0 \text{ Hz}$ to $500.0 \text{ Hz}$ Range $5.0 \text{ Hz}$ to $500.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5\% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $500.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5\% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $500 \text{ Hz}$ , $\ge 25 \text{ A}$ $100 \text{ Hz}$ to $500 \text{ Hz}$ , $\ge 25 \text{ A}$ $100 \text{ Hz}$ to $500 \text{ Hz}$ , $\ge 25 \text{ A}$ $100 \text{ Hz}$ to $500.0 \text{ Hz}$ Range $60.00 \text{ k}\Omega$ $6000.0$ $6000.0$ Resolution $0.1 \Omega$ ( $\le 600.0 \text{ GR}$ ) $1 \Omega$ ( $\le 600.0 \text{ GR}$ )Accuracy $1\% \pm 5 \text{ digits}$ Capacitance1000 \mu FRange $1000 \mu F$ Range $1000 \mu F$ Range $1000 \mu F$	Resolution	
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Resolution $0.1 \text{ mV}$ Accuracy $1\% \pm 5 \text{ digits}$ Amps Prequency: Jaw $0.1 \text{ Hz}$ Range $5.0 \text{ Hz} \text{ to } 50.0.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5\% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz} \text{ to } 10 \text{ Hz} \ge 50 \text{ A}$ 10 Hz to 100 Hz, $\ge 50$ $10 \text{ Hz}$ Amps Frequency: Flexible Current $10 \text{ Hz} \text{ to } 50.0 \text{ Hz}$ Probe $5.0 \text{ Hz} \text{ to } 50.0.0 \text{ Hz}$ Range $5.0 \text{ Hz} \text{ to } 50.0.0 \text{ Hz}$ Range $5.0 \text{ Hz} \text{ to } 50.0.0 \text{ Hz}$ Range $5.0 \text{ Hz} \text{ to } 50.0.0 \text{ Hz}$ Accuracy $0.5\% \pm 5 \text{ digits}$ Trigger Level $5.0 \text{ Hz} \text{ to } 20.0.0 \text{ Hz}$ Scattance $2.0 \text{ A}$ Range $60.00 \text{ kn}$ Goution $0.1 \Omega (\leq 60.0.0 \text{ Gout})$ $10 \Omega (\leq 60.0.0 \text{ kn})$ $10 \Omega (\leq 60.0.0 \text{ ch})$ Accuracy $0.1 \Omega (\leq 60.0.0 \text{ ch})$ Io ( $1 \Omega (\leq 60.0.0 \text{ ch})$ $10 \Omega (\leq 60.0.0 \text{ ch})$ Accuracy $0.1 \Omega (\leq 60.0.0 \text{ ch})$ Io ( $0 (\leq 60.0.0 \text{ ch}$	mV dc	
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Amps Frequency: JawRange $5.0 \text{ Hz}$ to $50.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5 \% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $10 \text{ Hz}, \ge 10 \text{ A}$ $10 \text{ Hz}$ to $100 \text{ Hz}, \ge 5 \text{ A}$ $100 \text{ Hz}$ to $500 \text{ Hz}, \ge 10 \text{ A}$ Amps Frequency: Flexible Current ProbeRange $5.0 \text{ Hz}$ to $50.0 \text{ Hz}$ Range $0.1 \text{ Hz}$ Accuracy $0.5 \% \pm 5 \text{ digits}$ Trigger Level $2.5 \text{ M}$ $2.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5 \% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $20 \text{ Hz}, \ge 25 \text{ A}$ $20 \text{ Hz}$ to $100 \text{ Hz}, \ge 20 \text{ A}$ $100 \text{ Hz}$ to $500 \text{ Hz}, \ge 25 \text{ A}$ Resistance $60.00 \text{ k/l}$ $6000 \Omega$ $6000 \Omega$ Range $60.00 \text{ k/l}$ $10 \Omega (\le 60.00 \text{ k/l})$ Accuracy $0.1  0 (\le 6000 \text{ Cl})$ $10 \Omega (\le 6000 \text{ Cl})$ Accuracy $1 \% \pm 5 \text{ digits}$ Capacitance $0.1  0 (\le 6000 \text{ Cl})$ $10 \Omega (\le 6000 \text{ Cl})$ Range $1000  \text{ µF}$ Range $1000  \text{ µF}$	Resolution	0.1 mV
Range $5.0 \text{ Hz}$ to $50.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5 \% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz}$ to $10 \text{ Hz}, \ge 10 \text{ A}$ $10 \text{ Hz}$ to $100 \text{ Hz}, \ge 5 \text{ A}$ $100 \text{ Hz}$ to $500 \text{ Hz}, \ge 10 \text{ A}$ Amps Frequency: Flexible Current Probe $$	Accuracy	$1 \% \pm 5$ digits
Resolution0.1 HzAccuracy $0.5 \% \pm 5$ digitsTrigger Level $5$ Hz to 10 Hz, $\geq 10$ A 10 Hz to 100 Hz, $\geq 5$ A 100 Hz to 500 Hz, $\geq 10$ AAmps Frequency: Flexible Current ProbeProbeRange $5.0$ Hz to $50.0$ HzRange $0.1$ HzAccuracy $0.5 \% \pm 5$ digitsTrigger Level $5$ Hz to $20$ Hz, $\geq 25$ A $20$ Hz to $100$ Hz, $\geq 25$ ARange $60.00$ kΩ $6000 \Omega$ $6000 \Omega$ Range $60.00$ kΩ $6000 \Omega$ $10 (\leq 600.00)$ Resolution $0.1 \Omega$ ( $\leq 6000 \Omega$ ) $10 \Omega$ ( $\leq 60.00$ kΩ)Accuracy $1 \% \pm 5$ digitsCapacitance $1 \% \pm 5$ digitsRange $100 \mu F$ Range $100 \mu F$	Amps Frequency: Jaw	
Accuracy $0.5 \% \pm 5$ digitsTrigger Level $5 Hz$ to $10 Hz$ , $\geq 10 A$ $10 Hz$ to $100 Hz$ , $\geq 5 A$ $100 Hz$ to $500 Hz$ , $\geq 10 A$ Amps Frequency: Flexible Current ProbeRange $5.0 Hz$ to $50.0 Hz$ Range $0.1 Hz$ Accuracy $0.1 Hz$ Accuracy $0.5 \% \pm 5$ digitsTrigger Level $5 Hz$ to $20 Hz$ , $\geq 25 A$ $20 Hz$ to $100 Hz$ , $\geq 20 A$ $100 Hz$ to $500 Hz$ , $\geq 25 A$ Resistance $0.1 0 Hz$ Range $60.00 k\Omega$ $6000 \Omega$ $6000 \Omega$ Resolution $0.1 \Omega (\leq 60.0 \Omega)$ $1 \Omega (\leq 6000 \Omega)$ $10 \Omega (\leq 60.00 k\Omega)$ Accuracy $1 \% \pm 5$ digitsCapacitance $0.1 \Omega (\leq 60.00 k\Omega)$ $10 \Omega (\leq 60.00 k\Omega)$ Range $1000 \mu F$ Range $1000 \mu F$	Range	5.0 Hz to 500.0 Hz
Trigger Level $S Hz$ to $10 Hz, \ge 10 A$ $10 Hz$ to $100 Hz, \ge 5 A$ $100 Hz$ to $500 Hz, \ge 10 A$ Amps Frequency: Flexible Current ProbeRange $S.0 Hz$ to $50.0 Hz$ Resolution $0.1 Hz$ Accuracy $0.5 \% \pm 5$ digitsTrigger Level $20 Hz$ to $20 Hz, \ge 25 A$ $20 Hz$ to $500 Hz, \ge 25 A$ Resistance $0.00 Hz$ Range $60.00 k\Omega$ $6000 \Omega$ $6000 \Omega$ Resolution $0.1 \Omega (\le 60.00 k\Omega)$ $10 \Omega (\le 60.00 k\Omega)$ Range $0.1 \Omega (\le 6000 \Omega)$ $10 \Omega (\le 6000 \Omega)$ Resolution $0.1 \Omega (\le 6000 \Omega)$ $10 \Omega (\le 60.00 k\Omega)$ Accuracy $1 \% \pm 5$ digitsCapacitance $0.1 \mu (\le 5000 \Omega)$ $10 \Omega (\le 60.00 k\Omega)$ Range $1000 \mu F$ Range $1000 \mu F$	Resolution	0.1 Hz
10 Hz to 100 Hz, $\geq$ 5 A 100 Hz to 500 Hz, $\geq$ 10 AAmps Frequency: Flexible Current ProbeRange5.0 Hz to 500.0 HzResolution0.1 HzAccuracy0.5 % ±5 digitsTrigger Level5 Hz to 20 Hz, $\geq$ 25 A 20 Hz to 100 Hz, $\geq$ 20 A 100 Hz to 500 Hz, $\geq$ 25 AResistance60.00 kΩ 6000 Ω 6000 ΩRange60.00 kΩ 6000 Ω 10 Ω ( $\leq$ 600.0 Ω) 10 Ω ( $\leq$ 600.0 Ω)Accuracy0.1 Ω ( $\leq$ 600.0 Ω) 10 Ω ( $\leq$ 60.00 kΩ)Resolution0.1 Ω ( $\leq$ 600.0 Ω) 10 Ω ( $\leq$ 60.00 kΩ)Resolution0.1 Ω ( $\leq$ 600.0 Ω) 10 Ω ( $\leq$ 600.0 Ω)Accuracy1 % ±5 digitsCapacitance1000 μFRange1000 μF ( $\leq$ 100.0 μF)	Accuracy	0.5 % $\pm$ 5 digits
ProbeRange $5.0 \text{ Hz to } 50.0 \text{ Hz}$ Resolution $0.1 \text{ Hz}$ Accuracy $0.5 \% \pm 5 \text{ digits}$ Trigger Level $5 \text{ Hz to } 20 \text{ Hz} \ge 25 \text{ A}$ $20 \text{ Hz to } 100 \text{ Hz} \ge 20 \text{ A}$ $20 \text{ Hz} \text{ to } 100 \text{ Hz} \ge 25 \text{ A}$ Resistance $0.1 \text{ µz} \ge 25 \text{ A}$ Range $60.00 \text{ k\Omega}$ $6000 \Omega$ Resolution $0.1 \Omega \ (\leq 600.0 \Omega)$ $1 \Omega \ (\leq 600.0 \Omega)$ Resolution $0.1 \Omega \ (\leq 600.0 \Omega)$ $10 \Omega \ (\leq 60.00 \text{ k\Omega})$ Accuracy $1 \ \% \ \pm 5 \ \text{ digits}$ Capacitance $1000 \ \mu\text{F}$ Range $1000 \ \mu\text{F}$ Resolution $0.1 \ \mu\text{ F} \ (\leq 100.0 \ \mu\text{F})$	Trigger Level	10 Hz to 100 Hz, ≥ 5 A
Resolution         0.1 Hz           Accuracy         0.5 % ±5 digits           Trigger Level         5 Hz to 20 Hz, $\geq$ 25 A           20 Hz to 100 Hz, $\geq$ 20 A         20 Hz to 500 Hz, $\geq$ 25 A           Resistance $0.1 \ 0.1 \ 0.1 \ 0.5 \ 0.00 \ 0.1 \ 0.00 \ 0.0 \ 0.00 \ 0.$		
Accuracy $0.5 \% \pm 5$ digits           Trigger Level $5 Hz to 20 Hz, \ge 25 A$ $20 Hz to 100 Hz, \ge 20 A$ $20 Hz to 500 Hz, \ge 25 A$ Resistance $000 Hz to 500 Hz, \ge 25 A$ Range $60.00 k\Omega$ $6000 \Omega$ $10 \zeta \le 6000 \Omega$ $10 \Omega (\le 6000 \Omega)$ $10 \zeta \le 6000 k\Omega$ $10 \Omega (\le 6000 k\Omega)$ Accuracy $1 \% \pm 5$ digits           Capacitance $1000 \mu F$ Range $1000 \mu F$ Resolution $0.1 \mu F (\le 100.0 \mu F)$	Range	5.0 Hz to 500.0 Hz
Trigger Level $5 \text{ Hz to 20 Hz, } \ge 25 \text{ A}$ $20 \text{ Hz to 100 Hz, } \ge 20 \text{ A}$ $100 \text{ Hz to 500 Hz, } \ge 25 \text{ A}$ Resistance $60.00 \text{ k}\Omega$ $6000 \Omega$ $6000 \Omega$ Range $60.00 \text{ k}\Omega$ $6000 \Omega$ $6000 \Omega$ Resolution $0.1 \Omega (\le 6000 \Omega)$ $1 \Omega (\le 6000 \Omega)$ $10 \Omega (\le 60.00 \text{ k}\Omega)$ Accuracy $1 \% \pm 5 \text{ digits}$ Capacitance $1000 \mu \text{F}$ Range $1000 \mu \text{F}$ Resolution $0.1 \mu \text{ F} (\le 100.0 \mu \text{F})$	Resolution	0.1 Hz
$20 \text{ Hz to } 100 \text{ Hz}, \ge 20 \text{ A}$ 100 Hz to 500 Hz, ≥ 25 A         Resistance         Range $60.00 \text{ k}\Omega$ $6000 \Omega$ $6000 \Omega$ $600.0 \Omega$ $10 \Omega (\le 600.0 \Omega)$ $10 \Omega (\le 600.0 \Omega)$ $10 \Omega (\le 60.00 \kappa\Omega)$ Accuracy $1 \% \pm 5$ digits         Capacitance         Range         Range $1000 \mu F$ Resolution $0.1 \mu F (\le 100.0 \mu F)$		0.5 % ±5 digits
Range $60.00 \text{ k\Omega}$ $6000 \Omega$ $6000 \Omega$ $600.0 \Omega$ $600.0 \Omega$ Resolution $0.1 \Omega$ ( $\leq 600.0 \Omega$ ) $1 \Omega$ ( $\leq 600.0 \Omega$ ) $1 \Omega$ ( $\leq 60.00 \text{ k\Omega}$ )           Accuracy $1 \% \pm 5$ digits           Capacitance         1000 µF           Range $1000 \mu \text{F}$ Resolution $0.1 \mu \text{F} (\leq 100.0 \mu \text{F})$	Trigger Level	20 Hz to 100 Hz, ≥ 20 A
6000 Ω 600.0 Ω           Resolution         0.1 Ω (≤ 600.0 Ω) 1 Ω (≤ 60.00 Ω) 10 Ω (≤ 60.00 kΩ)           Accuracy         1 % ±5 digits           Capacitance         1000 μF           Range         1000 μF           Resolution         0.1 μF (≤ 100.0 μF)	Resistance	
1 $\Omega$ ( $\leq$ 6000 $\Omega$ ) 10 $\Omega$ ( $\leq$ 60.00 k $\Omega$ )Accuracy1 % $\pm$ 5 digitsCapacitance1000 $\mu$ FRange0.1 $\mu$ F ( $\leq$ 100.0 $\mu$ F)	Range	6000 Ω
Capacitance         1000 μF           Range         0.1 μF (≤ 100.0 μF)	Resolution	1 Ω (≤ 6000 Ω)
Range         1000 μF           Resolution         0.1 μF (≤ 100.0 μF)	Accuracy	1 % ±5 digits
Resolution $0.1 \mu\text{F} (\leq 100.0 \mu\text{F})$	Capacitance	
Resolution $0.1 \ \mu F \ (\leq 100.0 \ \mu F)$	Range	1000 µF
1 F (≤ 1000 μF)	Resolution	0.1 μF (≤ 100.0 μF) 1 F (≤ 1000 μF)
Accuracy 1 % ±4 digits	Accuracy	1 % ±4 digits
Mechanical	Mechanical	
Size (L x W x H) 274 mm x 86 mm x 47 mm	Size (L x W x H)	274 mm x 86 mm x 47 mm
Weight (with Batteries) 463 g	Weight (with Batteries)	463 g
Jaw Opening 34 mm	Jaw Opening	34 mm
Flexible Current Probe Diameter7.5 mm	Flexible Current Probe Diameter	7.5 mm
Flexible Current Probe Cable Length       1.8 m         (head to electronics connector)       1.8 m		1.8 m
Rogowski Coil Length 450 mm	Rogowski Coil Length	450 mm

4 Fluke Corporation Fluke 377 FC, 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meters with iFlex



Environmental	
Operating Temperature	-10 °C to 50 °C
Storage Temperature	-40 °C to 60 °C
Operating Humidity (without condensation)	Non condensing (<10 °C) ≤ 90 % RH (10 °C to 30 °C) ≤ 75 % RH (30 °C to 40 °C) ≤ 45 % RH (40 °C to 50 °C)
Temperature Coefficients	Add 0.1 x specified accuracy for each degree C >28 °C or <18 °C
Ingress Protection	IEC 60529: IP30 (jaw closed)
Operating Altitude	2000 m
Storage Altitude	12 000 m
Electromagnetic Compatibility (EMC)	
International	IEC 61326-1: Portable Electromagnetic Environment IEC 61326-2-2, CISPR 11: Group 1, Class B
	Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.
	Class B: Equipment is suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.
	Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.
Korea (KCC)	Class A equipment (Industrial Broadcast & Communications Equipment)
	Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.
USA (FCC)	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.
Safety	
General	IEC 61010-1: Pollution degree 2
Measurement	IEC 61010-2-032: CAT III 1000 V / CAT IV 600 V IEC 61010-2-033: CAT III 1000 V / CAT IV 600 V
Current Clamp for Leakage Current Measurements	IEC 61557-13: Class 2, $\leq$ 30 A/m
Wireless Radio	
Radio Frequency Certification	FCC ID: T68-FBLE IC:6627A-FBLE
Frequency Range	2405 MHz to 2480 MHz
Output Power	<100 mW
Radio Frequency Data	Go to www.fluke.com and search for "Radio Frequency Data for Class A" (PN 4333628) SIMPLIFIED EU DECLARATION OF CONFORMITY Hereby, Fluke declares that the radio equipment contained in this Product is in compliance with Directive 2014/53/EU. The full text of the EU declaration is available at the following internet address: www.fluke.com/declaration-of-conformity

### FLUKE ®

### **Ordering information**

### FLUKE-378 FC

### Included

Fluke 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meter **TL224** Test Leads **TP175** TwistGuard<sup>™</sup> Test Probes **AC285** black grounding clip (1 only) **i2500-18 iFlex**® Flexible Current Probe 18 inch (48 cm) **TPAK** ToolPak<sup>™</sup> Magnetic Meter Hanger Premium carrying case Quick reference guide

### FLUKE-377 FC

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Visit **www.fluke.com** to get complete details on these products or ask your local Fluke sales representative.



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Smartphone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.

### Fluke. Keeping your world up and running.®

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