

# Flexible 3 Phase MICRO~flex ACMF 1603\_1/3

Part no.: P-06.660.1 ACMF 1603\_1/3\_5m

Part no.: P-06.660.2 ACMF 1603\_1/3\_8m



The ACMF 1603\_1/3 flexible AC current probe utilises the Rogowski principle that is compatible with the SIRAX MT7100 / MT7150 three phase power meter.

The flexible and lightweight measuring head allows quick and easy installation in hard-to-reach areas and with large conductors.

## Electrical Characteristics

Current Range.....	: 1600 A
Calibrated Output $V_{RMS}$ at 1000 A / 50Hz.....	: 14.0 mV
Accuracy (at 25°C, 50 Hz) .....	: 0.5% of reading
Linearity (10% to 100% of range) .....	: $\pm 0.2\%$ of reading
Integrator.....	: Non-inverted
Load Resistance.....	: 220 k $\Omega$
Internal Resistance per Probe .....	: 90 $\Omega$ nominal
Bandwidth (-1dB).....	: 10 Hz to 50 kHz
Phase Error .....	: $\pm 1^\circ$
Temperature Coefficient .....	: $\pm 0.05\%$ of reading / $^\circ C$
Position Sensitivity .....	: $\pm 2.5\%$ of reading
External Field (with cable >100 mm from the head).....	: $\pm 0.25\%$ of range
Working Voltage (see Safety Standards section).....	: 1000 V AC $RMS$ or DC (Probe)

## General Characteristics

Probe Material.....	: UL94 V-0
Probe Cable Length / Conductor Diameter .....	: 220 mm (9") / 70 mm (3")
Probe Cable Diameter.....	: 6 mm max.
Cable Length (Probe to Splitter) .....	: 1 m
Output Cable Length .....	: 4 m / 7 m un-terminated
Operating Temperature Range.....	: -25 to +75 $^\circ C$
Storage Temperature Range .....	: -40 to +75 $^\circ C$
Operating Humidity.....	: 15% to 85% (non-condensing)
Degree of protection.....	: IP67 Sensor, IP4X Cable splitter
Colour .....	: Green

## SIRAX MT7100 / MT7150 Settings

Measurement current channel ( <i>Global input settings</i> ).....	: Input 333mV/Rogowski
Integrator condition ( <i>Global input settings</i> ) .....	: Integrator enabled (Rogowski input)
CT Transducer ratio ( <i>Power settings</i> ) .....	: 71428,57 (see Figure 1)
CT Transducer delay ( $^\circ$ ) ( <i>Power settings</i> ).....	: 0

ROHS and WEEE Compliant

## Output Connections

Function / SIRAX MT7100 & MT7150 Connection	Colour
L1 S1	Black
L1 S2	Red
L2 S1	Blue
L2 S2	Yellow
L3 S1	Brown
L3 S2	White & Screen

## Safety Standards

EN 61010-1  
EN 61010-2-032

1000 V<sub>RMS</sub>, Category III, 600 V<sub>RMS</sub>, Category IV, Pollution Degree 2 for the probe, splitter and output cable

The product is designed for installation by suitably trained or qualified personnel into applications with restricted access to the unit and wiring or connections.

The output cable is limited to SELV (<70 VDC or 33 V<sub>RMS</sub>) unless terminated with adequate connector.

Use of the probe on uninsulated conductors is limited to 1000 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

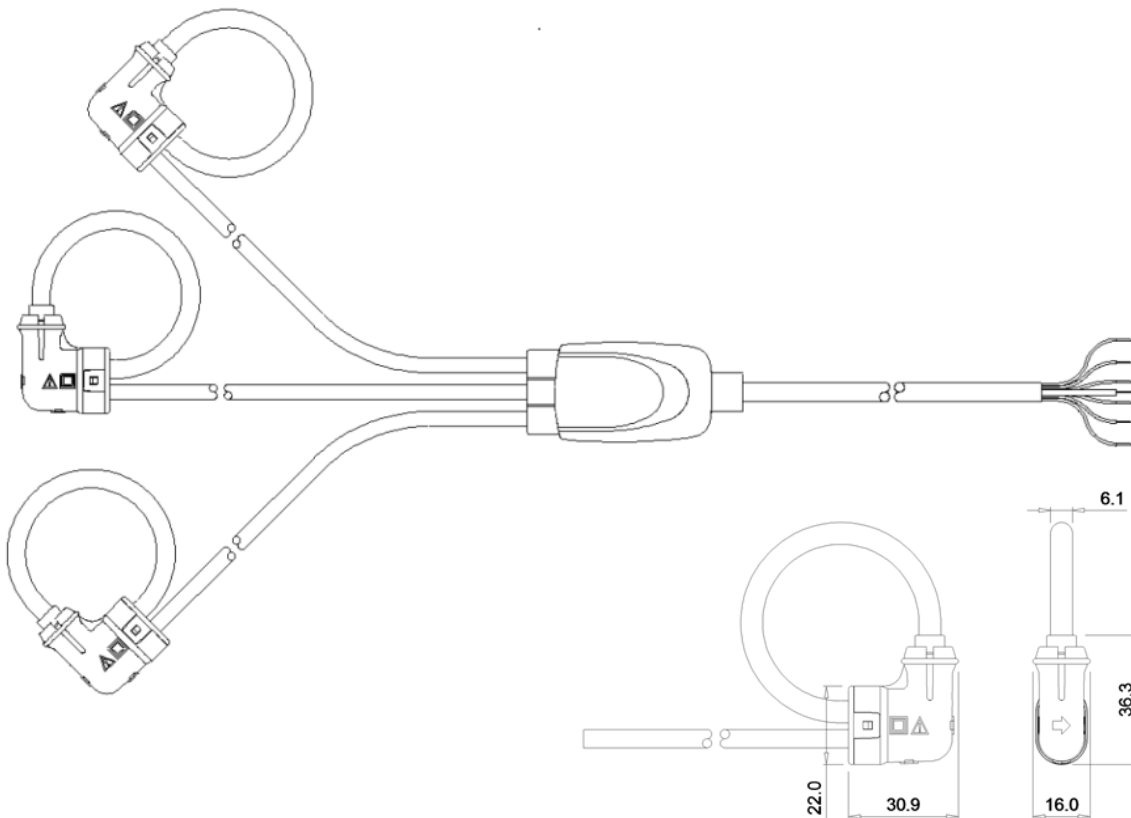


Figure 1 - Power Settings

QE-POWER-T PRO v0.1.2 FW: 0.2.7 MachineID: 32
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**Actions**

Modbus
Global input settings
Power Settings
Alarm settings
Power Quality Setting

CT_Transducer ratio <input style="width: 100%;" type="text" value="71.428,57"/>	DC Filter <input style="width: 100%;" type="text" value="10"/>	minute_for_Max_demand (0-60) <input style="width: 100%;" type="text" value="0"/>	Power Threshold exceedings <input style="width: 100%;" type="text" value="0"/>
CT_Transducer delay (°) <input style="width: 100%;" type="text" value="0"/>	AC Filter <input style="width: 100%;" type="text" value="50"/>	seconds_for_mean_RMS (0-30) <input style="width: 100%;" type="text" value="0"/>	seconds_for_MAX_RMS (1-30) <input style="width: 100%;" type="text" value="1"/>
VT_Transducer ratio <input style="width: 100%;" type="text" value="1"/>			
VT_Transducer delay (°) <input style="width: 100%;" type="text" value="0"/>			
Min voltage ripple (V) <input style="width: 100%;" type="text" value="0"/>			
Minimum current ripple (A) <input style="width: 100%;" type="text" value="0"/>			
Minimum power ripple (W) <input style="width: 100%;" type="text" value="0"/>			

CT Transducer ratio:  
 If Input 1A/5A -> Default 1.0 (Ex: 600:5 -> transducer\_ratio = 120)  
 If Input Rogowski -> Sensitivity [A/V] (Ex: 1000:0,1 -> transducer\_ratio = 10000)

VT Transducer ratio:  
 Default 1.0

**FACTORY  
DEFAULT**