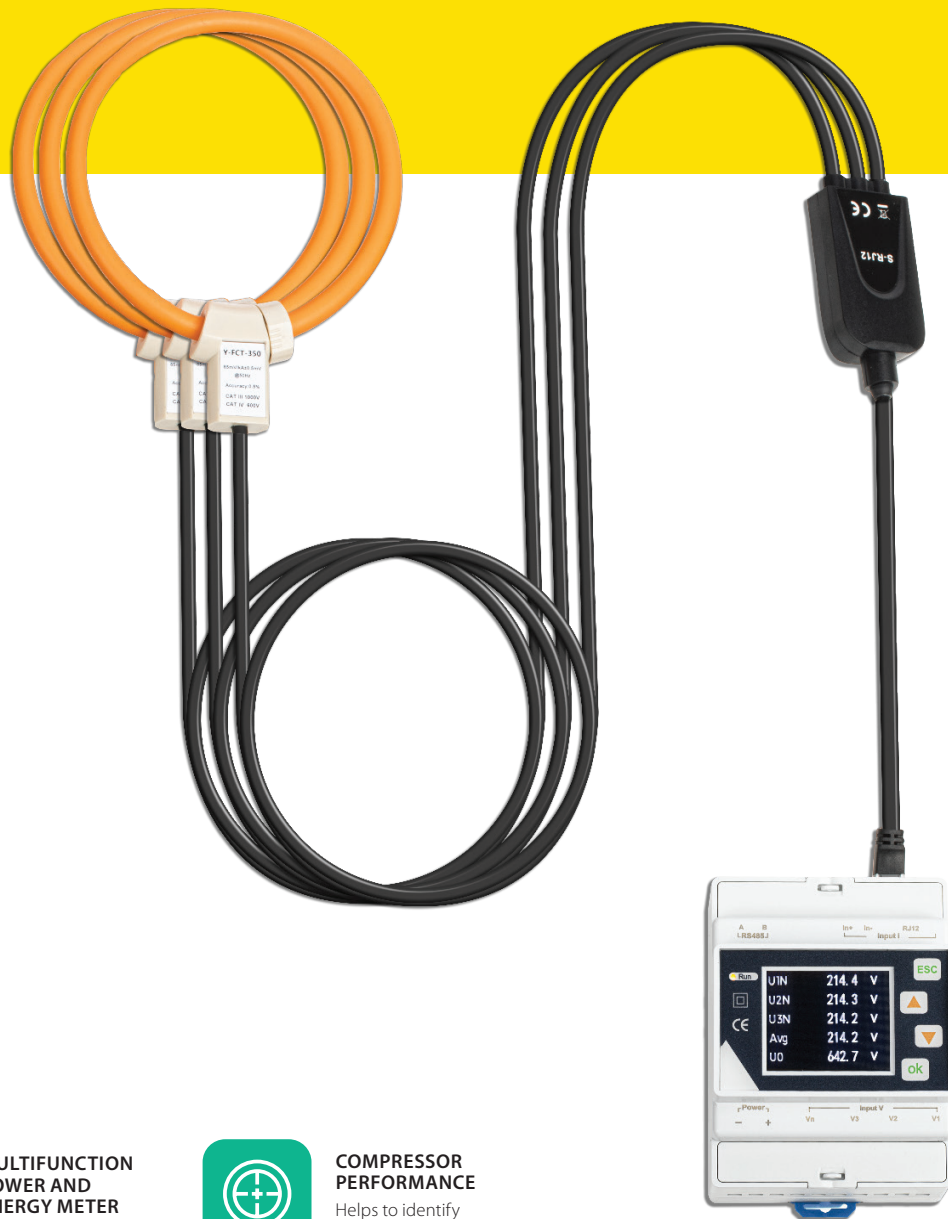


# S111

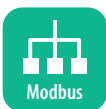
## Power and Energy Meter



**MULTIFUNCTION POWER AND ENERGY METER**  
3-phase, 1-phase



**COMPRESSOR PERFORMANCE**  
Helps to identify compressor efficiency



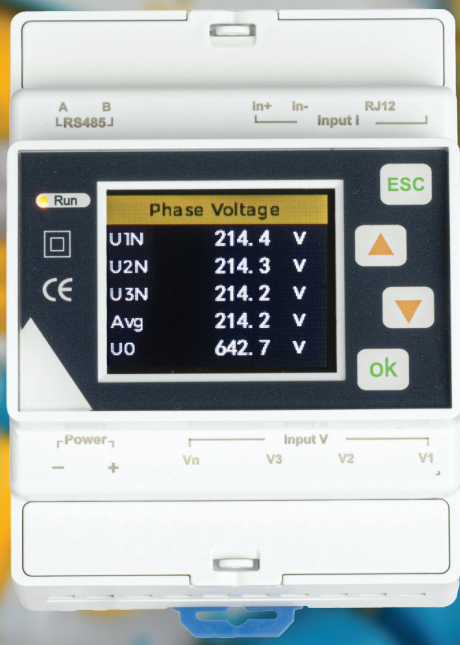
**MODBUS/RTU INTERFACE**  
Connects to any Modbus-Master



**ROGOWSKI COILS**  
Wide range, highly accurate



**EASY INSTALLATION**  
Easy-to-install



## Benefits

- ✓ Data display with simple menu navigation
- ✓ Phase voltage range up to max. 720 VAC
- ✓ Modbus/RTU interface for connection to any Master
- ✓ Rogowsky coils with wide range and high accuracy, 100A, 1000A or 3000A
- ✓ DIN rail installation for cabinets

## Operation Principle

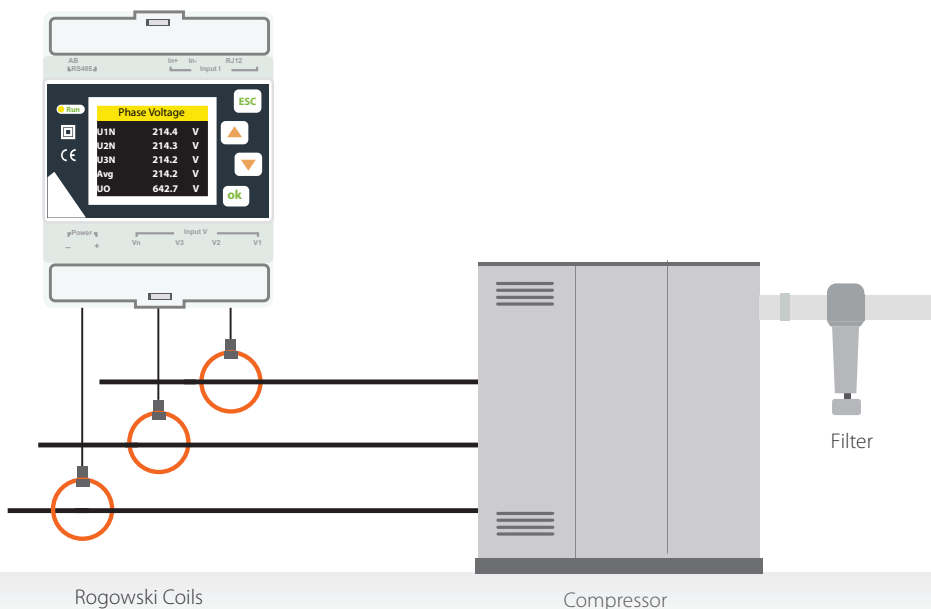
The SUTO Power and Energy Meter has been designed with a focus on easy installation and reliable measurements. The main application is to measure the power consumption and the accumulated energy consumption of electrical 3-phase consumers, like compressors, driers and oxygen/nitrogen generators.

The main difference to common power measurements is that all relevant parameters are real measured values and not assumptions. Unlike the traditional method, where only one phase is measured, the voltage is assumed as stable and the phase shift is entered as a constant, the S111 measures the voltage and current of each phase.

By this, the S111 is much more accurate and delivers more reliable measurements compared to single phase current measurements.

### S111

Power and Energy Meter

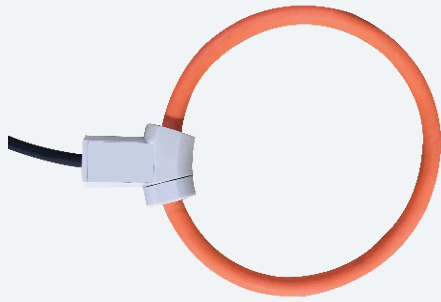


## Application

In this illustration, a Power and Energy Meter is installed directly into the connection box of the compressor.

The Rogowski current coils are easy to install, by just clamping them around the power cables. The voltage connection can be drawn directly from the power cabinet of the compressor.

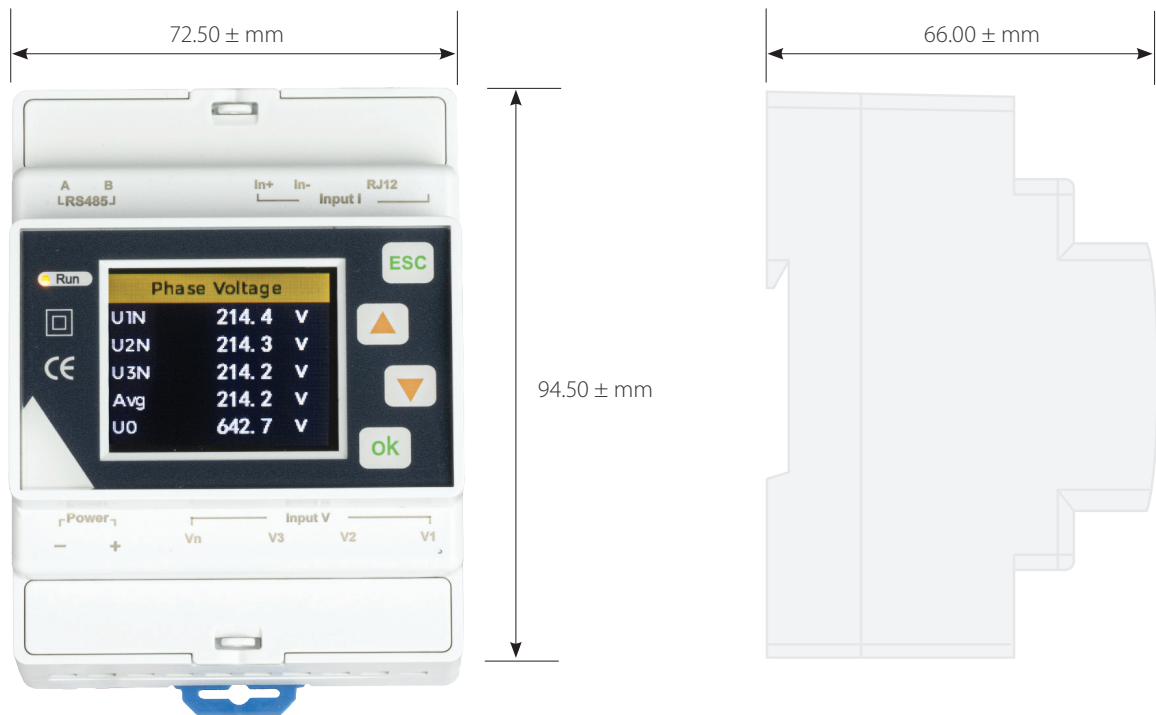
This is not only used to identify inefficient compressors, but also letting the compressed air operator know what the real costs of the compressed air are.



Current Measuring via Rogowski coils offers a high accuracy over a wide range and an easy installation. (Note: for each phase, one coil is needed)



## Dimension



## Power Supply

- 18 – 36 VDC, 3.5 VA

## Installation Options

The S111 comes in a compact design which can be 35 mm DIN rail mounted.

## Technical Data

### Signal / Interface & Supply

#### Electrical Data

Power supply 18 – 36 VDC, 3.5 VA

#### Input Signals

Phase voltage L1, L2, L3, N, max 720 VAC

Current sensor 3 x Rogowsky coils, integrated type, RJ12

#### Output Signals

Interface Modbus/RTU RS 485

### General data

#### Miscellaneous

Protection class IP20

Dimensions 95 x 73 x 66 mm

Display 1.77" color (TFT screen display)

Weight 0.260 kg

#### Operating conditions

Operating temperature -25°C ... +60°C

## Ordering

Please use the following table to assist in placing your order with our sales staff.

### S111 Power and Energy Meter

Order No.	Description
D554 0131	S111 Power and Energy Meter, DIN rail, Modbus/RTU, 18 ... 36 VDC power supply

### Accessories

Order No.	Description
S554 0143	Set of 3 x Electrical Current Transmitter, 100 AAC, 30 mm diameter, 2 m cable with RJ12 connector to S111
S554 0144	Set of 3 x Electrical Current Transmitter, 1000 AAC, 100 mm diameter, 2 m cable with RJ12 connector to S111
S554 0145	Set of 3 x Electrical Current Transmitter, 3000 AAC, 150 mm diameter, 2 m cable with RJ12 connector to S111
Other	
A554 0135	Adapter for S111 Power and Energy Meter to connect open end Rogowski coils (S554 0140, S554 0141, S554 0142) 6-pin terminal to RJ12



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