EU Type Examination Certificate Number: **0120/SGS0249**

Tyco Electronics UK Ltd

Freebournes Road
Witham
Essex
CM83AH
UK

Instrument Identification:
DRS-100-1P

Instrument Traceable Number
0120/SGS0249

Single Phase, Active Import/ Export (kWh), Indoor, Electricity Meter

has been assessed and certified as meeting the requirements of

EU Directive 2014/32/EU

Measuring Instruments Annex B

It is certified that the manufacturer's technical design and specimen for the above instrument has been examined and, based on the evidence submitted, it is considered that the instrument conforms to the requirements of Annex V of EU Directive 2014/32/EU

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex II, Module D or Annex II Module F

This certificate is valid until 29th September 2025
Issue 1

Certification is based on report number(s) SHES141200649301 issued 16th April 2015
EMA207767
EMA226287

Authorised Signature

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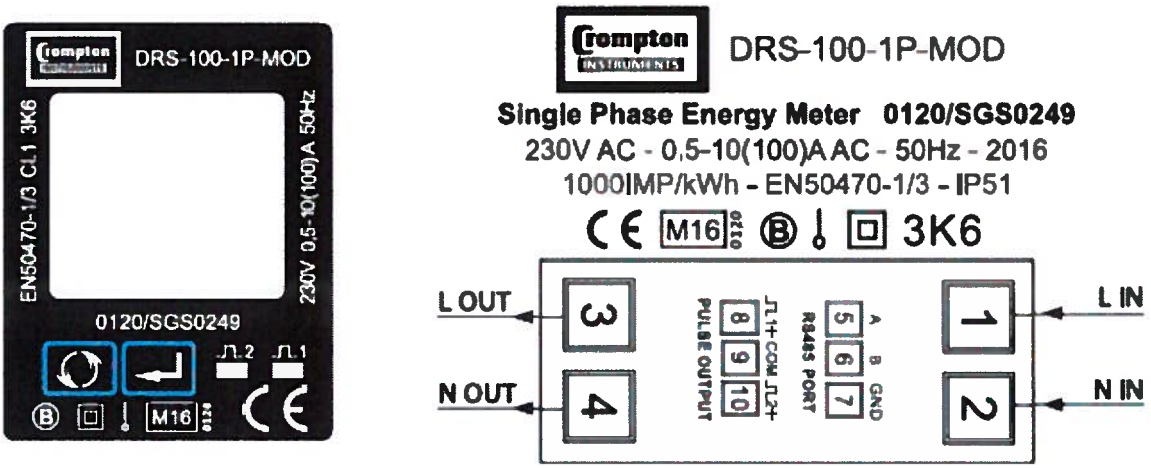
1. Technical Data

Manufacturer	Tyco Electronics UK Ltd
Meter Type(s)	DRS-100-Modbus,DRS-100-1P BI, DRS-100-1P DR, DRS-100-1P Pulse
Voltage Rating *(Un)*	230V
Current Rating *(Imin – Iref (Imax))*	0.5-10(100)A
Frequency *(Fn)*	50Hz
Active Accuracy Class *(kWh)*	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software Version No.	V1.2
Identification Location	Nameplate
Bill Of Materials No.'s	SDM230MODBUS-20150929
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	1000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Terminal Cover Sealing Type	4 x Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Location of Manufacture Address	Associated documents installation manual

2. Photograph of Meter and Sealing Plan

3. Name plates and Markings



Example of name plate and markings

3. Influence factors for temperature, frequency and voltage

Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
Imin	1.0	0.45	0.33	0.23	0.15	0.17	0.23
Itr	1.0	0.44	0.31	0.19	0.07	0.10	0.18
10Itr	1.0	0.42	0.29	0.18	0.03	0.08	0.16
Imax	1.0	0.27	0.19	0.12	0.03	0.06	0.12
Itr	0.5ind	0.48	0.36	0.27	0.17	0.18	0.22
10Itr	0.5ind	0.41	0.28	0.17	0.03	0.08	0.17
Imax	0.5ind	0.27	0.18	0.12	0.04	0.07	0.13
Itr	0.8cap	0.45	0.31	0.20	0.09	0.12	0.18
10Itr	0.8cap	0.40	0.27	0.16	0.04	0.10	0.19
Imax	0.8cap	0.26	0.19	0.11	0.05	0.08	0.15

During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table above represents the sum of the square values per load, determined via the following formula:-

$\delta e\ (T, U, f) = \sqrt{(\delta e^2\ (T, I, \cos\varphi)\ ,\ \delta e^2\ (U, I, \cos\varphi)\ ,\ \delta e^2\ (f, I, \cos\varphi))}$ where

$\delta e(T, I, \cos\varphi)$ = Additional error due to variation of the temperature at the same load
$\delta e(U, I, \cos\varphi)$ = Additional error due to variation of the voltage at the same load
$\delta e(f, I, \cos\varphi)$ = Additional error due to variation of the frequency at the same load

4. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
DRS-100-1P-Modbus:	Single tariff, total active energy, resettable active energy, import active energy, export active energy, total reactive energy, import reactive energy, export reactive energy, active power, reactive power, voltage, current, frequency, power factor, power demand, RS485 Modbus.
DRS-100-1P- Pulse:	Single tariff, total active energy, resettable active energy, import active energy, export active energy total reactive energy import reactive energy export reactive energy active, power reactive, power, voltage, current, frequency, power factor, power demand.
DRS-100-1P-DR:	Single tariff, total active energy, resettable energy, active power
DRS-100-1P-Bi:	Single tariff, import active energy, export active energy, import active power, export active power, total active energy, total active power

Modifications to the meter(s) described according to approval No.**0120/SGS0249** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

5. Document Revision History

Issue	Date	Comments
1	09/01/2017	Initial Issue