



EU Type Examination Certificate Number: **0120/SGS0451**

Hosaf Meter Industry Ltd.

9, Mohakhali C/A, High Tower (2nd floor)
Bir Uttam A. K. Khandakar Sorok
Dhaka-1212
Bangladesh

Instrument Identification:
HI-7

Single Phase, Active Import/Export (kWh), Smart, Prepay & Postpay, Electricity Meter

Instrument Traceable Number
0120/SGS0451

has been assessed and certified as meeting the requirements of

EU Directive 2014/32/EU

on Measuring Instruments Annex II, Module 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 8th February 2028
Issue 1

Certification is based on report number(s) SHES180100033301 dated 9th February 2018
SHES180400358401 dated 19th April 2018
SHES180500430601 dated 19th September 2018
SHES190802158501 dated 6th December 2019
EMA249904/1
EMA275854

Authorised Signature


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1. Technical Data

Manufacturer	Hosaf Meter Industry Ltd.
Meter Type	HI-7
Voltage Rating (U_n)	220-240 V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0.25-5(30)A, 0.25-5(40)A, 0.25-5(60)A, 0.25-5(80)A, 0.25-5(100)A, 0.5-10(40)A, 0.5-10(60)A, 0.5-10(80)A, 0.5-10(100)A
Frequency (F_n)	50 Hz & 60Hz (IEC only)
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-40°C to +70°C
Software/ Firmware Version No	BD_H5023_V0001_20180123
CRC Checksum	0x89CC9FB9
Identification Location	LCD
Bill Of Materials Number	LY7.303.001078MX-V01.01 LY5.365.001136MX-V01.01 LY5.528.001637MX-V01.01 LY5.528.001635MX-V01.01 LY5.528.001636MX-V1
IP Rating	IP54
Insulation Protective Class	Class II
LED Pulse Constant	1000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	BS
Location of Manufacturers Address	Associated Documents

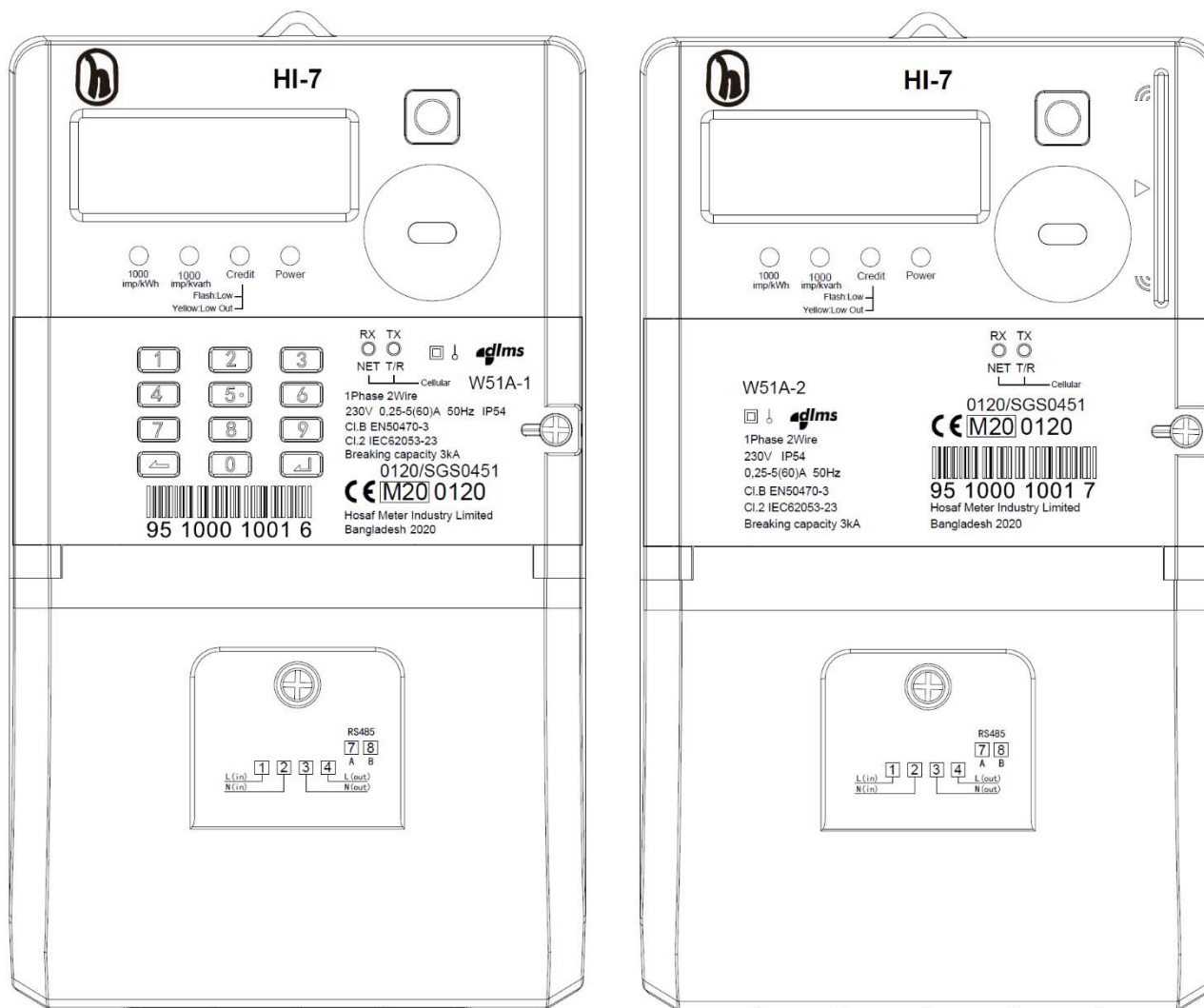
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2. Photograph of Meter and Sealing Plan



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3. Examples of Nameplates



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4. Calculation of the composite error/ MPE


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

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

where

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

		Influence Factors for temperature, frequency and voltage							
Current	PF Cos	-40° C	-25° C	-10° C	5° C	30° C	40° C	55° C	70° C
I _{min}	1.0	1.15	0.96	0.74	0.49	0.15	0.12	0.26	0.49
I _{tr}	1.0	1.13	0.92	0.69	0.46	0.12	0.12	0.29	0.50
10I _{tr}	1.0	1.24	0.95	0.73	0.51	0.16	0.10	0.24	0.44
I _{max}	1.0	1.20	0.89	0.61	0.31	0.16	0.34	0.60	0.72
I _{tr}	0.5ind	1.09	0.86	0.62	0.36	0.06	0.16	0.37	0.60
10I _{tr}	0.5ind	1.20	0.89	0.65	0.40	0.08	0.15	0.35	0.56
I _{max}	0.5ind	1.19	0.83	0.54	0.27	0.24	0.18	0.71	0.86
I _{tr}	0.8cap	1.11	0.91	0.69	0.46	0.16	0.15	0.31	0.51
10I _{tr}	0.8cap	1.20	0.92	0.72	0.49	0.16	0.12	0.27	0.47
I _{max}	0.8cap	1.38	1.04	0.75	0.49	0.17	0.21	0.42	0.66

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5. Annex of Variants

Product Variant Identification Details:

Connections	Ref. Spec 1	Ref. Spec 2	Ref. Spec 3	-	Keypad & Smart Card
X	Y	Z	R		X
Whole Current					0 Neither Keypad nor Card
					1 Keypad only
					2 Smart Card only
	4 220V		A 5(100)A		3 New Keypad only
	5 230V	1 50 Hz	B 5(80)A		4 Keypad and Smart Card
	6 240V	2 60 Hz	C 5(60)A		5 Touch Keypad only
			D 5(40)A		
			E 5(30)A		
			F 10(40)A		
			G 10(60)A		
			H 10(80)A		
			I 10(100)A		

e.g: W41A4, Whole Current, 220V/50Hz, 5(60)A, with keypad and smart card.

Modifications to the meter(s) described according to approval No. **0120/SGS0451** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

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6. Document Revision History

Issue	Date	Comments
1	25/02/2020	Initial Issue

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