

EU Type Examination Certificate Number: 0120/SGS0428

# Gacia Electrical Appliance Co., LTD.

No.1 Nanxijiang Road Daqiao Industrial Zone Yueqing, Wenzhou China

Instrument Identification: N8DM-11 Series

#### Single Phase, Active Import (kWh) Indoor, Electricity Meter

Instrument Traceable Number 0120/SGS0428

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 17<sup>th</sup> February 2024 Issue 1

Certification is based on report number(s) SHES130800321401 dated 18<sup>th</sup> February 2014 EMA241425 EMA275962

Authorised Signature

SGS United Kingdom Limited, Notified Body 0120 Unit 202B Worle Parkway, Weston-super-Mare, BS22 6WA, UK t +44 (0)1934 522917 f +44 (0)1934 522137 <u>www.sgs.com</u>

Contact Address

SGS United Kingdom Limited, Units 12A & 12B, South Industrial Estate, Bowburn, Durham, DH6 5AD, UK t +44 (0)191 377 2000 f +44 (0)191 377 2020 www.sgs.com



### EU-Type Examination Certificate Number:

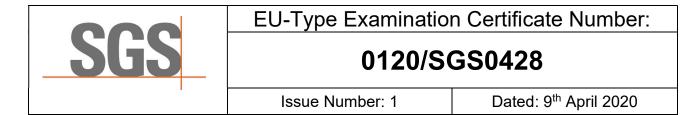
### 0120/SGS0428

Issue Number: 1

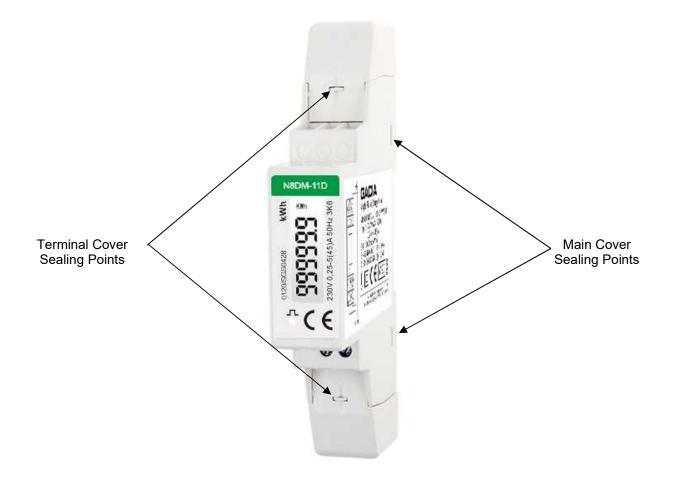
Dated: 9<sup>th</sup> April 2020

#### 1. Technical Data

Voltage Rating (Un)     230V       Current Rating (Imin – Iref (Imax))     Direct Connected 0.25-5(45)A, CT Connected 0.25-5(6)A       Frequency (Fn)     50Hz       Active Accuracy Class (KWh)     A or B (KWh)       Type of circuit     1p2w       Temperature Range     -25°C to +55°C       Software/ Firmware Version No     N8DM-11A, N8DM-11D, N8DM-11DF: V1.2       N8DM-11A, N8DM-11M, N8DM-11MB, N8DM-11DF: V2.4     N8DM-11A, N8DM-11D, N8DM-11DF: V2.4       CRC Checksum     N8DM-11A, V2, N8DM-11D V2, N2DM-11DE V2: V2.4       RCC Checksum     N8DM-11A, N8DM-11D, N8DM-11DF: V2.4       N8DM-11A, V2, N8DM-11D, V2, N8DM-11DF: V2.4     N8DM-11A, V2, N8DM-11D, V2, N2DM-11DE V2: V2.4       RCC Checksum     N8DM-11A, N8DM-11D, N8DM-11DF: V2.4       N8DM-11A, V2, N8DM-11D, V2, N8DM-11DF: V2.4     N8DM-11A, V2, N8DM-11D, V2, N4DM-11DE V2: V2.4       RRDM-11A, V2, N8DM-11D, V2, N8DM-11DF: V2.4     N8DM-11A, V2, N8DM-11D, V2, N4DM-11DE V2: V2.4       RRDM-11A, V2, N8DM-11A, V2, N8DM-11DF, V2.4     N8DM-11A, V2, N8DM-11D, V2, N8DM-11DF: V2.4       N8DM-11A, V2, N8DM-11D, V2, N8DM-11DE V2: N8DM-11DF: DH-JS-170027c     N8DM-11A, V2, N8DM-11DF: DH-JS-170027c       Identification Location     Meter Case     N8DM-11A, V2, N8DM-11DF: DH-JS-170027c       Bill Of Materials Number <th>Meter Type</th> <th>N8DM-11D, N8DM-11A, N8DM-11DB, N8E</th> <th>DM-11P, N8DM-11M, N8DM-11MB, N8DM-</th>	Meter Type	N8DM-11D, N8DM-11A, N8DM-11DB, N8E	DM-11P, N8DM-11M, N8DM-11MB, N8DM-		
11CTM, NBDM-11CTMB, NBDM-11A V2, NBDM-11D     Current Rating (Imin – Iref (Imax))     Direct Connected 0.25-5(45)A, CT Connected 0.25-5(6)A     Frequency (Fn)     Active Accuracy Class (kWh)     A or B (kWh)     Type of circuit     Temperature Range     Software/ Firmware Version No     NBDM-11A, NBDM-11D, NBDM-11DB: V1.2     NBDM-11A, NBDM-11D, NBDM-11DB: V2.4     NBDM-11CTP, NBDM-11DE: V1.2     NBDM-11CTM, NBDM-11DB, NBDM-11DF: V2.4     NBDM-11CTM, NBDM-11DB, NBDM-11DF: V2.5     NBDM-11A, NBDM-11D, NBDM-11DF: V2.5     NBDM-11A, NBDM-11D, NBDM-11DB: NDX0008E1E     NBDM-11A, NBDM-11D, NBDM-11DF: N00008E34     NBDM-11A, V2, NBDM-11D V2, NBDM-11DF: V2.0     NBDM-11A, V2, NBDM-11D V2, NBDM-11DF: N00008E1E     NBDM-11A: V2, NBDM-11D V2, NBDM-11DF: N00008E34     NBDM-11A: V2, NBDM-11D V2, NBDM-11DF: N00008E34     NBDM-11A: V2, NBDM-11D V2, NBDM-11DF: ND: N3E170027:1.0 <td col<="" th=""><th></th><th></th><th></th></td>	<th></th> <th></th> <th></th>				
Current Rating ( <i>lmin – Iref (lmax)</i> )     Direct Connected 0.25-5(45)A, CT Connected 0.25-5(6)A       Frequency (Fn)     50Hz       Active Accuracy Class ( <i>kWh</i> )     A or B ( <i>kWh</i> )       Type of circuit     1p2w       Temperature Range     -25°C to +55°C       Software/ Firmware Version No     N8DM-11A, N8DM-11D, N8DM-11DB; V1.2 N8DM-11M, N8DM-11CTM, N8DM-11DB; V2.4 N8DM-11CTM, N8DM-11CTM, N8DM-11DB; V2.4       CRC Checksum     N8DM-11A, N8DM-11D, N8DM-11DB; V2.4 N8DM-11A V2, N8DM-11D V2, N8DM-11DB; V2.4       RCR Checksum     N8DM-11A, N8DM-11D, N8DM-11DB; V2.4       N8DM-11A, N8DM-11D, N8DM-11DB; V2.4     N8DM-11A; V2, N8DM-11D V2, N8DM-11DB; V2.4       N8DM-11A, V2, N8DM-11D, V2, N8DM-11DB; V2.0000272C     N8DM-11A; V2, N8DM-11D; V2, 00000272C       N8DM-11A, V2, N8DM-11D; V2, 00000272C     N8DM-11A; V2, N8DM-11D; V2, 00000272C       N8DM-11A, V2, N8DM-11D; V2, 00000272C     N8DM-11D; V2, 00000272C       N8DM-11A V2, N8DM-11D; V2, 00000272C     N8DM-11D; V2, 0000271.5       N8DM-11DV: V2, V1-J3-50003-1.5     N8DM-110; V2, V1-J3-70027-1.0       N8DM-11DV: V2, V1-J3-180003-1.0     N8DM-110; V1-J3-170027-1.0       N8DM-11DV: V2, V1-J3-180003-1.0     N8DM-110; V2, V1-J3-170027-1.0       N8DM-11DV: V2, V1-J3-170026-1.0     N8DM-110; V2, V1-J3-170026-1.0       IP Rating <th>Voltage Rating (Un)</th> <th></th> <th colspan="3">N8DM-11D, N8DM-11A, N8DM-11DB, N8DM-11P, N8DM-11M, N8DM-11MB, N8DM- 11CTM, N8DM-11CTP, N8DM-11CTMB, N8DM-11A V2, N8DM-11D V2, N8DM-11DB V2</th>	Voltage Rating (Un)		N8DM-11D, N8DM-11A, N8DM-11DB, N8DM-11P, N8DM-11M, N8DM-11MB, N8DM- 11CTM, N8DM-11CTP, N8DM-11CTMB, N8DM-11A V2, N8DM-11D V2, N8DM-11DB V2		
Frequency (Fn)   50Hz     Active Accuracy Class (kWh)   A or B (kWh)     Type of circuit   1p2w     Temperature Range   -25°C to +55°C     Software/ Firmware Version No   N8DM-11A, N8DM-11D, N8DM-11DB: V1.2 N8DM-11CTM, N8DM-11D, N8DM-11CTP: V2.4 N8DM-11CTM, N8DM-11CTM, N8DM-11CTP: V2.5 N8DM-11CTM, N8DM-11CTM, N8DM-11DF: 0x00008E1E     CRC Checksum   N8DM-11A, N8DM-11D, N8DM-11DF: 0x00008E1E   N8DM-11M, N8DM-11DF: 0x00008E1E     Identification Location   Meter Case   N8DM-11CTM, N8DM-11DF: 0x00008E1E     Bill Of Materials Number   N8DM-11A: DH-JS-150002-1.5 N8DM-11A V2; N8DM-11D V2; N8DM-11DB V2: 0x0000272C     Identification Location   Meter Case     Bill Of Materials Number   N8DM-11A: DH-JS-150002-1.5 N8DM-11A V2; DH-JS-150003-1.0 N8DM-11D V2; DH-JS-170025-1.0 N8DM-11D V2; DH-JS-150009-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11CTM: DH-JS-170025-1.0     IP Rating   IP51     Insulation Protective Class   Class II     LED Pulse Constant   1000imp/kWh & 100imp/kWh     Impulse Voltage Rating   6kV     AC Voltage Rating   4kV		230V			
Active Accuracy Class (kWh)   A or B (kWh)     Type of circuit   1p2w     Temperature Range   -25°C to +55°C     Software/ Firmware Version No   N8DM-11A, N8DM-11D, N8DM-11DB; V1.2 N8DM-111M, N8DM-11DB, N8DM-11DB; V2.4 N8DM-11CTM, N8DM-11CTM, N8DM-11DB V2: V2.4     CRC Checksum   N8DM-11A, N8DM-11D, N8DM-11DB V2: V2.4 N8DM-11A, N8DM-11D, N8DM-11DB V2: V2.4     CRC Checksum   N8DM-11A, N8DM-11D, N8DM-11DB V2: V2.4     BBI Of Materials Number   N8DM-11A: DH-JS-150002-1.5 N8DM-11A V2, N8DM-11D V2, N8DM-11DB V2: 0x0000272C     Identification Location   Meter Case     Bill Of Materials Number   N8DM-11A: DH-JS-150002-1.5 N8DM-11A V2; DH-JS-190006-1.0 N8DM-11D V2; DH-JS-150003-1.5 N8DM-11CTW: PDH-JS-170021-1.0 N8DM-11D V2; DH-JS-150003-1.0 N8DM-11D V2; DH-JS-170025-1.0 N8DM-11CTW: DH-JS-170025-1.0 N8DM-11D V2; DH-JS-1800039-1.0 N8DM-11CTW: DH-JS-170025-1.0 N8DM-11CTW: DH-JS-170025-1.0     IP Rating   IP51     Insulation Protective Class   Class II     LED Pulse Constant   1000imp/kWh & 100imp/kWh     Impulse Voltage Rating   6kV     AC Voltage Rating   4kV	Current Rating (Imin – Iref (Imax))	Direct Connected 0.25-5(45)	A, CT Connected 0.25-5(6)A		
Type of circuit     1p2w       Temperature Range     -25°C to +55°C       Software/ Firmware Version No     N8DM-11A, N8DM-11D, N8DM-11DE, V1.2 N8DM-11M, N8DM-11MB, N8DM-11DE, V2.4 N8DM-11G, N8DM-11D, N8DM-11DE, V2.4 N8DM-11G, N8DM-11DE, V2.4 N8DM-11A, V2, N8DM-11DE, V2.020008E1E N8DM-11A, V2, N8DM-11DE, V2.00008E1E N8DM-11A, N8DM-11DB, N8DM-11DE, V0.00008E1E N8DM-11A, V2, N8DM-11DE, V2.0000272C       Identification Location     N8DM-11A, V2, N8DM-11DE, V2.00008E1E N8DM-11A, V2, N8DM-11DE, V2.0000272C       Bill Of Materials Number     N8DM-11A: DH-JS-150002-1.5 N8DM-11A, V2, N8DM-11DE, V2.0000072C       N8DM-11A: DH-JS-150002-1.5 N8DM-11A, V2, N8DM-11DE, V2.0000072C       Identification Location     Meter Case       Bill Of Materials Number     N8DM-11A: DH-JS-150002-1.5 N8DM-11DV: DH-JS-170026-1.0 N8DM-11DV: DH-JS-170026-1.0 N8DM-11DF     N8DM-11CTM: DH-JS-170027-1.0 N8DM-11DF       Ipplation Protective Class     Class II     Ipplation       LED Pulse Constant     1000imp/kWh     100imp/kWh       Impulse Voltage Rating     6kV       AC Voltage Rating     6kV       Main Cover Sealing Type     4 x Wire & Crimp       Integrity of meter     Inaccessible without breaking seals	Frequency <i>(Fn)</i>	50	Hz		
Temperature Range     -25°C to +55°C       Software/ Firmware Version No     N8DM-11A, N8DM-11D, N8DM-11DB; V1.2 N8DM-11M, N8DM-11CTMB, N8DM-11CTP; V2.4 N8DM-11A, N8DM-11CTMB, N8DM-11CTP; V2.5 N8DM-11A, V2, N8DM-11D V2, N8DM-11DB V2: V2.4       CRC Checksum     N8DM-11A, N8DM-11D, N8DM-11DB; V1.2 N8DM-11A, V2, N8DM-11D V2, N8DM-11DB V2: V2.4       CRC Checksum     N8DM-11A, N8DM-11D, N8DM-11DB; V2.92.5 N8DM-11A, V2, N8DM-11D V2, N8DM-11DB V2: V2.4       CRC Checksum     N8DM-11A, N8DM-11DB, N8DM-11DB; V2.92.6 N8DM-11A, V2, N8DM-11D V2, N8DM-11DB V2: V2.4       Bill Of Materials Number     N8DM-11A; V2.1H, J3S-150002-1.5 N8DM-11A V2, N8DM-11D V2, N8DM-11DF V2: 0x00008594 N8DM-11A V2, N8DM-11D V2, N8DM-11DF V2: 0x0000272C       Identification Location     Meter Case       Bill Of Materials Number     N8DM-11A; DH-JS-150002-1.5 N8DM-11A V2, DH-JS-150003-1.5 N8DM-11DF V2: DH-JS-150003-1.5 N8DM-11CTM: DH-JS-170027-1.0 N8DM-11DF V2: DH-JS-150003-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11DF V2: DH-JS-170026-1.0       IP Rating     IP51       Insulation Protective Class     Class II       LED Pulse Constant     1000imp/kWh & 100imp/kWh       Impulse Voltage Rating     6kV       AC Voltage Rating     4kV       Main Cover Sealing Type     4 x Wire & Crimp       Integrity of meter     Inaccessible without breaking seals	Active Accuracy Class (kWh)	A or B	(kWh)		
Software/ Firmware Version NoN8DM-11A, N8DM-11D, N8DM-11DE: V1.2 N8DM-11CTM, N8DM-11CTM, N8DM-11DE: V2.4 N8DM-11CTM, N8DM-11DTP: V2.5 N8DM-11D V2, N8DM-11D V2, N8DM-11DE V2: V2.4CRC ChecksumN8DM-11A, V2, N8DM-11D, V2, N8DM-11DE V2: V2.4CRC ChecksumN8DM-11A, N8DM-11D, N8DM-11DE V2: V2.4CRC ChecksumN8DM-11A, V2, N8DM-11D, V2, N8DM-11DE V2: V2.4CRC ChecksumN8DM-11A, V2, N8DM-11D, V2, N8DM-11DE V2: V2.4CRC ChecksumN8DM-11A, V2, N8DM-11D, N8DM-11DE, V2: 00000272C N8DM-11A, V2, N8DM-11D, V2, N8DM-11CTP: 0x00008594 N8DM-11D V2, N8DM-11DE V2: 0x0000272CIdentification LocationMeter CaseBill Of Materials NumberN8DM-11A: DH-JS-150002-1.5 N8DM-11D V2: DH-JS-17002-1.0 N8DM-11D/DB: DH-JS-17002-1.0 N8DM-11D/DB: DH-JS-17002-1.0 N8DM-11D/DB: DH-JS-17002-1.0 N8DM-11D/DB: DH-JS-170025-1.0IP RatingIPIP RatingIP51Insulation Protective ClassIP51Insulation Protective ClassIP51Impulse Voltage RatingGAC Voltage RatingGKVAC Voltage RatingGKVMain Cover Sealing Type4 x Wire & CrimpIntegrity of meterInaccessible without breaking seals	Type of circuit	1p2	2w		
N8DM-11M, N8DM-11MB, N8DM-11P: V2.4     N8DM-11CTTM, N8DM-11CTMB, N8DM-11CTP: V2.5     N8DM-11A V2, N8DM-11D V2, N8DM-11DB V2: V2.4     CRC Checksum     N8DM-11A, N8DM-11D, N8DM-11DB: 0x00008E1E     N8DM-11M, N8DM-11D, N8DM-11DB: 0x00008E1E     N8DM-11A, N8DM-11D, N8DM-11CTP: 0x0000272C     N8DM-11A, V2, N8DM-11DB V2: 0x0000272C     N8DM-11A, V2, N8DM-11DB V2: 0x0000272C     N8DM-11A, V2, N8DM-11D V2; 0x0000272C     N8DM-11A, V2, N8DM-11D V2; 0x0000272C     N8DM-11A V2: 0X, N8DM-11D V2; 0X000272C     N8DM-11A V2: 0X, N8DM-11D V2; 0X000272C     N8DM-11A V2: 0X, N8DM-11D V2; 0X000272C     N8DM-11D V2: 0X, N8DM-11D V2; 0X000272C     N8DM-11D V2: 0X, N8DM-11D, N8DM-11CTM: 0X-JS-170021-1.0     N8DM-11D V2: 0X, N8DM-11CTM: 0X-JS-170027-1.0     N8DM-11D V2: 0X, N8DM-11D V2: 0X, N8DM-11CTM: 0X-JS-170027-1.0     N8DM-11D V2: 0X, N8DM-11DB V2: 0X, N8DM-11CTM: 0X-JS-170027-1.0     N8DM-11MB DH-JS-170026-1.0 <	Temperature Range	-25°C to	o +55℃		
Identification LocationN8DM-11A V2, N8DM-11D V2, N8DM-11D V2, N8DM-11D V2: 0x0000272CIdentification LocationMeter CaseBill Of Materials NumberN8DM-11A: DH-JS-150002-1.5 N8DM-11A V2: DH-JS-150006-1.0 N8DM-11A V2: DH-JS-150003-1.5 N8DM-11C TM: DH-JS-170014-1.1 N8DM-11D/DB: DH-JS-150003-1.0 N8DM-11D V2: DH-JS-190009-1.0 N8DM-11D V2: DH-JS-170025-1.0N8DM-11CTM: DH-JS-170021-1.0 N8DM-11CTM: DH-JS-170025-1.0 N8DM-11DB V2: DH-JS-170026-1.0IP RatingIP51Insulation Protective ClassClass IILED Pulse Constant1000imp/kWh & 100imp/kWhImpulse Voltage Rating6kVAC Voltage Rating4 x Wire & CrimpIntegrity of meterInaccessible without breaking seals		N8DM-11M, N8DM-11MB, N8DM-11P: V2.4 N8DM-11CTM, N8DM-11CTMB, N8DM-11CTP: V2.5 N8DM-11A V2, N8DM-11D V2, N8DM-11DB V2: V2.4 N8DM-11A, N8DM-11D, N8DM-11DB: 0x00008E1E			
Bill Of Materials Number   N8DM-11A: DH-JS-150002-1.5 N8DM-11A V2: DH-JS-19006-1.0 N8DM-11D/DB: DH-JS-150003-1.5 N8DM-11D/DB: DH-JS-150003-1.0 N8DM-11D V2: DH-JS-170025-1.0 N8DM-11D V2: DH-JS-190099-1.0 N8DM-11CTME: DH-JS-170025-1.0   N8DM-11CTME: DH-JS-170027-1.0 N8DM-11CTP: DH-JS-170025-1.0     IP Rating   IP51     Insulation Protective Class   Class II     LED Pulse Constant   1000imp/kWh & 100imp/kWh     Impulse Voltage Rating   6kV     AC Voltage Rating   4kV     Main Cover Sealing Type   4 x Wire & Crimp     Integrity of meter   Inaccessible without breaking seals					
N8DM-11A V2: DH-JS-190006-1.0N8DM-11P: DH-JS-170021-1.0N8DM-11D/DB: DH-JS-150003-1.5N8DM-11CTM: DH-JS-170014-1.1N8DM-11D V2: DH-JS-180033-1.0N8DM-11CTMB: DH-JS-170027-1.0N8DM-11D V2: DH-JS-190009-1.0N8DM-11CTP: DH-JS-170025-1.0N8DM-11DB V2: DH-JS-170026-1.0N8DM-11CTP: DH-JS-170025-1.0IP RatingIP51Insulation Protective ClassClass IILED Pulse Constant1000imp/kWh & 100imp/kWhImpulse Voltage Rating6kVAC Voltage Rating4kVMain Cover Sealing Type4 x Wire & CrimpIntegrity of meterInaccessible without breaking seals	Identification Location	Meter Case			
Insulation Protective Class   Class II     LED Pulse Constant   1000imp/kWh & 100imp/kWh     Impulse Voltage Rating   6kV     AC Voltage Rating   4kV     Main Cover Sealing Type   4 x Wire & Crimp     Integrity of meter   Inaccessible without breaking seals	Bill Of Materials Number	N8DM-11A V2: DH-JS-190006-1.0 N8DM-11D/DB: DH-JS-150003-1.5 N8DM-11D V2: DH-JS-180033-1.0 N8DM-11DB V2: DH-JS-190009-1.0	N8DM-11P: DH-JS-170021-1.0 N8DM-11CTM: DH-JS-170014-1.1 N8DM-11CTMB: DH-JS-170027-1.0		
LED Pulse Constant   1000imp/kWh & 100imp/kWh     Impulse Voltage Rating   6kV     AC Voltage Rating   4kV     Main Cover Sealing Type   4 x Wire & Crimp     Integrity of meter   Inaccessible without breaking seals	IP Rating	IP51			
Impulse Voltage Rating 6kV   AC Voltage Rating 4kV   Main Cover Sealing Type 4 x Wire & Crimp   Integrity of meter Inaccessible without breaking seals	Insulation Protective Class	Class II			
AC Voltage Rating 4kV   Main Cover Sealing Type 4 x Wire & Crimp   Integrity of meter Inaccessible without breaking seals	LED Pulse Constant	1000imp/kWh & 100imp/kWh			
Main Cover Sealing Type 4 x Wire & Crimp   Integrity of meter Inaccessible without breaking seals	Impulse Voltage Rating	6kV			
Integrity of meter Inaccessible without breaking seals	AC Voltage Rating	4kV			
	Main Cover Sealing Type	4 x Wire & Crimp			
Intended Location of the Meter	Integrity of meter	Inaccessible without breaking seals			
	Intended Location of the Meter	Indoor			
Type of Register   LCD: N8DM-11D, N8DM-11DB, N8DM-11P, N8DM-11MB, N8DM-11CTM, N8DM-11CTP, N8DM-11CTMB     M8DM-11CTP, N8DM-11CTMB   Mechanical: N8DM-11A	Type of Register	N8DM-11CTP, N8DM-11CTMB			
Terminal Arrangement(s) DIN	Terminal Arrangement(s)	DI	DIN		
Location of Manufacturers Address Nameplate	Location of Manufacturers Address	Name	eplate		



#### 2. Photograph of Meter and Sealing Plan





EU-Type Examination Certificate Number:

### 0120/SGS0428

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Dated: 9th April 2020

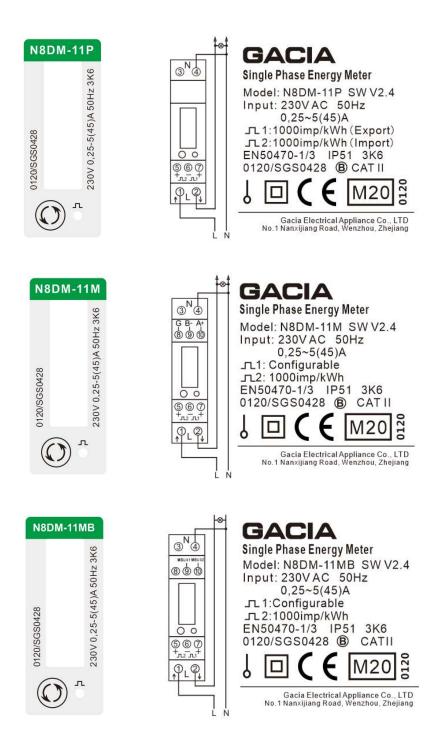
#### 3. Examples of Nameplates



	EU-
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Issue Number: 1

Dated: 9th April 2020



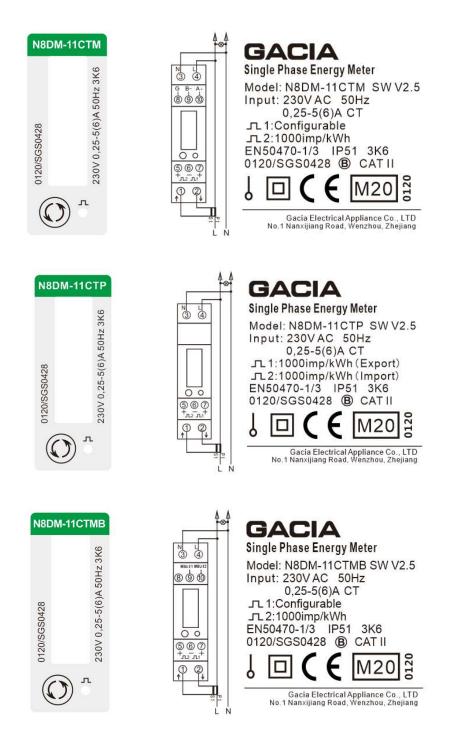


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Dated: 9th April 2020

#### 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:-

δ e (*T*, *U*, *f*) = √ (δ e<sup>2</sup> (*T*, *I*, cosφ) , δ e<sup>2</sup> (*U*, *I*, cosφ) , δ e<sup>2</sup> (*f*, *I*, cosφ))

where

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

		Influenc	e Factors	for Tempe	rature, Vo	ltage & Fre	equency
Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
Imin	1.0	0.12	0.12	0.12	0.13	0.12	0.12
Itr	1.0	0.16	0.16	0.16	0.16	0.16	0.16
10ltr	1.0	0.17	0.16	0.16	0.16	0.16	0.16
Imax	1.0	0.13	0.13	0.13	0.13	0.13	0.13
Itr	0.5ind	0.29	0.29	0.29	0.29	0.29	0.29
10ltr	0.5ind	0.40	0.40	0.40	0.40	0.40	0.40
Imax	0.5ind	0.16	0.16	0.16	0.16	0.16	0.16
Itr	0.8cap	0.24	0.24	0.24	0.24	0.24	0.24
10ltr	0.8cap	0.31	0.31	0.31	0.31	0.31	0.31
Imax	0.8cap	0.09	0.09	0.09	0.09	0.09	0.09



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#### 5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
NBDM-11D	Single Phase 230V, 0.25-5(45)A
NBDM-11DB	Single Phase 230V, 0.25-5(45)A, backlight
NBDM-11A	Single Phase 230V, 0.25-5(45)A Mechanical register
NBDM-11M	Single Phase 230V, 0.25-5(45)A, RS485 Modbus
NBDM-11P	Single Phase, 230V, 0.25-5(45)A
NBDM-11MB	Single Phase, 230V, 0.25-5(45)A, Mbus EN13757-3
NBDM-11A V2	Single Phase 230V, 0.25-5(45)A Mechanical register
NBDM-11D V2	Single Phase 230V, 0.25-5(45)A
NBDM-11DB V2	Single Phase 230V, 0.25-5(45)A backlight
NBDM-11CTP	Single Phase 230V, 0.25-5(6)A
NBDM-11CTM	Single Phase 230V, 0.25-5(6)A. RS485, Modbus
NBDM-11CTMB	Single Phase 230V, 0.25-5(6)A. M-Bus EN13757-3

Modifications to the meter(s) described according to approval No.**0120/SGS0428** 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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Dated: 9th April 2020

#### 6. Document Revision History

Issu	e Date	Comments
1	09/04/2020	Initial Issue

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