



## Tokenless Prepayment BS Standard Meter

# E470

### Technical data



JSG Metering Solutions LTD

Unit 11, Totman Close, Brook Road Industrial Estate, Rayleigh, Essex, SS6 7UZ

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## E470 Technical Specifications

### General

#### Voltage

Nominal Voltage $U_n$	220, 230, 240V
Voltage Range	80-115% $U_n$
Voltage Withstand	415V Continuous

#### Frequency

Nominal Frequency	50Hz
Frequency Variation	+/- 2%

### MID-specific data

#### Current

Base Current	
Direct Connection $I_{ref}$	10A, 15A or 20A
$I_{max}$	100A
Starting Current	
MID Class B	0.04 Itr
MID Class A	0.05 Itr

#### Measurement Accuracy

Max Measuring Range	40mA up to 100A
Measuring Accuracy	
Active Energy MID	Class A or B

### General

#### Operating Behaviour

Voltage Interruptions (Power Down)	
Blocking of inputs and outputs	Immediate
Standby Operation	for 0.15s
Data Storage after	0.15s
Switch Off	after approx 0.15s
Voltage Restoration (Power Up)	
Function Standby	<5s (depending on duration of failure)
Detection of energy direction and phase voltage	<5s

#### Power Supply Quality

The meter complies with EN63052-11 Section 7.1.1 Voltage range and 7.1.2 Voltage dips and short interruptions

#### Power Consumption

Voltage Circuit	<5W <25VA
Current Circuit	<2.5VA

### Environmental Influences

Temperature Test	IEC
Temperature Range	
Operation	-25°C to +55°C
Power Measurement Range	-25°C to +55°C
Storage	-25°C to +55°C
This complies with EN 62052-11:2003 section 6.1	
Temperature Coefficient	
Range	From -25°C to +55°C
Typical mean value	±0.015% per K
$\cos\varphi = 1$ (from $I_{min}$ to $I_{max}$ )	±0.05% per K
$\cos\varphi = 0.5$ (from $I_{tr}$ to $I_{max}$ )	±0.07% per K

Impermeability to IEC 60529	IP51
Shock Test	BS EN60068-2-27

### Electromagnetic Compatibility

Electrostatic Discharges	to IEC 61000-4-2
Contact Discharges	8kV
Air Discharges	15kV
Electromagnetic RF Fields	to IEC 61000-4-3
80 MHz to 2 GHz	at least 10V/m
Radio Interference suppression to IEC 55022	Class B

Fast Transient Burst Test	to IEC 61000-4-4
With basic current $I_b$ :	
For current and voltage circuits	4kV
For auxiliary circuits >40V	4kV
With open current circuit	
for voltage and current circuits	4kV
Fast Transient Surge Test	to IEC 61000-4-5
Impulse Voltage	4kV
Impedance of source	2Ω
Rise/Decay time of impulse voltage	1.2μs/50μs
Rise/Decay time of impulse voltage	8μs/50μs

### Insulation Strength

Insulation Strength	4.4kV at 50Hz for 80 seconds
Impulse Voltage Strength	to IEC62053-11
Impulse Voltage	6kV
Impedance of source	500Ω
Rise/Decay time of impulse voltage	1.2μs/50μs
Protection Class II to IEC50470-1	<input type="checkbox"/> 2

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**Display****Characteristics**

Type	7 character, 7 segment LCD
Digit size	8x3.5mm
Number of Digits	6 significant numbers 2dp

**Communication interfaces****Optical Interface**

Type	Serial, bi-directional interface
Protocol	IEC62056-21

**Case Material****Base, Top Cover and Terminal Cover**

Flame retardant and UV stabilised polycarbonate

**Weight and Dimensions****Weight**

Standard	750g
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**Dimensions**

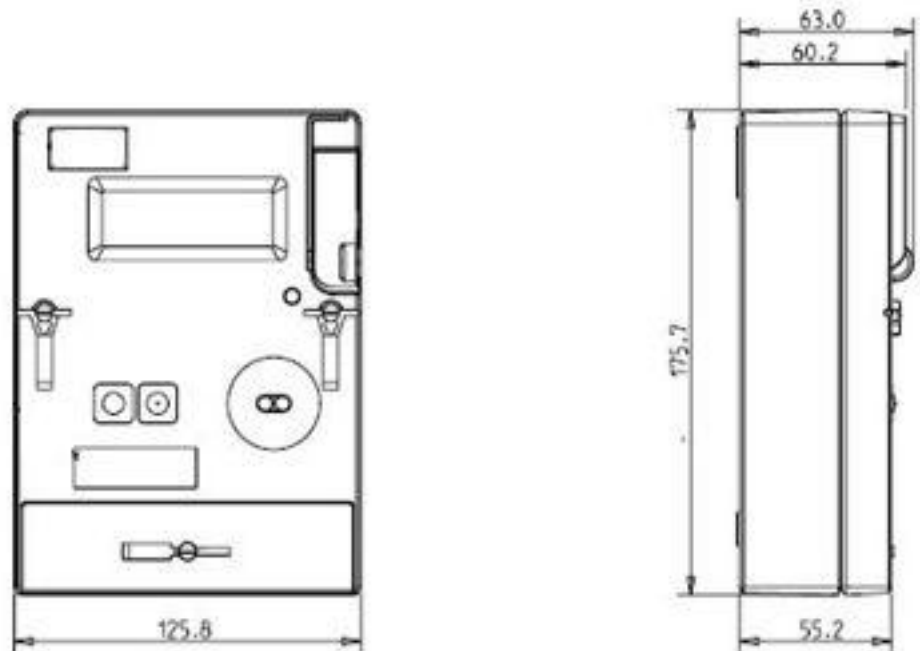
Width	175mm
Height	126mm
Depth	55mm

**Terminal Details**

Arrangement	BS5685
Size	8.3mm diameter

**Connections**

Standard layout and dimensions

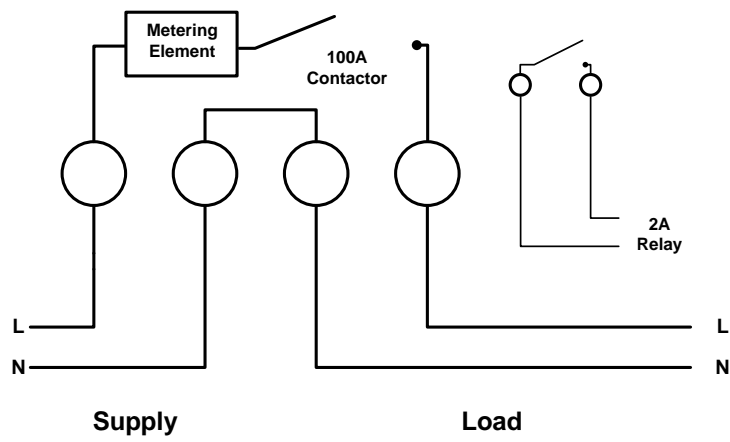
**Dimensions**

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## Wiring Connections



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