Single Phase DIN Standard Credit Meter

5254F

Technical data

The 5254F meter is a DIN Standard single phase multi rate time-of-use static watt-hour meter

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5254F Technical Specification

5254F Technical Specifications

General

Voltage

Nominal Voltage U_n	220-240V
Voltage Range	80-115%Un
Voltage Withstand	415V Continuous

Frequency

Nominal Frequency	50Hz
Frequency Variation	+/- 2%

MID-specific data

Current

Base Current	
Direct Connection Iref	5, 10A
Current Max	
Imax	80A
Starting Current	
MID Class B	0.04 Itr
MID Class A	0.05 Itr

Measurement Accuracy

Max Measuring Range	20mA up to 80A
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 failue)	
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	<4VA

Environmental Influences

Temperature Test	IEC62053-21, IEC62053-23
Temperature Range	
Operation	-25°C to +55°C
Power Measurement Range	-40°C to +70°C
Storage	-25°C to +55°C

This complies with EN 62052-11:2003 section 6.1

Temperature Coefficient **	
Range	From -10°C to +45°C
Typical mean value	±0.015% per K
$\cos\varphi$ =1 (from Imin to I_{max})	±0.05% per K
$\cos\varphi$=0.5 (from Itr to I_{max})	±0.07% per K
Impermeability to IEC 60529	IP51
Shock Test	BS EN60068-2-27

Electromagnetic Compatibility**

Electrostatic Discharges	to IEC 610000-4-2
Contact Discharges	8kV
Air Discharges	15kV
Electromagnetic RF Fields	to IEC 610000-4-3
80 MHz to 2 GHz	at least 10V/m
Radio Interference suppression to IEC/CISPR 22	Class B
Fast Transient Burst Test	to IEC 610000-4-4
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 610000-4-5
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 IEC626050-131	⧈2

Display

Characteristics	
Type	LCD
Digit size	7mm
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	
Standard	400g
Dimensions	
Width	125mm
Height	135mm
Depth	45.5mm
Height (with extended terminal cover)	187mm

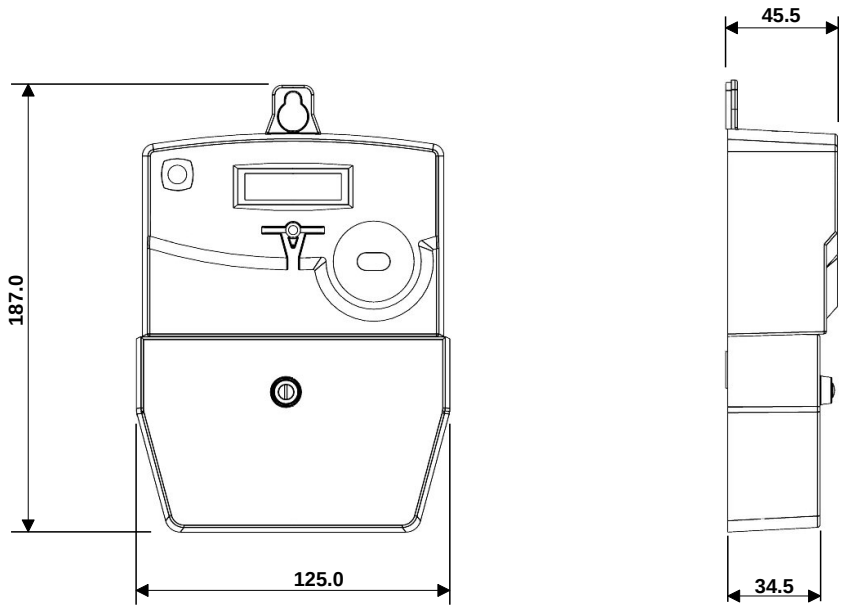
Terminal Details	
Arrangement	DIN
Size	6mm diameter

Connections

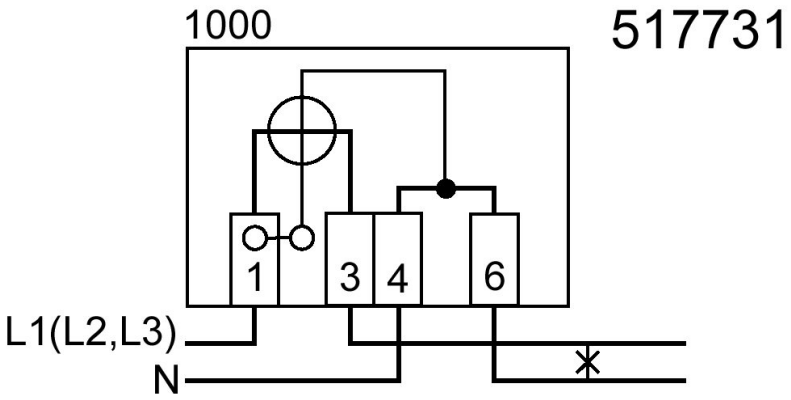
Standard layout and dimensions

Weight and Dimensions

Dimensions



Wiring Diagram



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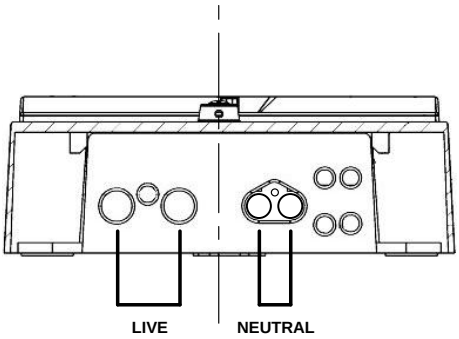
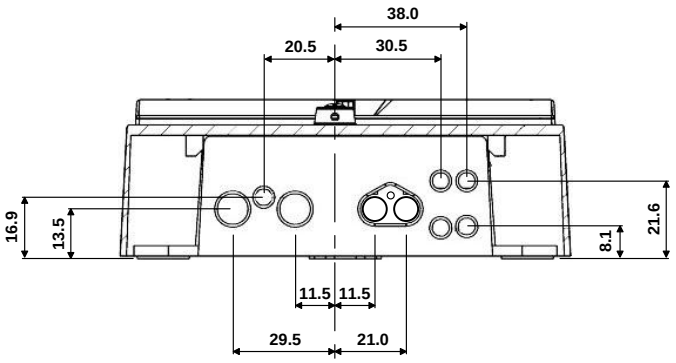
Terminal Layout and Phase Connection (Dimensions in mm).





External Connection Diagram