



Single-phase energy meters  
DMED100T1  
single-phase  
1

Product designation

Product type designation

Type

DIN rail module number

**Auxiliary supply  $U_s$**

Operational frequency

|     |    |    |
|-----|----|----|
| min | Hz | 50 |
| max | Hz | 60 |

Power consumption

|     |    |   |
|-----|----|---|
| Max | VA | 7 |
|-----|----|---|

Power dissipation Max

|   |      |
|---|------|
| W | 0.45 |
|---|------|

**Measuring voltage inputs**

Rated voltage ( $U_e$ )

|               |     |           |
|---------------|-----|-----------|
| phase-neutral | VAC | 220...240 |
|---------------|-----|-----------|

Operating voltage range

|               |     |           |
|---------------|-----|-----------|
| phase-neutral | VAC | 184...264 |
|---------------|-----|-----------|

Connection method

Direct

**Current**

IEC maximum ( $I_{max}$ )

|   |    |
|---|----|
| A | 40 |
|---|----|

IEC minimum ( $I_{min}$ )

|   |      |
|---|------|
| A | 0.25 |
|---|------|

IEC rated ( $I_{ref-Ib}$ )

|   |   |
|---|---|
| A | 5 |
|---|---|

IEC start ( $I_{st}$ )

|    |    |
|----|----|
| mA | 20 |
|----|----|

Transition ( $I_{tr}$ )

|   |     |
|---|-----|
| A | 0.5 |
|---|-----|

**Accuracy**

|                 |                           |
|-----------------|---------------------------|
| Active energy   | Class 1 (IEC/EN 62053-21) |
| Reactive energy | Class 2 (IEC/EN 62053-23) |

**Output characteristics**

LED Pulse rate

|           |      |
|-----------|------|
| pulse/kWh | 1000 |
|-----------|------|

LED Pulse duration

|    |    |
|----|----|
| ms | 30 |
|----|----|

Static output pulse rate

|           |    |
|-----------|----|
| pulse/kWh | 10 |
|-----------|----|

Static output pulse duration

|    |     |
|----|-----|
| ms | 100 |
|----|-----|

Static output external voltage

|     |         |
|-----|---------|
| VDC | 10...30 |
|-----|---------|

Static outputs Maximum current

|    |    |
|----|----|
| mA | 50 |
|----|----|

**Insulations**

Rated insulation voltage  $U_i$  IEC/EN

|   |     |
|---|-----|
| V | 250 |
|---|-----|

Rated impulse withstand voltage  $U_{imp}$

|    |   |
|----|---|
| kV | 6 |
|----|---|

Operating frequency withstand voltage

|    |   |
|----|---|
| kV | 4 |
|----|---|

**Mechanical features**

Housing type

Polyamide

Terminals type

Fixed

Conductor cross section

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 1.5 |
|-----|-----------------|-----|

|     |                 |    |
|-----|-----------------|----|
| Max | mm <sup>2</sup> | 10 |
| min | AWG             | 16 |
| Max | AWG             | 6  |

Tightening torque (Max)

|      |     |
|------|-----|
| Nm   | 1.5 |
| lbin | 14  |

Fixing

Din rail

Weight

g 86

**Ambient conditions**

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -25 |
| max | °C | +55 |

Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -25 |
| max | °C | +70 |

Relative humidity

% <80

Maximum Pollution degree

2

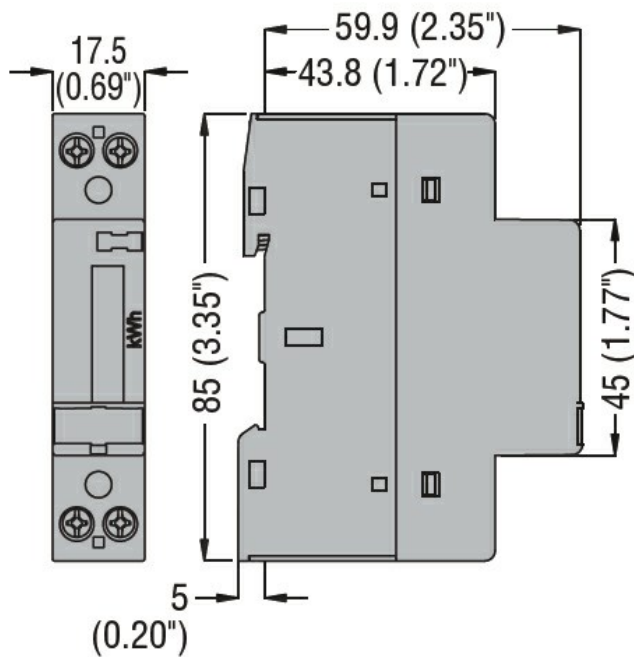
Mechanical environment

Class M1

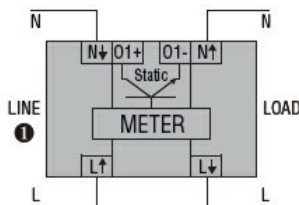
Magnetic environment

Class E2

**Dimensions**



**Wiring diagrams**



**Certifications and compliance**

Compliance

CSA 22.2 n°61010-1

EN 50470-1

IEC/EN 61010-1

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UL61010-1

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Certificates

cULus

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EAC

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RCM

**ETIM classification**

ETIM 8.0

EC001506 -  
Kilowatt-hour  
meter