



Iskra MT174-T1 - Summary Sheet

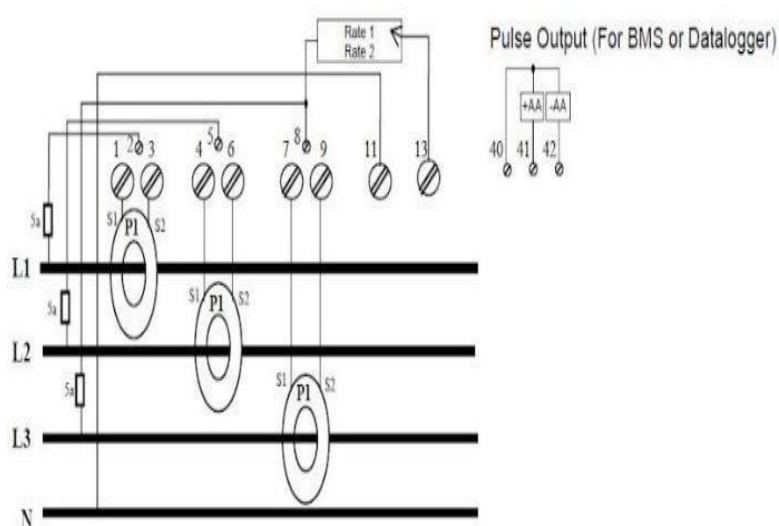
This Iskra MT174-T1 is a CT operated three phase meter manufactured by Iskra, one of Europe's largest electric meter manufacturer's. This class B, (accurate to within 1%), surface mounted meter is MID approved making it suitable for billing applications and includes two pulse outputs and an RS485 connection. While typically used in three phase four wire installations, it can also be used on both single and two phase supplies. It also logs recorded data internally so in the event of a fault, such as a screen failure, readings can still be retrieved.

We configure the auto scroll display, (viewable without having to press any buttons), on the MT174 for different applications as listed below. This ensures the key information required is available without having to check instructions, press buttons etc.

Specification

Wiring Diagram

Meter Type	Three Phase
Fitting Type	Surface Mount
Max. Current (Amps)	6A
MID Approved	Yes
Smart	No
Input Type	Current Transformer
Output Type	Pulse & RS485
Tariffs	Single / Dual / Multiple *
Availability	Next Day
Import / Export	Import / Import & Export *



*Needs to be added before dispatch

Requires 3 current transformers

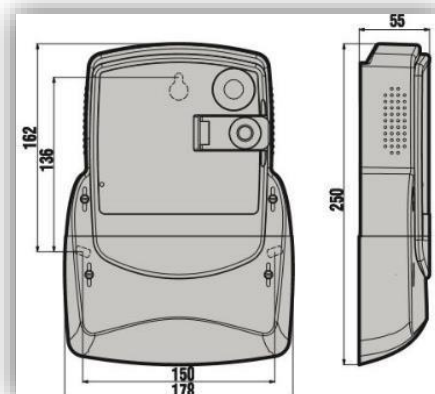
Dimensions



Split core current transformer
Model shown T24



Solid core current transformer
Model shown CT32



Installation Checks:

Supply Voltages:

- Check the L1, L2, L3, indicators on the meter display – these should all be on.
- Missing indicators show a phase voltage missing. Check supply and reference voltage fuses.
- Flashing indicators show incorrect phase rotation – two pairs of phase voltage cables must be swapped, e.g. exchange the L1 (both in & out cables) with the L2 (both in & out cables).

Currents and Energy Direction:– How to check each phase separately **IF IN DOUBT: ASK**

- To perform this test a load must be drawing current from the supply so that the meter is operating.
- Isolate 2 phases (normally by removing the relevant voltage reference fuses). Isolate and short out the remaining 2 CTs CAUTION: Always ensure that CTs are shorted or dangerous voltages can be present on CT cables
- Only keep the CT on the phase circuit to be checked. You are now working with one phase voltage only – check that the P arrow indicators on the meter display show P+
- If there is no arrow and energy flow (Kw) is not present, either the installation is not under load OR the CT being checked is not installed onto the relevant phase cable.
- Once checked, isolate this phase and CT and repeat this test for the other phases checking for P+.
- If P- is showing instead of P+ the CT is the wrong way around the supply cable. P1 should be on the supply side (or direction of current flow side) of the cable. OR S1 and S2 are connected the wrong way on the meter terminals.
- Finally, re-connect all supplies and check all CTs are correctly terminated. As a final check display the reverse (export) reading on the meter by accessing the additional displays using the blue button as shown above. Make a note of the reading then check a few minutes (or hours) later – the value should not increase.
- Note that some loads result in energy flow in two directions – e.g. a grid connected wind turbine will draw a small current for its control circuitry in the reverse direction when not generating.

Meter LEDs:

Once powered up and in operation you can check the operation by observing the LEDs on the front of the meter:

LED operation:

OFF = No voltage to meter

ON = Voltage OK No current flowing through the meter

BLINKING = Energy registered by meter (proportional to load being measured)