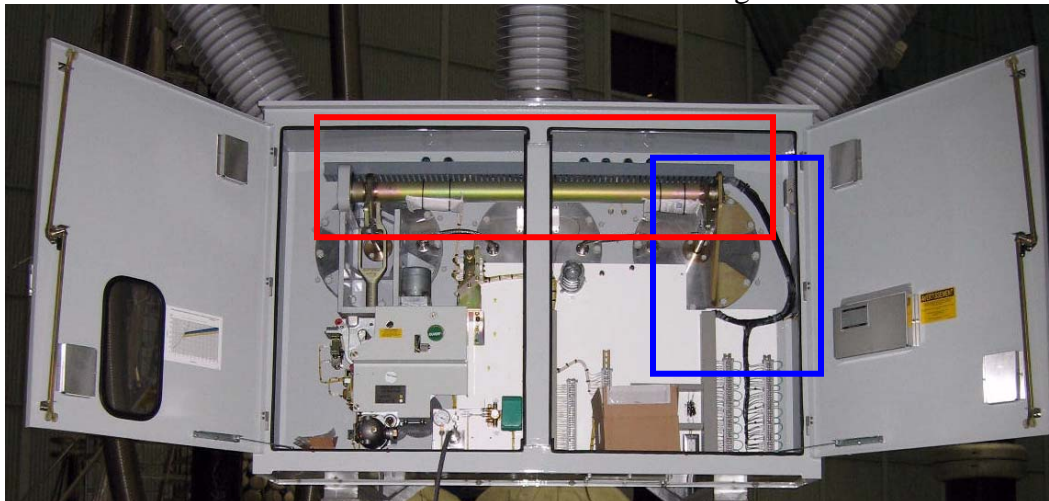


EXAMPLE 18: SFMT DEAD TANK BREAKER BY MITSUBISHI **(TEST PERFORMED IN QUÉBEC, CANADA)**



(Fig 1) Circuit breaker

This 3 contact dead tank breaker manufactured by Mitsubishi has one contact per phase. The travel mechanism of this breaker is common to all three phases (see red rectangle in fig.2). Only one single transducer is required to measure the breaker travel. This transducer will be connected in the area outlined in blue in fig. 2.



(Fig 2) Mechanism

Measurement of the travel and velocity is part of the regular maintenance required by the

manufacturer on this breaker.

The contacts move in a linear motion. For this, we can use either a **rotary transducer** or an **optical encoder** connected to our linear to rotary converter **KIT-ZLR** used in conjunction with the **bracket** supplied by the manufacturer (shown in fig. 3).

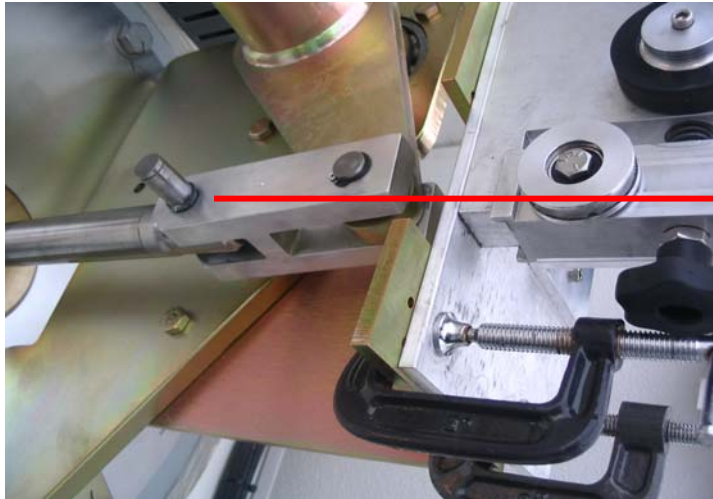


(Fig 3) Bracket

To this **bracket** we connect our KIT-ZLR. A rod directly attached to the breaker mechanism will be connected to the three wheels of our KIT-ZLR.



(Fig 4) Rod



Attachment for
the Coupling
piece

(Fig 5) Coupling piece



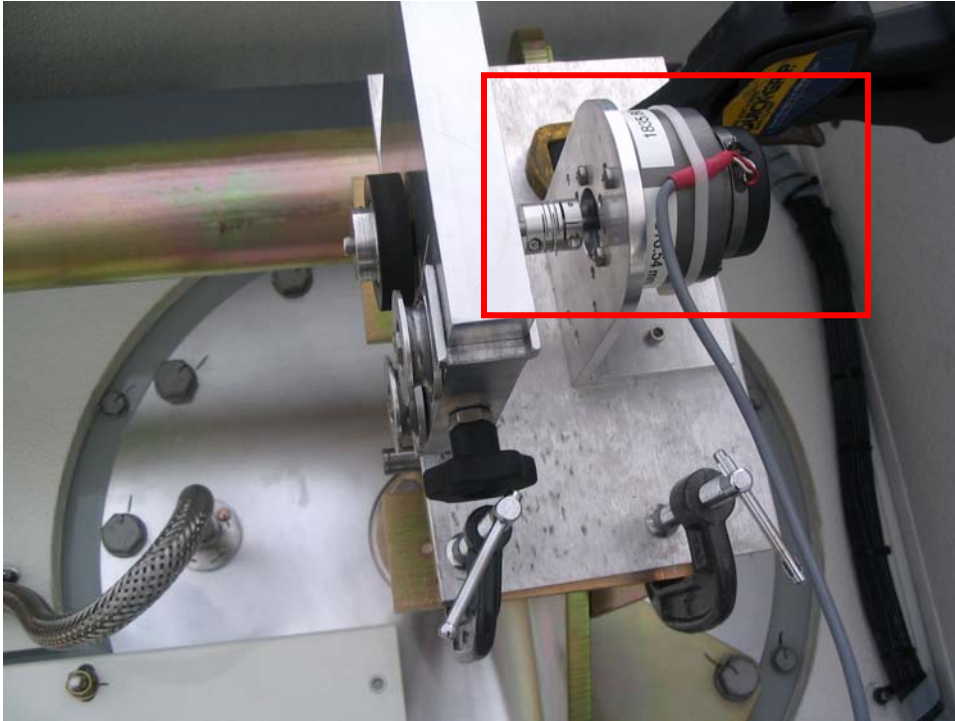
Coupling piece

(Fig 5 Bis) Coupling piece

As for all breakers with linear movement, we are going to connect a **rod** to the breaker mechanism fig 4 thanks to the **coupling piece** shown in fig 5bis

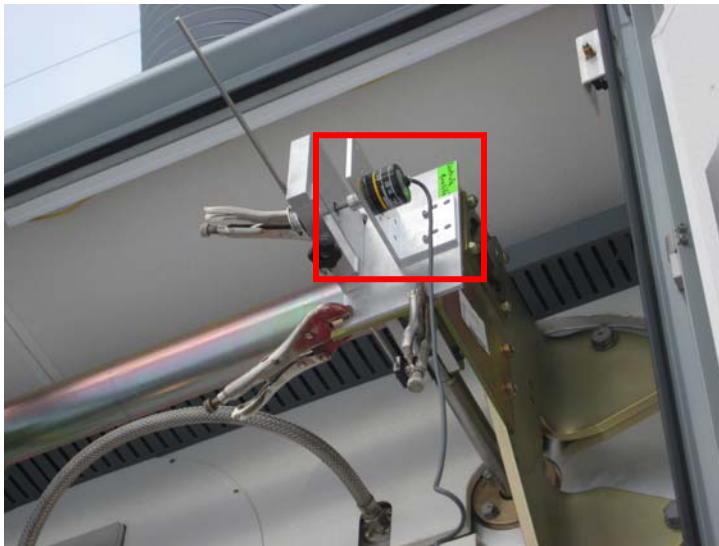
Final mounting

with rotary transducer....



(fig 6)

...with Optical Encoder

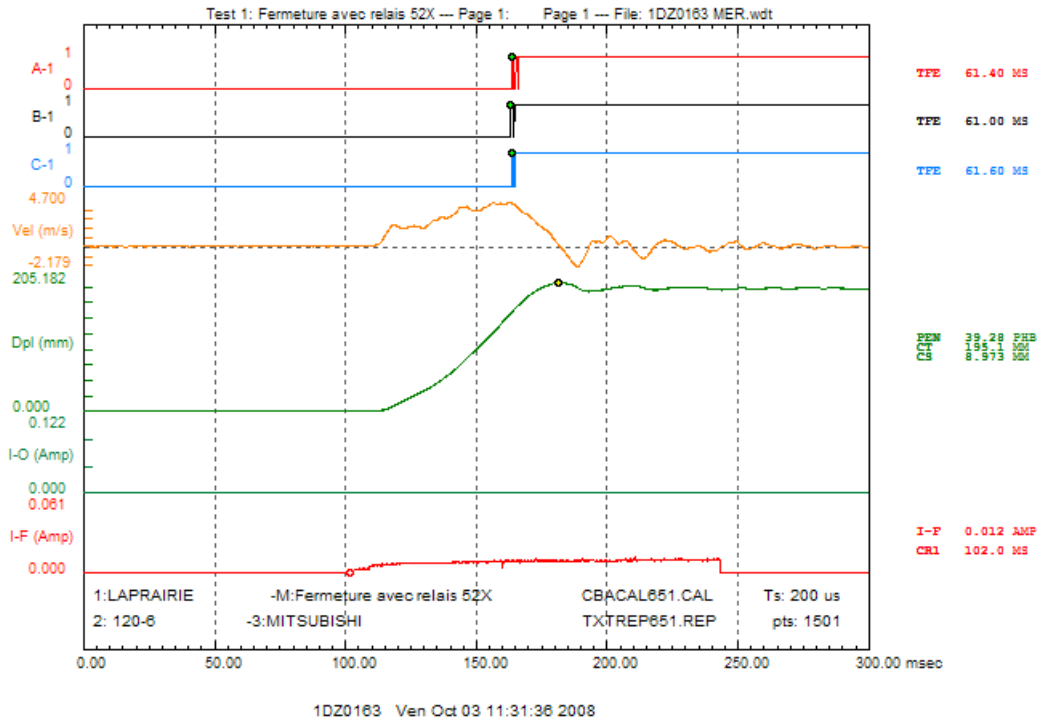


(Fig 6 bis)

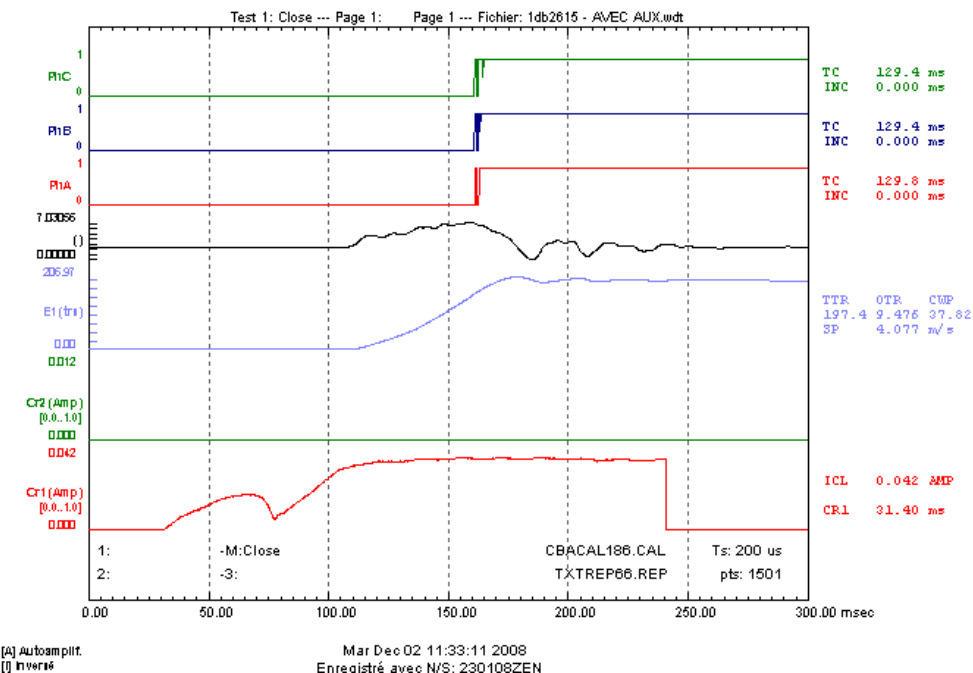
Results obtained on Close operation with the CBA WIN software.

Below you will see two examples of the Close test done with the two types of transducers. As you can see, the travel curves are almost identical.

With Rotary transducer

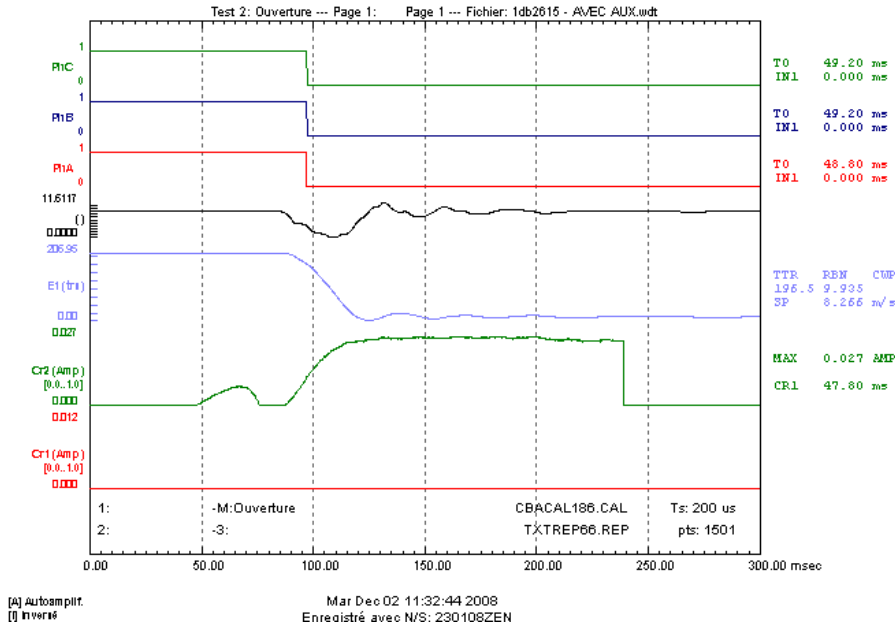


With Optical encoder



Results obtained on Open operation with the **CBA WIN software.**

With optical encoder



Results obtained on Close-Open operation with the **CBA WIN software.**

With optical encoder

