DYNAMIC RATINGS

ROGOWSKI COIL (RC)

OVERVIEW

Partial discharge (PD) activity is a leading indicator of insulation failure in high voltage insulation system and in particular high voltage transformer insulation. PD measurement in industrial environments requires noise filtering. The Dynamic Ratings Rogowski Coil (RC) is a polarity sensitive, air-core, high frequency current transformer allows for advanced noise rejection based on pulse polarity when used in conjunction with BAU+ sensor. With this added level of filtering, the monitor can utilize lower frequencies in the detection which provides deeper "visibility" of PD within the windings without the concern associated with external PD sources.

APPLICATION

RCs are used in conjunction with Dynamic Ratings Bushing Adaptor (BAU) sensors. Pulse polarity from both sensors is compared to determine signal direction.

The RC attaches to the preamplifier located in the BAU+ sensor via the IP67 rated connector. The RC coil signal is transmitted through the second coaxial cable to the PD monitor. The Rogowski Coil amplifier is powered by the PD monitor utilizing the same coaxial cable.

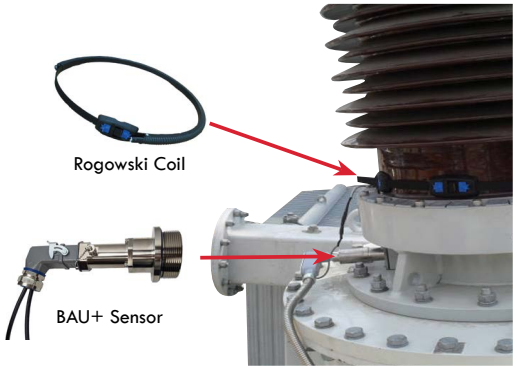
BENEFITS

- RCs use materials proven to resist UV deterioration.
- RCs are easy to install and are non-intrusive. A buckle strap is provided to allow quick installation.
- RCs are available in multiple sizes to fit a wide variety of bushing diameters.
- IP67 connections are well-suited for harsh environments.

SELECTING THE PROPER RC SIZE

RCs are fitted to the base of the bushing below the bottom skirt/shed. RC sensors are selected by length to encircle the circumference of a bushing's porcelain base.

The total length of the sensor needs to consider the buckle length of 6 inches. Hence, an RC-2.0 should be selected for an application where the circumference is 762 mm / 2.5 ft.



RESPONSIVE
ASSET HEALTH SOLUTIONS

PQE POWER SYSTEM SDN BHD

HOW TO ORDER

Order online at https://dynamic-ratings.myshopify.com/ (US & Canada) or contact your local sales office to request a quote

Part #	Description
RC-1.6*	488 mm / 1.6 ft in length (circumference)
RC-2.0*	610 mm / 2 ft in length (circumference)
RC-2.5*	762 mm / 2.5 ft in length (circumference)
RC-3.0*	914 mm / 3.0 ft in length (circumference)
RC-3.5*	1070 mm / 3.5 ft in length (circumference)
RC-4.0*	1220 mm / 4.0 ft in length (circumference)
RC-4.5*	1370 mm / 4.5 ft in length (circumference)
RC-5.0*	1520 mm / 5.0 ft in length (circumference)
RC-5.5*	1680 mm / 5.5 ft in length (circumference)
RC-6.0*	1830 mm / 6.0 ft in length (circumference)
RC-6.5*	1980 mm / 6.5 ft in length (circumference)

* One sensor is supplied per part number. One sensor is used per bushing.
The sensor must be used with a BAUplus-xx-A bushing sensor with a pre-amplifier and should be ordered at the same time.
RG 58A/U Coax cable is needed to connect from the pre-amplifier to the monitoring instrument. Coax cable must be ordered separately.
Customer to provide a drawing of the transformer bushing to be monitored to ensure the appropriate sensor size.

DYNAMIC RATINGS

We are the industry Responsive Asset Health Solutions provider. We use comprehensive end-to-end products and services to improve customers business performance.

bsi. ISO 9001:2015 Quality Management

bsi. ISO 14001:2015 Environmental Management

bsi. ISO 45001 Occupational Health and Safety Management

Local Contact:

PQE POWER SYSTEM SDN BHD
+603 7733 6433
info@PQE.com.my
www.PQE.com.my