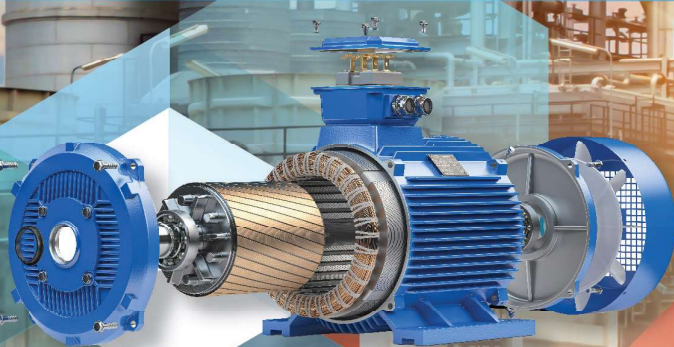


ELECTRICAL SOLUTION :

SMART MOTOR CONDITION
MONITORING SYSTEM



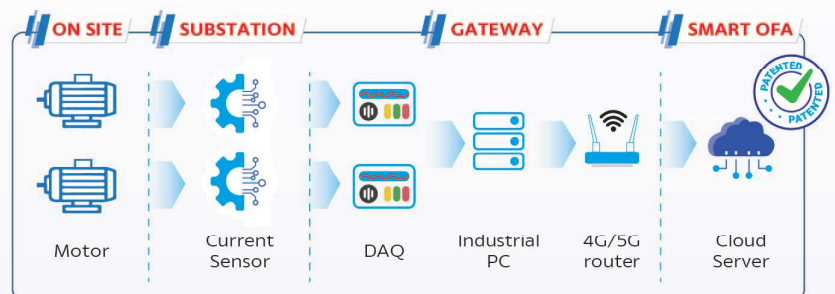
SMART MOTOR CONDITION MONITORING

Have you ever experienced these issues caused by Induction motor failure?

- Lack of detection for abnormality
- Unplanned breakdown
- High safety & environmental risk from working with arc-flash
- High inspection and maintenance costs from workers



Smart motor condition monitoring System benefits client to...



- Early detection for abnormality
- Production loss saving
- Reduce inspection and maintenance cost
- Safe work conditions from prevent to work with energized part

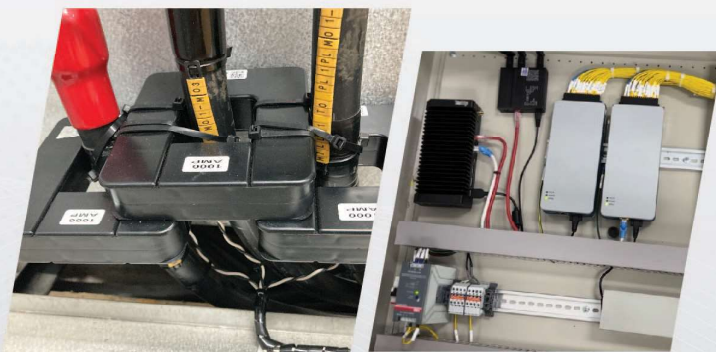
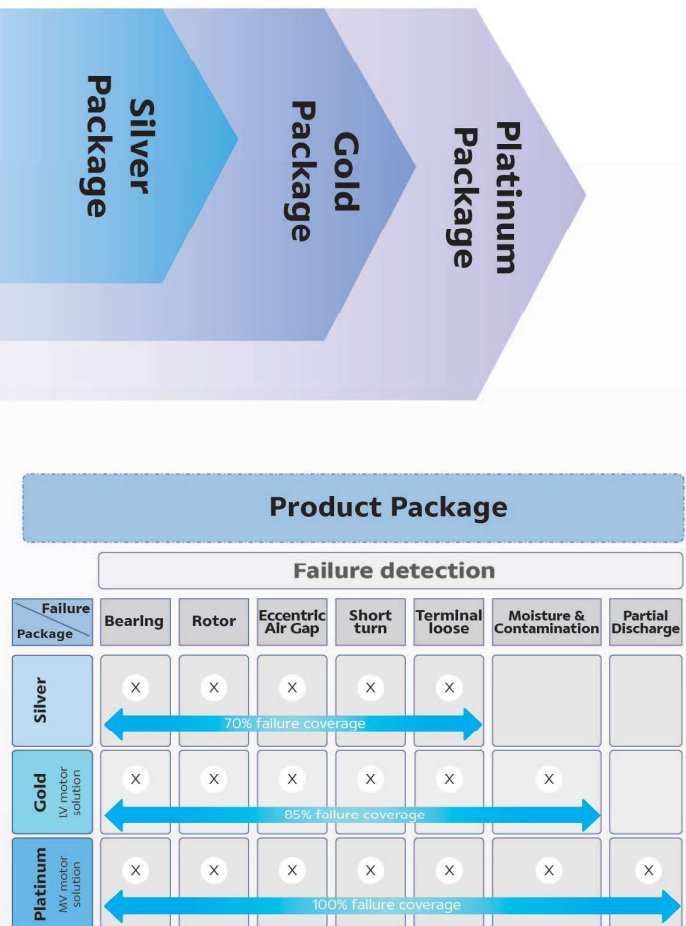
SMART MOTOR CONDITION MONITORING



Based-on 40 Years of Experiences
as a Solution Practitioners

Smart motor condition monitoring System benefits client to...

- Failure mode covering
 - Rotor Bar Crack
 - Eccentric Air Gap
 - Stator Short Turn
 - Bearing Defect
 - Terminal Looseness
 - Moisture & Contamination
 - Partial Discharge
- Compiled with ISO-20958, IEC-60270 Std
- Easy for installation (Install in substation at MCC / Switchgear)
- 24/7 machine condition monitoring via REPCO NEX web application
- Automated diagnostic through using machine learning
- User-friendly visualized dashboard
- Customizable alarm notification



SMART MOTOR CONDITION MONITORING



Fault Event Alarm

Download Format

New Fault Event Alarm

Date/Time	Alarm Message	Alarm Type	Alarm Value	Adknowledge	Done	Details
23 Aug 2023, 11:25		Alarm	-52.55	Adknowledge		
23 Aug 2023, 11:08		Alarm	-52.52	Adknowledge		
23 Aug 2023, 10:58		Alarm	20.89	Adknowledge		
14 Sep 2023, 17:03		Warning	7.65	Adknowledge		
23 Aug 2023, 11:04		Warning	-55.74	Adknowledge		

10 Entries per page



Real-Time Monitoring



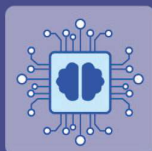
24/7 Machine Condition Monitoring via Web-Based Application



Early Detection Alert



More than 300k THB/yr saving (based on 1MW motor)



Automated Diagnostic Through Using Machine Learning

Topic	Specification
Type of Current Sensor	Clamp-on, Flexible
Analyzed Parameter	Current (A)
Operating Temperature (Sensor)	Up to 70 °C
Maximum Length for Signal Cable	70 meters
Frequency Bandwidth	Up to 12 kHz (MCA, Leakage Current) Up to 30 MHz (Partial Discharge)
Resolution	32 bit (MCA, Leakage Current) 12 bit (Partial Discharge)
Sampling Rate	Up to 100 kS/s (MCA, Leakage Current) Up to 125 MS/s (Partial Discharge)
Accuracy (Controller)	±1% of full scale
Voltage Supply	220 VAC, 24VDC
Analog Input	±10 V, ±5 V, ±1 V, ±0.2 V
Network Protocol	TCP/IP, 4G, WIFI

