Preventive maintenance for AF1350 ... AF2650 contactors

In order to guarantee high levels of efficiency and reliability to your electrical installation, ABB suggests a regular preventive maintenance on your installed block contactors.

Preventive maintenance includes the carrying-out of tests, measurements and any maintenance, repair or replacement activities, based on specially designed technical plans, aimed at reducing the probability of failure or the working deterioration of the apparatus.

ABB as leader in design and production for low voltage contactors, always pays particular attention to customer satisfaction. Thanks to highly qualified organization, ABB provides support to customers during all phases of the product's life cycle, from product selection to after-sales assistance.

Benefits

Preventive Maintenance creates value over the long-term by

- Providing the best management of maintenance costs, in particular:
 - Less expensive direct costs of maintenance, by reducing the charges due to urgent situations
 - Less expensive indirect costs of the installation shut-down, taking advantage of scheduled stops.
- Ensuring better efficiency and reliability of the equipment
- Extending the contactor's life
- Guaranteeing the safety of the installation for longer time.

Preventive maintenance program

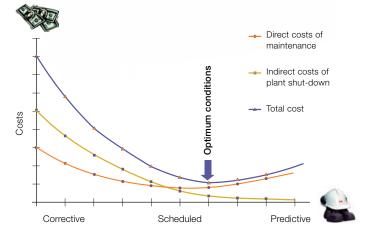
ABB has designed its maintenance schedule for all contactor families, based on its technical knowledge of the products and on its experience in the field.

The preventive maintenance program has the following main targets:

- Check the preservation and the efficiency status of the apparatus
- Anticipate the trend of deterioration of the contactors, signalling the need for replacement of excessively worn out components, where available, or suggest alternative solutions for bringing them up to date
- Increase the life cycle of the installation, proposing proactive maintenance and replacing obsolete components.

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Maintenance planning

Provided services

Considering the importance of the maintenance activity and the required technical know-how, ABB guarantees professional competence. Interventions are performed by ABB recommended skilled technicians. After the inspection activities, ABB technicians give all the indications related to the future maintenance needs and any possible corrective actions, while releasing the final report.

Maintenance schedule

ABB draws up a systematic and functional preventive maintenance program. ABB proposes a maintenance intervention every three years directed to extend the product's life. (extraordinary maintenance).

Service intervals shall have to be suitably assessed in case of non-standard service and environmental conditions.

The offer foresees the following maintenance schedule:

| AF1350 AF2650 contactors | Year from the commissioning 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|-----|---|-----|-----|---|---|---|-----|---|-----|-----|-----|---|-----|-----|----|----|-----|-----|-----|
| | 0 | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | 4 | 15 | 16 | 17 | 18 | 19 | 20 |
| Base structure | • | • | • | • | | • | • | _ | | • | • | | • | • | | • | • | • | | | | | |
| Identification label | | T | T | 1 | Ι | Ι | - 1 | T | T | | l l | 1 | Т | - 1 | - 1 | | Π | 1 | 1 | 1 | Τ | - 1 | T |
| Top cover | | I | I | I | I | I | T | I | 1 | | l | I | I | I | I | | I | 1 | I | 1 | ı | - 1 | I |
| Base | | ı | I | I | I | T | 1 | I | I | | l | I | Ι | ı | 1 | | ı | 1 | Ι | 1 | ı | I | Ī |
| Mechanical components | · | | | | | | | | | | | | | | | | | | | | | | |
| Operating coil | | Ι | 1 | Р | Ι | Ι | Р | T | T | | р | ı | Ι | Р | I | | Π | Р | 1 | 1 | р | Ι | T |
| Arc chambers | | ı | I | (R) | I | 1 | (R) | I | 1 | (| R) | 1 | I | (R |) l | | ı | (R) | I | 1 | (R) | 1 | I |
| Arc Runners | | I | I | (R) | I | I | (R) | I | 1 | (| R) | I | I | (R |) l | | ı | (R) | I | 1 | (R) | I | I |
| Fixed contacts | | 1 | 1 | (R) | I | 1 | (R) | I | 1 | (| R) | 1 | - 1 | (R |) l | | l i | (R) | I | 1 | (R) | 1 | I |
| Moving contacts | | ı | I | (R) | I | 1 | (R) | I | 1 | (| R) | I | I | (R |) l | | ı | (R) | I | 1 | (R) | - 1 | I |
| Spring on moving contacts | | ı | I | ı | ı | I | ı | I | 1 | | l | I | ı | ı | - 1 | | ı | 1 | I | 1 | ١ | - 1 | I |
| Armature magnets | | ı | I | ı | I | 1 | 1 | I | 1 | | l l | I | I | I | I | | ı | 1 | I | 1 | 1 | 1 | I |
| Spring in retainer | | I | I | I | I | I | T | I | I | | l | I | I | I | I | | ı | Ι | I | 1 | ı | I | I |
| Shaft | | ı | I | I | ı | T | - 1 | I | Ī | | l | I | Ι | ı | 1 | | ı | Ι | ı | 1 | ı | T | T |
| Contact bridge | | ı | I | (R) | I | - | (R) | I | 1 | (| R) | I | I | (R |) l | | ı | (R) | I | 1 | (R) | - 1 | I |
| Bearings | | ı | I | ı | I | I | 1 | I | 1 | | l | I | Ι | ı | 1 | | ı | 1 | Ι | 1 | ı | I | I |
| Return springs for moving contacts | | ı | I | I | I | I | 1 | I | Ī | | l | I | ı | I | ı | | l | T | I | I | ı | I | I |
| Main busbar connections | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal connections | | T | 1 | Т | Ι | 1 | 1 | T | T | | L | 1 | Т | - 1 | - 1 | | Ι | 1 | - | I | 1 | - 1 | T |
| Auxiliary connections | | | | | | | | • | | | | | | • | | | | | | | | | |
| Auxiliary contact block | | Ι | I | Ι | Τ | Ι | Ι | T | T | | 1 | 1 | Ι | - 1 | I | | Ι | Τ | Ι | 1 | Ι | Ι | - 1 |
| PLC connector | | ı | I | I | I | I | - 1 | I | Ī | | l | I | ı | I | ı | | l | T | I | I | I | ı | I |
| Electrical components | | | | | | | | | | | | | | | | | | | | | | | |
| Coil isolation | | 1 | 1 | Р | Ι | - 1 | Р | T | T | | Р | 1 | Т | Р | - 1 | | Ι | Р | - | 1 | Р | - 1 | T |
| Terminal holder | | I | I | I | I | I | T | I | 1 | | l | I | I | I | I | | I | 1 | I | 1 | ı | I | I |
| Main PCBA | | 1 | 1 | Р | I | 1 | Р | 1 | 1 | | Р | 1 | - 1 | Р | I | | Ι | Ρ | I | 1 | Р | 1 | I |
| Pegs to main PCBA | | ı | I | I | I | 1 | T | I | 1 | | l | I | I | I | I | | ı | 1 | I | 1 | I | - 1 | I |
| Filter PCB | | ı | 1 | Р | ı | I | Р | I | 1 | | Р | I | ı | Р | - 1 | | ı | Ρ | I | 1 | Р | I | I |
| LVRT PCB (AF-T) | | ı | I | Р | I | T | Р | I | Ī | | Р | I | Ι | Р | 1 | | ı | Ρ | I | 1 | Р | 1 | Ī |
| Wiring | • | | | | | | | | | • | | | | | | | • | | | | | | |
| Wiring diagram | | ı | I | Ι | Т | T | 1 | I | 1 | | I | 1 | Т | - 1 | - 1 | | L | 1 | Ι | 1 | ı | T | T |
| Cable | | I | I | I | I | I | Ι | I | I | | l | I | I | I | ı | | l | Ι | I | I | - 1 | I | I |
| Cable connectors | | ı | I | ı | I | I | I | I | Ī | | l l | I | Ι | I | ı | | ı | 1 | I | I | I | I | T |

| Legend | |
|-----------------------------------|--|
| I (Inspection) | Inspection and tests, corrective actions, if required, replacement of the component |
| P (Performance) | Tests, measurements and any "maintenance" or repair or "replacement" activity, if required, aimed at improving product life |
| (R) (Replacement under condition) | Any replacement of component suggested by ABB qualified technician after ordinary and/or extraordinary preventive maintenance inspection |
| (P) (Performance under condition) | Tests performed only if provided for contract and/or if deemed necessary by ABB qualified technician |

For further information contact:

ABB AB
Control Products
Low Voltage Products
S-72161 Västerås, Sweden

www.abb.com/lowvoltage



Service for control and protection

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