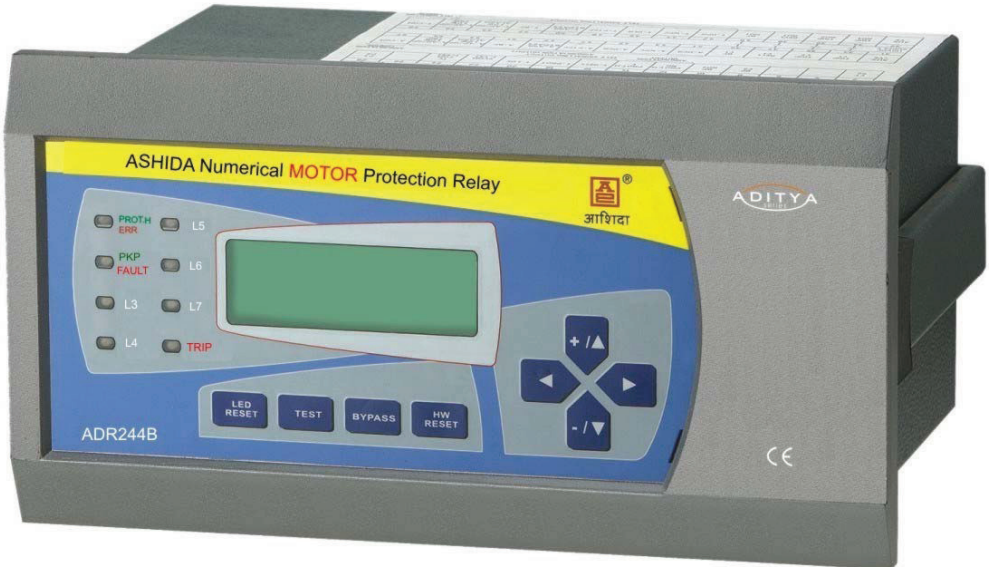
ASHIDA Numerical Motor Protection Relay

Type: ADR244B
(ADITYA–V2 Series)
(Preliminary)



Protection Features:

- ✓ Over-Current Protection including doubling feature.
- ✓ Negative phase sequence element (46) includes Phase reversal.
- ✓ Selection of Curve: Five selectable IEC curve (Normal Inverse1 (C1), Normal Inverse2, (C2) Very inverse (C3), Extremely inverse (C4), Long time inverse (C5)) and Define Time (C6)
  Five C7 to C11 selectable IEEE/ANSI Curve another C1 to C11 RI/RXIDG curve with Drop-off time delay.
- ✓ Thermal Overload Protection.
- ✓ Start Number Protection.
- ✓ Stall Protection.
- ✓ Breaker Failure detection
- ✓ In-built CB Trip Circuit Supervision function during pre closing and post closing of CB.
- ✓ Under current Protection
- ✓ On site CT Secondary selection 1A or 5A.
- ✓ Under/Over voltage Protection.
- ✓ Under/Over Power Protection.
- ✓ Internal reconstruction phase-phase voltage and open delta voltage required for direction detection
- ✓ Internal calculation of zero seq. EF current (3Io) and Zero sequence voltage (3Vo) for directional detection for Earth fault
- ✓ Residual O/V (NDV) Protection.
- ✓ 3 Phase voltage check.

Note: Due to our policy to upgrade our products constantly, we reserve the right to supply products which may vary slightly from that indicated above.

आशिदा
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Relay Design Features:

- ✓ Large 20x4 LCD display for Parameter and setting display
- ✓ **Disturbance Recorder. Up 3sec of actual waveform of *current* & voltage along with logical and physical status are captured & saved in the built-in memory with date time stamping, for analyzing fault condition & fault location.**
- ✓ Fully communicable with IEC standard open protocol. **60870-5-103**
- ✓ Separate Communication Port for SCADA (RS485) as well as Local testing (RS232C)
- ✓ Online display of CB status and other digital and logical status.
- ✓ Continuous monitoring of module's internal hardware and alarm generation in case of failure of any critical components.
- ✓ 7 Digital Output contacts for local alarm as well as tele-signalling.
- ✓ **2 Setting Groups.**
- ✓ **CB CLOSE/TRIP from Relay keyboard**
- ✓ 8 Optically isolated digital status input for monitoring of status and avoid used of external relay logic
- ✓ 2 dedicated status input for Trip Circuit Monitoring
- ✓ 100 nos of event memory, event such CB close, Trip, digital status change, relay pkp etc. All events are with date and time stamped up to 1ms.
- ✓ 10 nos of Fault data stored with keypad interface and time stamping.
- ✓ **Display of Voltage, current, PF, Active, Reactive Power in terms of primary and secondary value.**

Main Functions

The ADR244B are having following protection functions.

1. 3 stage of Over current element. (IP>, IP>> and IP>>>).includes doubling feature.
2. 3 stages of 3Io (Internally derived EF) (3Io>, 3Io>> and 3Io>>>).
3. 3 stages of IE (Externally EF or REF) (IE>, IE>> and IE>>>).
4. 2 stage of Negative Phase sequence with phase reversal.
5. 2 stage of under current element.
6. 2 stage of Under/Over voltage element.
7. Thermal Overload Protection.
8. Start Nb. Element.
9. Stall Detection element.
10. 2 stage of Under/Over power element.
11. 3 Phase voltage check
12. Trip Circuit Super vision.
13. Breaker Failure Detection.
14. Monitoring Functions.

Each of these functions are independently programmable and can be enable or disable by user depending upon requirement.

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