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1 INDICATIONS

1.1 Application

The indications from all the 48 selected binary signals are shown on the built-in man machine interface (MMI) and on Station Monitoring System (SMS) for each recorded disturbance in the disturbance report. The LEDs on the front of the terminal present start and trip indications.

1.2 Theory of operation

The indications shown on the MMI and SMS give an overview of the status of the 48 event signals during the fault. On the MMI the indications for each recorded disturbance are presented at:

DisturbReport
Disturbances
Disturbance n (1 - 10)
Indications

All signals selected can be internally produced signals or emerge from binary input channels. The trip signals (TRIP-TRIPL1, TRIP-TRIPL2, TRIP-TRIPL3) and BFP--BUTRIP (from the Breaker failure protection function) are however always available among the indications in SMS, but not automatically on the built-in MMI. When any of these for trip signals are indicated, the red MMI LED will be activated.

The indications are registered only during the fault time of a recorded disturbance, i.e. as long as any trigger condition is activated.

The signal name for internal logical signals presented on the screen will follow the signal name, that can be found in the signal list in each function description of item 7 of this User's Guide. Binary input signals will be presented with its user defined name.

The LED indications give the following information:

Green LED (left):

- steady light — In service
- flashing light — Internal fail, i.e. the internal signal INT--FAIL is high
- dark — No power supply

Yellow LED (middle):

- steady light — A disturbance report has been triggered
- flashing light — The terminal is in test mode

Red LED (right):

- steady light — A protection function has issued a trip command for one of the four trip signals listed above
- flashing light — The terminal is blocked, i.e. the internal signal INT--TERMBLCK is high

1.3 Setting

The signals to be presented as indications are selected in the Disturbance report setting. This can be found in the built-in MMI at:

Settings
DisturbReport
BinarySignals
Signal n (up to 48)

See item “Disturbance report - Settings”, 1MRK 580 029-XEN, for more information.

1.4 Testing

If TestMode is activated and;

1.1 TestMode/DisturbReport/**Operation = On** and **DisturbSummary = On or Off**, the disturbances are stored as usual in the terminal.

1.2 TestMode/DisturbReport/**Operation = Off** and **DisturbSummary = On**, the disturbance summary will scroll indications on the MMI, but nothing is presented under the Indications. LED information is shown but not stored.

1.3 TestMode/DisturbReport/**Operation = Off** and **DisturbSummary = Off**, disturbances are not stored. LED information is neither shown nor stored.