

USER PROGRAMS (1/2)

PROGRAM 1: Control for overvoltage, undervoltage, phases unbalance and phases cycle. It is supposed a three-phase voltage of 230V.

RELAY 1: Control phases cycle.

DEFINITION MODE WORKING
STATE OF CONTACT = ON

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = NON OPERATIVE
V |Li-Lj| MINIMUM = NON OPERATIVE
V |Li-LN| MAXIMUM = NON OPERATIVE
V |Li-LN| MINIMUM = NON OPERATIVE
≠ MAX |Li-Lj| MAXIMUM = NON OPERATIVE
≠ MAX |Li-LN| MAXIMUM = NON OPERATIVE
FREQUENCY MAXIMUM = NON OPERATIVE
FREQUENCY MINIMUM = NON OPERATIVE
PHASES CYCLE = ACTIVE
DETECTION MODE = CANCELLED
RELEASE MODE = CANCELLED

RELAY 2: Control of voltage threshold (overvoltage and undervoltage).

DEFINITION WORKING MODE =
V |Li-Lj| DETEC / MAX = 285.0 Vac
V |Li-Lj| RELEASE / MAX = 259.7 Vac
V |Li-Lj| DETEC / MIN = 180.0 Vac
V |Li-Lj| RELEASE / MIN = 200.0 Vac
V |Li-LN| DETEC / MAX = 163.0 Vac
V |Li-LN| RELEASE / MAX = 150.0 Vac
V |Li-LN| DETEC / MIN = 113.0 Vac
V |Li-LN| RELEASE / MIN = 125.0 Vac
STATE OF CONTACT = ON
DETECTION TIMER = 0.5 s
RELEASE TIMER = 0.5 s

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = OPERATIVE
V |Li-Lj| MINIMUM = OPERATIVE
V |Li-LN| MAXIMUM = OPERATIVE
V |Li-LN| MINIMUM = OPERATIVE
≠ MAX |Li-Lj| MAXIMUM = NON OPERATIVE
≠ MAX |Li-LN| MAXIMUM = NON OPERATIVE
FREQUENCY MAXIMUM = NON OPERATIVE
FREQUENCY MINIMUM = NON OPERATIVE
PHASES CYCLE = NON OPERATIVE
DETECTION MODE = DELAYED
TIME RANGE DETECTION = SECONDS
RELEASE MODE = DELAYED
TIME RANGE RELEASE = SECONDS

RELAY 3: Control of phase unbalance.

DEFINITION WORKING MODE =
≠ |Li-Lj| MAXIMUM DETEC / MAX = 10.0 %
≠ |Li-Lj| MAXIMUM RELEASE / MAX = 5.0 %
STATE OF CONTACT = ON
≠ |Li-LN| MAXIMUM DETEC / MAX = 10.0 %
≠ |Li-LN| MAXIMUM RELEASE / MAX = 5.0 %

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = NON OPERATIVE
V |Li-Lj| MINIMUM = NON OPERATIVE
V |Li-LN| MAXIMUM = NON OPERATIVE
V |Li-LN| MINIMUM = NON OPERATIVE
≠ |Li-Lj| MAXIMUM = OPERATIVE
≠ |Li-LN| MAXIMUM = OPERATIVE
FREQUENCY MAXIMUM = NON OPERATIVE
FREQUENCY MINIMUM = NON OPERATIVE
PHASES CYCLE = NON OPERATIVE
DETECTION MODE = INSTANTANEOUS
RELEASE MODE = INSTANTANEOUS

NOTE: Options in italics are only available according to the ones selected in DEFINITION WORKING MODE.

USER PROGRAMS (2/2)

PROGRAM 2: Control for overvoltage, undervoltage, phases unbalance, phases cycle and frequency. It is supposed a three-phase voltage of 230V.

RELAY 1: Control of phases cycle.

DEFINITION WORKING MODE = —
STATE OF CONTACT = ON

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = NON OPERATIVE
V |Li-Lj| MINIMUM = NON OPERATIVE
V |Li-LN| MAXIMUM = NON OPERATIVE
V |Li-LN| MINIMUM = NON OPERATIVE
≠ MAX |Li-Lj| MAXIMUM = NON OPERATIVE
≠ MAX |Li-LN| MAXIMUM = NON OPERATIVE
FREQUENCY MAXIMUM = NON OPERATIVE
FREQUENCY MINIMUM = NON OPERATIVE
CYCLE PHASES = OPERATIVE
DETECTION MODE = CANCELLED
RELEASE MODE = CANCELLED

RELAY 2: Control of voltage threshold (overvoltage and undervoltage).

DEFINITION WORKING MODE = —
V |Li-Lj| DETEC / MAX = 285.0 Vac
V |Li-Lj| RELEASE / MAX = 259.7 Vac
V |Li-Lj| DETEC / MIN = 180.0 Vac
V |Li-Lj| RELEASE / MIN = 200.0 Vac
V |Li-LN| DETEC / MAX = 163.0 Vac
V |Li-LN| RELEASE / MAX = 150.0 Vac
V |Li-LN| DETEC / MIN = 113.0 Vac
V |Li-LN| RELEASE / MIN = 125.0 Vac
STATE OF CONTACT = ON
TIMER DETECTION = 0.5 s
TIMER RELEASE = 0.5 s

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = OPERATIVE
V |Li-Lj| MINIMUM = OPERATIVE
V |Li-LN| MAXIMUM = OPERATIVE
V |Li-LN| MINIMUM = OPERATIVE
≠ MAX |Li-Lj| MAXIMUM = NON OPERATIVE
≠ MAX |Li-LN| MAXIMUM = NON OPERATIVE
FREQUENCY MAXIMUM = NON OPERATIVE
FREQUENCY MINIMUM = NON OPERATIVE
CYCLE PHASES = NON OPERATIVE
MODE DETECTION = DELAYED
TIME RANGE DETECTION = SECONDS
RELEASE MODE = DELAYED
TIME RANGE RELEASE = SECONDS

RELAY 3: Control of the frequency

DEFINITION WORKING MODE = —
FREQUENCY DETEC / MAX = 52 Hz
FREQUENCY RELEASE / MAX = 51 Hz
FREQUENCY DETEC / MIN = 49 Hz
FREQUENCY RELEASE / MIN = 48 Hz
STATE OF CONTACT = ON

ALARM STATE = OFF
V |Li-Lj| MAXIMUM = NON OPERATIVE
V |Li-Lj| MINIMUM = NON OPERATIVE
V |Li-LN| MAXIMUM = NON OPERATIVE
V |Li-LN| MINIMUM = NON OPERATIVE
≠ |Li-Lj| MAXIMUM = NON OPERATIVE
≠ |Li-LN| MAXIMUM = NON OPERATIVE
FREQUENCY MAXIMUM = OPERATIVE
FREQUENCY MINIMUM = OPERATIVE
PHASES CYCLE = NON OPERATIVE
DETECTION MODE = INSTANTANEOUS
RELEASE MODE = INSTANTANEOUS

NOTE: Options in italics are only available according to the ones selected in DEFINITION WORKING MODE.