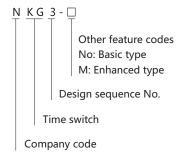


# **NKG3-M Time Switch**

# 1. General

NKG3-M time switch (hereinafter referred to as time switch) is used in automatic control circuits with a frequency of AC 50Hz(or 60Hz), a rated control supply voltage of up to 220V and a rated operational current of 0.75A to provide timed on-off control for street lamps, advertising lamps and similar equipment.

# 2. Type designation



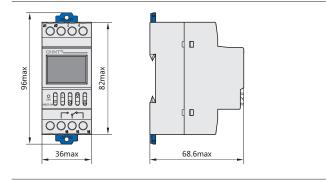
# 3. Technical data

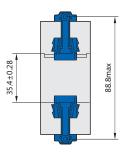
Rated control supply voltage	AC(50Hz) 220V
Conventional heating current	5A
Usage category of auxiliary circuit	AC-15
Rated operational current (Ie)	AC-15 220V/0.75A 380V/0.47A
Timing error	≤2 seconds/day
Time control range	1s~168h
Mechanical life	≥30 thousand times
Electrical life	≥10 thousand times
Mounting type	Installation type, rail type
Immunity	See Table 2

Item	Severity level
Electrostatic discharge immunity	±8×(1±10%)kV (air discharge)
Radiated electromagnetic field immunity	Test electric field strength: 10×(1±10%)V/m
Fast transient immunity	For power line, 2kV, for I/O signal and control circuits, 1kV, duration: 1min
Surge (impact) immunity	Open circuit test voltage: 2×(1±10%)kV

## 4. Overall and mounting dimensions (mm)

#### 4.1 Profile and installation dimension



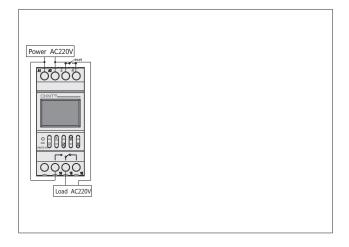


#### 4.2 Connection mode

### 4.2.1 Direct control mode

If the electrical apparatus under control is single-phase supplied and has an operational current not greater than the rated value of the switch, direct control mode can be used, as shown in Figure 1. For lamp loads with a large starting impulse current, AC contactor expansion control mode should be used.

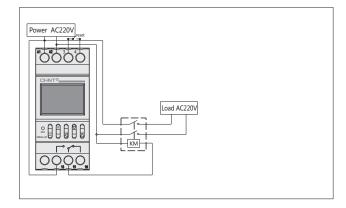
Figure 1 Connection diagram of single-phase direct control



#### 4.2.2 Single expansion mode

If the electrical apparatus under control is single-phase supplied and has an operational current greater than the rated value of the switch, AC contactor expansion control mode should be used, as shown in Figure 2.

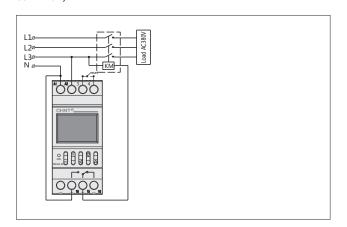
Figure 2 Connection diagram of single-phase expansion control (contactor coil: 220V)



#### 4.2.3 Three-phase operating mode

If the electrical apparatus under control is three-phase supplied, an external AC contactor is required.
a. If the coil voltage of the control contactor is AC220V 50Hz, the connection mode shown in Figure 4 should be

used.
Figure 4 Connection diagram of three-phase control (contactor coil: 220V)



b. If the coil voltage of the control contactor is AC380V 50Hz, the connection mode shown in Figure 5 should be used. Figure 5 Connection diagram of three-phase control (contactor coil: 380V)

