



NP8 Series Pushbuttons

1. General

Electric ratings: AC50/60Hz, AC415V/DC250V;

Degree of protection: IP65

Standard: IEC/EN60947-5-1

2. Operating conditions

- 2.1 Ambient temperature is $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, the average temperature during 24 hours couldn't exceed $+35^{\circ}\text{C}$.
- 2.2 Altitude: $\leq 2000\text{m}$.
- 2.3 Atmosphere condition: Relative humidity of the atmosphere couldn't exceed 50% when the highest temperature is $+40^{\circ}\text{C}$; much higher relative humidity is allowable under the condition of lower temperature, for example, when the temperature reaches $+20^{\circ}\text{C}$, the relative humidity is up to 90%. As for dews, which contingently appear due to change of temperature, special steps should be taken.
- 2.4 Pollution grade: 3
- 2.5 Installation category: II
- 2.6 Tightening torque is $0.8 \sim 1.2\text{N}\cdot\text{m}$ for the cable terminals.
Cross section of the cable connection is $0.5 \sim 2.5\text{mm}^2$, and 8mm conductor length is needed.

3. Technical data

- 3.1 Refer to table below for rated values related to utilization category.

AC-15	Rated operational voltage,V	415	240	120
	Rated operational current,A	1.9	3	6
DC-13	Rated operational voltage,V	250	125	-
	Rated operational current,A	0.27	0.55	-

- 3.2 Refer to table 3 for basic parameters of illuminated pushbutton.

Basic parameters	LED lamp
Rated operational current	$\leq 20\text{mA}$
Rated operational voltage	AC/DC 6V,12V,24V,36V,AC110V~230V

3.3 Durability

Mechanical life:

Flush, mushroom-headed and illuminated version:

3×10^6 operation circles.

Rotary, double-headed, self-locking and keyed version:

1×10^5 operation circles.

Electric life:

Flush, mushroom-headed and illuminated version:

AC 1×10^6 / DC 2.5×10^5 operation circles.

Rotary, double-headed, self-locking and key type button:

1×10^5 operation circles.

3.4 Short-circuit protective device: gG16

4. Features

- 4.1 Operating mechanism features
bright colors and streamline surface.
- 4.2 Modular design.
Operating system, adapter, contact system and illuminating system can be freely combined to realize different functions.
- 4.3 Convenient for mounting
and dismantling thanks to snap-on structure.
- 4.4 Automatic locking function of the central adaptor makes it convenient and reliable for mounting and connection.
- 4.5 The terminal screw is available
with anti-loosening mechanism to protect it against loosening from the body during transportation.
- 4.6 LED lamp with high brightness and long service life ensures reliable indication.

NP8- X/33	Metal	Color	Selector Switches	1	2
	NP8-20X/331	White		2	—
	NP8-20X/332	Black		2	—
	NP8-20X/333	Green		2	—
	NP8-20X/334	Red		2	—
	NP8-20X/335	Yellow		2	—
	NP8-20X/336	Blue		2	—
	NP8-02X/331	White		—	2
	NP8-02X/332	Black		—	2
	NP8-02X/333	Green		—	2
	NP8-02X/334	Red		—	2
	NP8-02X/335	Yellow		—	2
	NP8-02X/336	Blue		—	2
	NP8-11X/331	White		1	1
	NP8-11X/332	Black		1	1
	NP8-11X/333	Green		1	1
	NP8-11X/334	Red		1	1
	NP8-11X/335	Yellow		1	1
	NP8-11X/336	Blue		1	1
NP8- X/37	Metal	Color	Selector Switches	1	2
	NP8-20X/371	White		2	—
	NP8-20X/372	Black		2	—
	NP8-20X/373	Green		2	—
	NP8-20X/374	Red		2	—
	NP8-20X/375	Yellow		2	—
	NP8-20X/376	Blue		2	—
	NP8-02X/371	White		—	2
	NP8-02X/372	Black		—	2
	NP8-02X/373	Green		—	2
	NP8-02X/374	Red		—	2
	NP8-02X/375	Yellow		—	2
	NP8-02X/376	Blue		—	2
	NP8-11X/371	White		1	1
	NP8-11X/372	Black		1	1
	NP8-11X/373	Green		1	1
	NP8-11X/374	Red		1	1
	NP8-11X/375	Yellow		1	1
	NP8-11X/376	Blue		1	1
NP8- X/38	Metal	Color	Selector Switches	1	2
	NP8-20X/381	White		2	—
	NP8-20X/382	Black		2	—
	NP8-20X/383	Green		2	—
	NP8-20X/384	Red		2	—
	NP8-20X/385	Yellow		2	—
	NP8-20X/386	Blue		2	—
	NP8-02X/381	White		—	2
	NP8-02X/382	Black		—	2
	NP8-02X/383	Green		—	2
	NP8-02X/384	Red		—	2
	NP8-02X/385	Yellow		—	2
	NP8-02X/386	Blue		—	2
	NP8-11X/381	White		1	1
	NP8-11X/382	Black		1	1
	NP8-11X/383	Green		1	1
	NP8-11X/384	Red		1	1
	NP8-11X/385	Yellow		1	1
	NP8-11X/386	Blue		1	1

★ Selector Switches (2 positions) -(Illuminated)
AC/DC6V, 12V, 24V, 36V, AC110V~230V

NP8- XD /21	Metal	Color	Selector Switches	1	2
	NP8-10XD/211	White		1	—
	NP8-10XD/213	Green		1	—
	NP8-10XD/214	Red		1	—
	NP8-10XD/215	Yellow		1	—
	NP8-10XD/216	Blue		1	—
	NP8-01XD/211	White		—	1
	NP8-01XD/213	Green		—	1
	NP8-01XD/214	Red		—	1
	NP8-01XD/215	Yellow		—	1
	NP8-01XD/216	Blue		—	1
NP8- XD/22	Metal	Color	Selector Switches	1	2
	NP8-10XD/221	White		1	—
	NP8-10XD/223	Green		1	—
	NP8-10XD/224	Red		1	—
	NP8-10XD/225	Yellow		1	—
	NP8-10XD/226	Blue		1	—
	NP8-01XD/221	White		—	1
	NP8-01XD/223	Green		—	1
	NP8-01XD/224	Red		—	1
	NP8-01XD/225	Yellow		—	1
	NP8-01XD/226	Blue		—	1
NP8- XD /21	Metal	Color	Selector Switches	1	2
	NP8-20XD/211	White		2	—
	NP8-20XD/213	Green		2	—
	NP8-20XD/214	Red		2	—
	NP8-20XD/215	Yellow		2	—
	NP8-20XD/216	Blue		2	—
	NP8-02XD/211	White		—	2
	NP8-02XD/213	Green		—	2
	NP8-02XD/214	Red		—	2
	NP8-02XD/215	Yellow		—	2
	NP8-02XD/216	Blue		—	2
	NP8-11XD/211	White		1	1
	NP8-11XD/213	Green		1	1
	NP8-11XD/214	Red		1	1
	NP8-11XD/215	Yellow		1	1
	NP8-11XD/216	Blue		1	1
NP8- XD/22	Metal	Color	Selector Switches	1	2
	NP8-20XD/221	White		2	—
	NP8-20XD/223	Green		2	—
	NP8-20XD/224	Red		2	—
	NP8-20XD/225	Yellow		2	—
	NP8-20XD/226	Blue		2	—
	NP8-02XD/221	White		—	2
	NP8-02XD/223	Green		—	2
	NP8-02XD/224	Red		—	2
	NP8-02XD/225	Yellow		—	2
	NP8-02XD/226	Blue		—	2
	NP8-11XD/221	White		1	1
	NP8-11XD/223	Green		1	1
	NP8-11XD/224	Red		1	1
	NP8-11XD/225	Yellow		1	1
	NP8-11XD/226	Blue		1	1

Type	Color or Function	Contact	Model Description	Code
Illuminated selector	Red, 2-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/21 RED AC 110V-220V	667205
Illuminated selector	Red, 2-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/21 RED AC 110V-230V	667574
Illuminated selector	Red, 2-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/21 RED AC/DC 24V	667193
Illuminated selector	Green, 2-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/21 GRN AC 110V-220V	667204
Illuminated selector	Green, 2-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/21 GRN AC 110V-230V	667573
Illuminated selector	Green, 2-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/21 GRN AC/DC 24V	667192
Illuminated selector	Green, 2-position, latching, AC/DC 36V LED	2 NO	NP8-20XD/21 GRN AC/DC 36V	578955
Illuminated selector	Orange, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 ORG AC/DC 24V	578825
Illuminated selector	Orange, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 ORG AC 110V-220V	578829
Illuminated selector	White, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 WHT AC/DC 24V	578822
Illuminated selector	White, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 WHT AC 110V-220V	578826
Illuminated selector	White, 2-position, self-return, AC 110V-230V LED	2 NO	NP8-20XD/22 WHT AC 110V-230V	667686
Illuminated selector	Red, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 RED AC/DC 24V	578691
Illuminated selector	Red, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 RED AC 110V-220V	578719
Illuminated selector	Red, 2-position, self-return, AC 110V-230V LED	2 NO	NP8-20XD/22 RED AC 110V-230V	667655
Illuminated selector	Green, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 GRN AC/DC 24V	578690
Illuminated selector	Green, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 GRN AC 110V-220V	578718
Illuminated selector	Green, 2-position, self-return, AC 110V-230V LED	2 NO	NP8-20XD/22 GRN AC 110V-230V	667654
Illuminated selector	Blue, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 BLU AC/DC 24V	578824
Illuminated selector	Blue, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 BLU AC 110V-220V	578828
Illuminated selector	Blue, 2-position, self-return, AC 110V-230V LED	2 NO	NP8-20XD/22 BLU AC 110V-230V	667688
Illuminated selector	Yellow, 2-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/22 YEL AC/DC 24V	578823
Illuminated selector	Yellow, 2-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/22 YEL AC 110V-220V	578827
Illuminated selector	Yellow, 2-position, self-return, AC 110V-230V LED	2 NO	NP8-20XD/22 YEL AC 110V-230V	667687
Illuminated selector	Orange, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 ORG AC 110V-220V	667325
Illuminated selector	Orange, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 ORG AC/DC 24V	667329
Illuminated selector	White, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 WHT AC 110V-220V	667322
Illuminated selector	White, 3-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/31 WHT AC 110V-230V	667614
Illuminated selector	White, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 WHT AC/DC 24V	667326
Illuminated selector	Red, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 RED AC 110V-220V	667209
Illuminated selector	Red, 3-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/31 RED AC 110V-230V	667578
Illuminated selector	Red, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 RED AC/DC 24V	667197
Illuminated selector	Green, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 GRN AC 110V-220V	667208
Illuminated selector	Green, 3-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/31 GRN AC 110V-230V	667577
Illuminated selector	Green, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 GRN AC/DC 24V	667196
Illuminated selector	Green, 3-position, latching, AC/DC 36V LED	2 NO	NP8-20XD/31 GRN AC/DC 36V	578963
Illuminated selector	Blue, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 BLU AC 110V-220V	667324
Illuminated selector	Blue, 3-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/31 BLU AC 110V-230V	667616
Illuminated selector	Blue, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 BLU AC/DC 24V	667328
Illuminated selector	Yellow, 3-position, latching, AC 110V-220V LED	2 NO	NP8-20XD/31 YEL AC 110V-220V	667323
Illuminated selector	Yellow, 3-position, latching, AC 110V-230V LED	2 NO	NP8-20XD/31 YEL AC 110V-230V	667615
Illuminated selector	Yellow, 3-position, latching, AC/DC 24V LED	2 NO	NP8-20XD/31 YEL AC/DC 24V	667327
Illuminated selector	Orange, 3-position, self-return, AC/DC 24V LED	2 NO	NP8-20XD/33 ORG AC/DC 24V	578917
Illuminated selector	Orange, 3-position, self-return, AC 110V-220V LED	2 NO	NP8-20XD/33 ORG AC 110V-220V	578929