



## NU6-II G

### Surge Protective Device

#### 1. General

- 1.1 Certificates: international certificates are under proceeding;
- 1.2 Number of pole: 1, 2, 3, 4, 1P+N, 3P+N;
- 1.3 Electric ratings: 230/400V, AC50/60Hz;
- 1.4 Application: Protect electric system and on-loading electrical apparatus from thunder and instantaneous over-voltage;
- 1.5 Standard: IEC/EN 61643-11



RoHS

#### 2. Technical data

| Model         | Max.continuous Operational Voltage Uc(V) | Level of protection Up(kV) | Maximum discharge current (8/20μs)(kA) | Nominal discharge current In (8/20μs) (kA) |
|---------------|------------------------------------------|----------------------------|----------------------------------------|--------------------------------------------|
| NU6- II G(/F) | 275                                      | 1.5                        | 40                                     | 20                                         |
|               | 320                                      | 1.6                        |                                        |                                            |
|               | 385                                      | 1.8                        |                                        |                                            |
|               | 440                                      | 2.0                        |                                        |                                            |
|               | 255(NPE)                                 | 1.5                        | 65                                     | 30                                         |
|               | 275                                      | 1.6                        |                                        |                                            |
|               | 320                                      | 1.8                        |                                        |                                            |
|               | 385                                      | 2.0                        |                                        |                                            |
|               | 440                                      | 2.2                        |                                        |                                            |
|               | 255(NPE)                                 | 1.8                        | 100                                    | 50                                         |
|               | 275                                      | 2.0                        |                                        |                                            |
|               | 320                                      | 2.1                        |                                        |                                            |
|               | 385                                      | 2.2                        |                                        |                                            |
|               | 440                                      | 2.4                        |                                        |                                            |

| Auxiliary | Configurations | Rated voltage Un(V) | Rated current In(A) |
|-----------|----------------|---------------------|---------------------|
| Contact   | 1NO+1NC        | AC250               | 0.5                 |

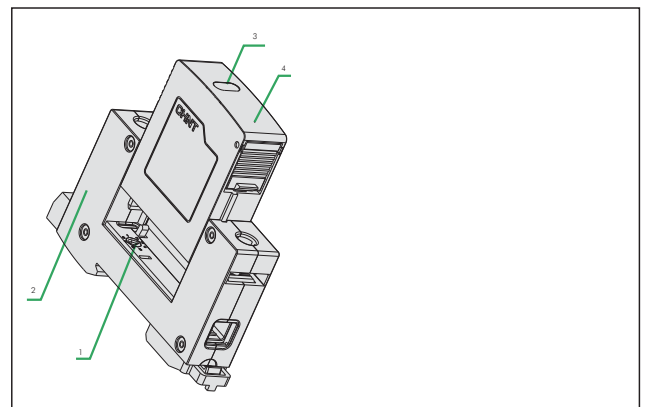
#### 3. How to select surge protectors

- a. The voltage should be  $\leq U_c$ ;
- b.  $U_p <$  maximum impulse withstands;
- c. Different protectors should be selected according to various grounding system and protection mode.

| Model        | Max.continuous operational voltage $U_c(V \sim)$ | Applicable grounding system | Protection mode | Circuits               | Number of poles  |
|--------------|--------------------------------------------------|-----------------------------|-----------------|------------------------|------------------|
| NU6-II G(/F) | 275                                              | TN-S                        | L-PE,L-N,N-PE   | 1 phase,3 phase 5 wire | 1,2,4, 1P+N,3P+N |
|              |                                                  | TN-C                        | L-PEN           | 1 phase,3 phase 4 wire | 1,3              |
|              |                                                  | TT                          | L-N,N-PE        | 1 phase,3 phase 4 wire | 1P+N,3P+N        |
|              | 320                                              | TN-S                        | L-PE,L-N,N-PE   | 1 phase,3 phase 5 wire | 1,2,4, 1P+N,3P+N |
|              |                                                  | TN-C                        | L-PEN           | 1 phase,3 phase 4 wire | 1,3              |
|              |                                                  | TT                          | L-N,N-PE        | 1 phase,3 phase 4 wire | 1P+N,3P+N        |
|              | 385                                              | TN-S                        | L-PE,L-N,N-PE   | 1 phase,3 phase 5 wire | 1,2,4, 1P+N,3P+N |
|              |                                                  | TN-C                        | L-PEN           | 1 phase,3 phase 4 wire | 1,3              |
|              |                                                  | TT                          | L-PE, L-N,N-PE  | 1 phase,3 phase 4 wire | 1,2,4, 1P+N,3P+N |
|              | 440                                              | TN-S                        | L-PE,L-N,N-PE   | 1 phase,3 phase 5 wire | 1,2,4, 1P+N,3P+N |
|              |                                                  | TN-C                        | L-PEN           | 1 phase,3 phase 4 wire | 1,3              |
|              |                                                  | TT                          | L-PE,L-N,N-PE   | 1 phase,3 phase 4 wire | 1,2,4, 1P+N,3P+N |
|              |                                                  | IT                          | L-PE            | 1 phase,3 phase 3wire  | 1,3              |

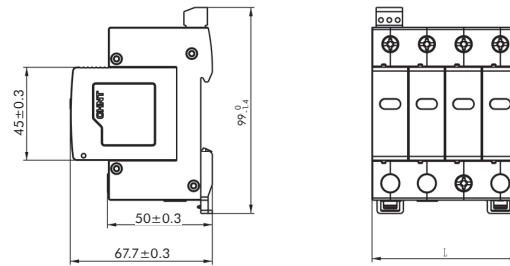
#### 4. Functions

- 4.1 The product is composed of two independent components: removable protective module 4 and base 2;
- 4.2 When the product is damaged, the part 3 will indicate; please replace the removable protective module 4 at once and there is no need to cutoff the circuits;
- 4.3 The part 1 is for maximum continuous operational voltage indication as well as avoiding replacement with wrong module.



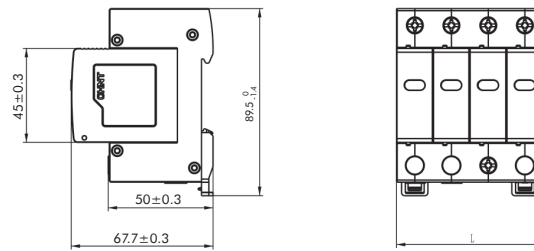
## 5. Overall and mounting dimensions (mm)

NU6- II G/F (40, 65kA) with remote control port



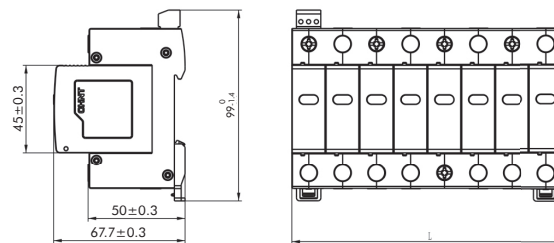
| NU6 II G |                 |                 |                 |                 |
|----------|-----------------|-----------------|-----------------|-----------------|
| 极数       | 1P              | 1P+N、2P         | 3P              | 3P+N、4P         |
| L(mm)    | $18^{0}_{-0.6}$ | $36^{0}_{-1.2}$ | $54^{0}_{-2.4}$ | $72^{0}_{-2.4}$ |

NU6- II G/F(40, 65kA) without remote control port



| NU6 II G |                 |                 |                 |                 |
|----------|-----------------|-----------------|-----------------|-----------------|
| 极数       | 1P              | 1P+N、2P         | 3P              | 3P+N、4P         |
| L(mm)    | $18^{0}_{-0.6}$ | $36^{0}_{-1.2}$ | $54^{0}_{-2.4}$ | $72^{0}_{-2.4}$ |

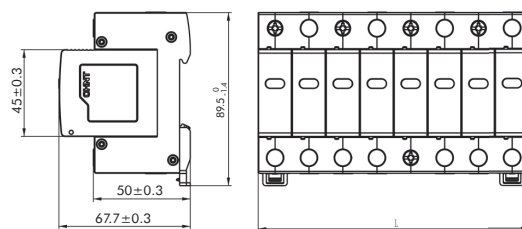
NU6- II G/F (100kA) with remote control port



| 极数    | 1P              | 1P+N            | 2P              | 3P               | 3P+N             | 4P               |
|-------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| L(mm) | $36^{0}_{-1.2}$ | $54^{0}_{-2.4}$ | $72^{0}_{-2.4}$ | $108^{0}_{-3.6}$ | $126^{0}_{-3.6}$ | $144^{0}_{-4.8}$ |

NU6 II G

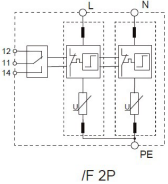
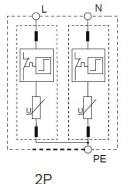
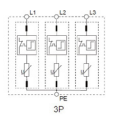
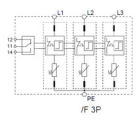
NU6- II G/F (100kA) without remote control port

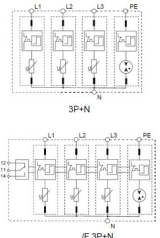
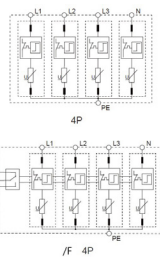


| NU6 II G |                 |                 |                 |                  |                  |                  |
|----------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| 极数       | 1P              | 1P+N            | 2P              | 3P               | 3P+N             | 4P               |
| L(mm)    | $36^{0}_{-1.2}$ | $54^{0}_{-2.4}$ | $72^{0}_{-2.4}$ | $108^{0}_{-3.6}$ | $126^{0}_{-3.6}$ | $144^{0}_{-4.8}$ |

|              |            |                                      |                           |                                                         |                                      |
|--------------|------------|--------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------------|
| NU6          | II         | /F                                   | 40kA                      | 275V                                                    | 1P                                   |
| Product type | Test class | Telecommunicati on functions         | I <sub>max</sub> (8/20μs) | Maximum continuous operational voltage(U <sub>c</sub> ) | Poles                                |
| NU6          | II         | Default: Normal<br>F: With auxiliary | 40kA<br>65kA<br>100kA     | 275V<br>320V<br>385V<br>440V                            | 1P<br>1P+N<br>2P<br>3P<br>3P+N<br>4P |

| Diagram        | Test class | I <sub>max</sub> (8/20μs)(kA) | U <sub>c</sub> (V) | Poles | Auxiliary contact | Description              | Code   |
|----------------|------------|-------------------------------|--------------------|-------|-------------------|--------------------------|--------|
| <p>1P</p>      | II         | 40                            | 275                | 1P    | N                 | NU6-IIG 40kA/275V 1P     | 252491 |
|                | II         | 40                            | 275                | 1P    | Y                 | NU6-IIG/F 40kA/275V 1P   | 252499 |
|                | II         | 40                            | 320                | 1P    | N                 | NU6-IIG 40kA/320V 1P     | 252492 |
|                | II         | 40                            | 320                | 1P    | Y                 | NU6-IIG/F 40kA/320V 1P   | 252500 |
|                | II         | 40                            | 385                | 1P    | N                 | NU6-IIG 40kA/385V 1P     | 252493 |
|                | II         | 40                            | 385                | 1P    | Y                 | NU6-IIG/F 40kA/385V 1P   | 252501 |
|                | II         | 40                            | 440                | 1P    | N                 | NU6-IIG 40kA/440V 1P     | 252494 |
|                | II         | 40                            | 440                | 1P    | Y                 | NU6-IIG/F 40kA/440V 1P   | 252502 |
|                | II         | 65                            | 275                | 1P    | N                 | NU6-IIG 65kA/275V 1P     | 252495 |
|                | II         | 65                            | 275                | 1P    | Y                 | NU6-IIG/F 65kA/275V 1P   | 252503 |
|                | II         | 65                            | 320                | 1P    | N                 | NU6-IIG 65kA/320V 1P     | 252496 |
|                | II         | 65                            | 320                | 1P    | Y                 | NU6-IIG/F 65kA/320V 1P   | 252504 |
|                | II         | 65                            | 385                | 1P    | N                 | NU6-IIG 65kA/385V 1P     | 252497 |
|                | II         | 65                            | 385                | 1P    | Y                 | NU6-IIG/F 65kA/385V 1P   | 252505 |
|                | II         | 65                            | 440                | 1P    | N                 | NU6-IIG 65kA/440V 1P     | 252498 |
|                | II         | 65                            | 440                | 1P    | Y                 | NU6-IIG/F 65kA/440V 1P   | 252506 |
| <p>/F 1P</p>   | II         | 100                           | 385                | 1P    | N                 | NU6-IIG 100KA/385V 1P    | 368969 |
|                | II         | 100                           | 385                | 1P    | Y                 | NU6-IIG/F 100kA/385V 1P  | 368977 |
|                | II         | 100                           | 440                | 1P    | N                 | NU6-IIG 100kA/440V 1P    | 368970 |
|                | II         | 100                           | 440                | 1P    | Y                 | NU6-IIG/F 100kA/440V 1P  | 368978 |
| <p>1P+N</p>    | II         | 40                            | 275                | 1P+N  | N                 | NU6-IIG 40kA/275V 1P+N   | 252507 |
|                | II         | 40                            | 275                | 1P+N  | Y                 | NU6-IIG/F 40kA/275V 1P+N | 252515 |
|                | II         | 40                            | 320                | 1P+N  | N                 | NU6-IIG 40kA/320V 1P+N   | 252508 |
|                | II         | 40                            | 320                | 1P+N  | Y                 | NU6-IIG/F 40kA/320V 1P+N | 252516 |
|                | II         | 40                            | 385                | 1P+N  | N                 | NU6-IIG 40kA/385V 1P+N   | 252509 |
|                | II         | 40                            | 385                | 1P+N  | Y                 | NU6-IIG/F 40kA/385V 1P+N | 252517 |
|                | II         | 40                            | 440                | 1P+N  | N                 | NU6-IIG 40kA/440V 1P+N   | 252510 |
|                | II         | 40                            | 440                | 1P+N  | Y                 | NU6-IIG/F 40kA/440V 1P+N | 252518 |
|                | II         | 65                            | 275                | 1P+N  | N                 | NU6-IIG 65kA/275V 1P+N   | 252511 |
|                | II         | 65                            | 275                | 1P+N  | Y                 | NU6-IIG/F 65kA/275V 1P+N | 252519 |
|                | II         | 65                            | 320                | 1P+N  | N                 | NU6-IIG 65kA/320V 1P+N   | 252512 |
|                | II         | 65                            | 320                | 1P+N  | Y                 | NU6-IIG/F 65kA/320V 1P+N | 252520 |
|                | II         | 65                            | 385                | 1P+N  | N                 | NU6-IIG 65kA/385V 1P+N   | 252513 |
|                | II         | 65                            | 385                | 1P+N  | Y                 | NU6-IIG/F 65kA/385V 1P+N | 252521 |
|                | II         | 65                            | 440                | 1P+N  | N                 | NU6-IIG 65kA/440V 1P+N   | 252514 |
|                | II         | 65                            | 440                | 1P+N  | Y                 | NU6-IIG/F 65kA/440V 1P+N | 252522 |
| <p>/F 1P+N</p> | II         | 65                            | 275                | 1P+N  | N                 | NU6-IIG 65kA/275V 1P+N   | 252511 |
|                | II         | 65                            | 275                | 1P+N  | Y                 | NU6-IIG/F 65kA/275V 1P+N | 252519 |
|                | II         | 65                            | 320                | 1P+N  | N                 | NU6-IIG 65kA/320V 1P+N   | 252512 |
|                | II         | 65                            | 320                | 1P+N  | Y                 | NU6-IIG/F 65kA/320V 1P+N | 252520 |

| Diagram                                                                                                                                                                                   | Test class | $I_{max}(8/20\mu s)(kA)$ | $U_c(V)$ | Poles | Auxiliary contact | Description            | Code   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------|----------|-------|-------------------|------------------------|--------|
| <br>/F 2P<br><br>2P     | II         | 40                       | 275      | 2P    | N                 | NU6-IIG 40kA/275V 2P   | 252523 |
|                                                                                                                                                                                           | II         | 40                       | 275      | 2P    | Y                 | NU6-IIG/F 40kA/275V 2P | 252531 |
|                                                                                                                                                                                           | II         | 40                       | 320      | 2P    | N                 | NU6-IIG 40kA/320V 2P   | 252524 |
|                                                                                                                                                                                           | II         | 40                       | 320      | 2P    | Y                 | NU6-IIG/F 40kA/320V 2P | 252532 |
|                                                                                                                                                                                           | II         | 40                       | 385      | 2P    | N                 | NU6-IIG 40kA/385V 2P   | 252525 |
|                                                                                                                                                                                           | II         | 40                       | 385      | 2P    | Y                 | NU6-IIG/F 40kA/385V 2P | 252533 |
|                                                                                                                                                                                           | II         | 40                       | 440      | 2P    | N                 | NU6-IIG 40kA/440V 2P   | 252526 |
|                                                                                                                                                                                           | II         | 40                       | 440      | 2P    | Y                 | NU6-IIG/F 40kA/440V 2P | 252534 |
|                                                                                                                                                                                           | II         | 65                       | 275      | 2P    | N                 | NU6-IIG 65kA/275V 2P   | 252527 |
|                                                                                                                                                                                           | II         | 65                       | 275      | 2P    | Y                 | NU6-IIG/F 65kA/275V 2P | 252535 |
|                                                                                                                                                                                           | II         | 65                       | 320      | 2P    | N                 | NU6-IIG 65kA/320V 2P   | 252528 |
|                                                                                                                                                                                           | II         | 65                       | 320      | 2P    | Y                 | NU6-IIG/F 65kA/320V 2P | 252536 |
|                                                                                                                                                                                           | II         | 65                       | 385      | 2P    | N                 | NU6-IIG 65kA/385V 2P   | 252529 |
|                                                                                                                                                                                           | II         | 65                       | 385      | 2P    | Y                 | NU6-IIG/F 65kA/385V 2P | 252537 |
|                                                                                                                                                                                           | II         | 65                       | 440      | 2P    | N                 | NU6-IIG 65kA/440V 2P   | 252530 |
|                                                                                                                                                                                           | II         | 65                       | 440      | 2P    | Y                 | NU6-IIG/F 65kA/440V 2P | 252538 |
|                                                                                                                                                                                           | II         | 100                      | 385      | 2P    | N                 | NU6-IG 100kA/385V 2P   | 368971 |
|                                                                                                                                                                                           | II         | 100                      | 385      | 2P    | Y                 | NU6-IG/F 100kA/385V 2P | 368979 |
|                                                                                                                                                                                           | II         | 100                      | 440      | 2P    | N                 | NU6-IG 100kA/440V 2P   | 368972 |
|                                                                                                                                                                                           | II         | 100                      | 440      | 2P    | Y                 | NU6-IG/F 100kA/440V 2P | 368980 |
| <br>3P<br><br>/F 3P | II         | 40                       | 275      | 3P    | N                 | NU6-IIG 40kA/275V 3P   | 252539 |
|                                                                                                                                                                                           | II         | 40                       | 275      | 3P    | Y                 | NU6-IIG/F 40kA/275V 3P | 252547 |
|                                                                                                                                                                                           | II         | 40                       | 320      | 3P    | N                 | NU6-IIG 40kA/320V 3P   | 252540 |
|                                                                                                                                                                                           | II         | 40                       | 320      | 3P    | Y                 | NU6-IIG/F 40kA/320V 3P | 252548 |
|                                                                                                                                                                                           | II         | 40                       | 385      | 3P    | N                 | NU6-IIG 40kA/385V 3P   | 252541 |
|                                                                                                                                                                                           | II         | 40                       | 385      | 3P    | Y                 | NU6-IIG/F 40kA/385V 3P | 252549 |
|                                                                                                                                                                                           | II         | 40                       | 440      | 3P    | N                 | NU6-IIG 40kA/440V 3P   | 252542 |
|                                                                                                                                                                                           | II         | 40                       | 440      | 3P    | Y                 | NU6-IIG/F 40kA/440V 3P | 252550 |
|                                                                                                                                                                                           | II         | 65                       | 275      | 3P    | N                 | NU6-IIG 65kA/275V 3P   | 252543 |
|                                                                                                                                                                                           | II         | 65                       | 275      | 3P    | Y                 | NU6-IIG/F 65kA/275V 3P | 252551 |
|                                                                                                                                                                                           | II         | 65                       | 320      | 3P    | N                 | NU6-IIG 65kA/320V 3P   | 252544 |
|                                                                                                                                                                                           | II         | 65                       | 320      | 3P    | Y                 | NU6-IIG/F 65kA/320V 3P | 252552 |
|                                                                                                                                                                                           | II         | 65                       | 385      | 3P    | N                 | NU6-IIG 65kA/385V 3P   | 252545 |
|                                                                                                                                                                                           | II         | 65                       | 385      | 3P    | Y                 | NU6-IIG/F 65kA/385V 3P | 252553 |
|                                                                                                                                                                                           | II         | 65                       | 440      | 3P    | N                 | NU6-IIG 65kA/440V 3P   | 252546 |
|                                                                                                                                                                                           | II         | 65                       | 440      | 3P    | Y                 | NU6-IIG/F 65kA/440V 3P | 252554 |
|                                                                                                                                                                                           | II         | 100                      | 385      | 3P    | N                 | NU6-IG 100KA/385V 3P   | 368973 |
|                                                                                                                                                                                           | II         | 100                      | 385      | 3P    | Y                 | NU6-IG/F 100kA/385V 3P | 368981 |
|                                                                                                                                                                                           | II         | 100                      | 440      | 3P    | N                 | NU6-IG 100kA/440V 3P   | 368974 |
|                                                                                                                                                                                           | II         | 100                      | 440      | 3P    | Y                 | NU6-IG/F 100kA/440V 3P | 368982 |

| Diagram                                                                             | Test class | $I_{max}(8/20\mu s)(kA)$ | $U_c(V)$ | Poles | Auxiliary contact | Description              | Code   |
|-------------------------------------------------------------------------------------|------------|--------------------------|----------|-------|-------------------|--------------------------|--------|
|    | II         | 40                       | 275      | 3P+N  | N                 | NU6-IIG 40kA/275V 3P+N   | 252555 |
|                                                                                     | II         | 40                       | 275      | 3P+N  | Y                 | NU6-IIG/F 40kA/275V 3P+N | 252563 |
|                                                                                     | II         | 40                       | 320      | 3P+N  | N                 | NU6-IIG 40kA/320V 3P+N   | 252556 |
|                                                                                     | II         | 40                       | 320      | 3P+N  | Y                 | NU6-IIG/F 40kA/320V 3P+N | 252564 |
|                                                                                     | II         | 40                       | 385      | 3P+N  | N                 | NU6-IIG 40kA/385V 3P+N   | 252557 |
|                                                                                     | II         | 40                       | 385      | 3P+N  | Y                 | NU6-IIG/F 40kA/385V 3P+N | 252565 |
|                                                                                     | II         | 40                       | 440      | 3P+N  | N                 | NU6-IIG 40kA/440V 3P+N   | 252558 |
|                                                                                     | II         | 40                       | 440      | 3P+N  | Y                 | NU6-IIG/F 40kA/440V 3P+N | 252566 |
|                                                                                     | II         | 65                       | 275      | 3P+N  | N                 | NU6-IIG 65kA/275V 3P+N   | 252559 |
|                                                                                     | II         | 65                       | 275      | 3P+N  | Y                 | NU6-IIG/F 65kA/275V 3P+N | 252567 |
|                                                                                     | II         | 65                       | 320      | 3P+N  | N                 | NU6-IIG 65kA/320V 3P+N   | 252560 |
|                                                                                     | II         | 65                       | 320      | 3P+N  | Y                 | NU6-IIG/F 65kA/320V 3P+N | 252568 |
|                                                                                     | II         | 65                       | 385      | 3P+N  | N                 | NU6-IIG 65kA/385V 3P+N   | 252561 |
|                                                                                     | II         | 65                       | 385      | 3P+N  | Y                 | NU6-IIG/F 65kA/385V 3P+N | 252569 |
|                                                                                     | II         | 65                       | 440      | 3P+N  | N                 | NU6-IIG 65kA/440V 3P+N   | 252562 |
|                                                                                     | II         | 65                       | 440      | 3P+N  | Y                 | NU6-IIG/F 65kA/440V 3P+N | 252570 |
|  | II         | 40                       | 275      | 4P    | N                 | NU6-IIG 40kA/275V 4P     | 252571 |
|                                                                                     | II         | 40                       | 275      | 4P    | Y                 | NU6-IIG/F 40kA/275V 4P   | 252579 |
|                                                                                     | II         | 40                       | 320      | 4P    | N                 | NU6-IIG 40kA/320V 4P     | 252572 |
|                                                                                     | II         | 40                       | 320      | 4P    | Y                 | NU6-IIG/F 40kA/320V 4P   | 252580 |
|                                                                                     | II         | 40                       | 385      | 4P    | N                 | NU6-IIG 40kA/385V 4P     | 252573 |
|                                                                                     | II         | 40                       | 385      | 4P    | Y                 | NU6-IIG/F 40kA/385V 4P   | 252581 |
|                                                                                     | II         | 40                       | 440      | 4P    | N                 | NU6-IIG 40kA/440V 4P     | 252574 |
|                                                                                     | II         | 40                       | 440      | 4P    | Y                 | NU6-IIG/F 40kA/440V 4P   | 252582 |
|                                                                                     | II         | 65                       | 275      | 4P    | N                 | NU6-IIG 65kA/275V 4P     | 252575 |
|                                                                                     | II         | 65                       | 275      | 4P    | Y                 | NU6-IIG/F 65kA/275V 4P   | 252583 |
|                                                                                     | II         | 65                       | 320      | 4P    | N                 | NU6-IIG 65kA/320V 4P     | 252576 |
|                                                                                     | II         | 65                       | 320      | 4P    | Y                 | NU6-IIG/F 65kA/320V 4P   | 252584 |
|                                                                                     | II         | 65                       | 385      | 4P    | N                 | NU6-IIG 65kA/385V 4P     | 252577 |
|                                                                                     | II         | 65                       | 385      | 4P    | Y                 | NU6-IIG/F 65kA/385V 4P   | 252585 |
|                                                                                     | II         | 65                       | 440      | 4P    | N                 | NU6-IIG 65kA/440V 4P     | 252578 |
|                                                                                     | II         | 65                       | 440      | 4P    | Y                 | NU6-IIG/F 65kA/440V 4P   | 252586 |
|                                                                                     | II         | 100                      | 385      | 4P    | N                 | NU6-IG 100kA/385V 4P     | 368975 |
|                                                                                     | II         | 100                      | 385      | 4P    | Y                 | NU6-IG/F 100kA/385V 4P   | 368983 |
|                                                                                     | II         | 100                      | 440      | 4P    | N                 | NU6-IG 100kA/440V 4P     | 368976 |
|                                                                                     | II         | 100                      | 440      | 4P    | Y                 | NU6-IG/F 100kA/440V 4P   | 368984 |