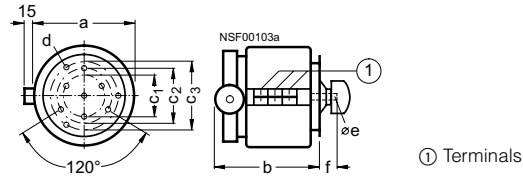


Variable ratio-transformers

Toroidal-core variable ratio-transformers

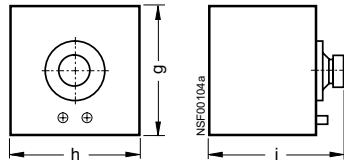
4CH10 to 4CH21

IP00 degree of protection, front view without knob and dial  
Manual operation



4CH10 to 4CH21

IP20 degree of protection, manual operation



Portable design

Input: up to 14 A: 3-core cable with **SCHUKO** plug, over 14 A: terminals at the transformer.

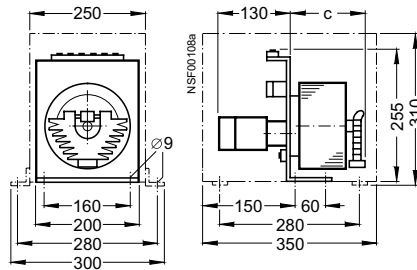
Output: experimenting terminals on the outside of enclosure for Types 4CH13 to 4CH16, **SCHUKO** plug for Type 4CH10 to 4CH12.

Stationary design

Input and output terminals on the inside.

4CH12 to 4CH21

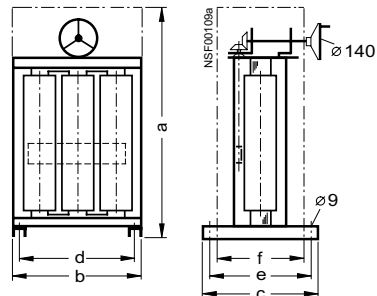
With motorized operating mechanism, IP00/IP20 degree of protection



Pillar-type variable ratio-transformers

4CP,

with dry self-cooling,  
IP00/IP20 degree of protection



| Order No.<br>5th to 7th position | a    |
|----------------------------------|------|
| 050                              | 1000 |
| 060                              | 1100 |
| 070                              | 1200 |
| 080                              | 1300 |
| 090                              | 1400 |
| 100                              | 1500 |
| 110                              | 1600 |
| 130                              | 1800 |

Examples from the table:  
4CP5 050-2ED0

| Type  | IP00 degree of protection |     |                |                |                |    |    | IP20 degree of protection |     |     |     |
|-------|---------------------------|-----|----------------|----------------|----------------|----|----|---------------------------|-----|-----|-----|
|       | a                         | b   | c <sub>1</sub> | c <sub>2</sub> | c <sub>3</sub> | d  | e  | f                         | g   | h   | i   |
| 4CH10 | 72                        | 61  | Central fixing |                |                | -- | 6  | 20                        | 125 | 170 | 140 |
| 4CH11 | 72                        | 86  | M10 × 0.75     |                |                | -- | 6  | 20                        | 125 | 170 | 140 |
| 4CH12 | 86                        | 105 | 26             | 60             | --             | M4 | 6  | 28                        | 130 | 200 | 180 |
| 4CH13 | 120                       | 110 | 80             | --             | --             | M6 | 10 | 45                        | 210 | 200 | 230 |
| 4CH20 | 120                       | 130 | 80             | --             | --             | M6 | 10 | 45                        | 210 | 200 | 230 |
| 4CH14 | 120                       | 150 | 80             | --             | --             | M6 | 10 | 45                        | 210 | 200 | 230 |
| 4CH21 | 160                       | 145 | 80             | 95             | 100            | M6 | 10 | 35                        | 310 | 300 | 260 |
| 4CH15 | 160                       | 150 | 80             | 95             | 100            | M6 | 10 | 35                        | 310 | 300 | 260 |
| 4CH16 | 160                       | 150 | 80             | 95             | 100            | M6 | 10 | 35                        | 310 | 300 | 260 |

| Type  | c   |
|-------|-----|
| 4CH12 | 105 |
| 4CH13 | 110 |
| 4CH20 | 130 |
| 4CH14 | 150 |
| 4CH21 | 145 |
| 4CH15 | 150 |
| 4CH16 | 150 |

| Order No.<br>10th position | a     | b    | c   | d   | e   | f   |
|----------------------------|-------|------|-----|-----|-----|-----|
| D or L                     | see   | 364  | 430 | 310 | 400 | 360 |
| F or N                     | Table | 684  | 430 | 630 | 400 | 360 |
| G or P                     | left  | 1004 | 450 | 935 | 420 | 380 |

4CP5 050-2ED0