



# CLZ-FP-48/20-HD

CLZ-FP-48/20-HD, Three-phase tubular power capacitor

Code: R2H56J.

- > Terminal: A
- > Frequency (Hz): 50
- > kvar (460 V): 18,4
- > kvar (480 V): 20
- > Cover (opc.): 7
- > Use voltage (V): 480

## Specifications

### AC power supply

|           |       |
|-----------|-------|
| Frequency | 50 Hz |
|-----------|-------|

### Electrical characteristics

|                             |                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Losses (W)                  | Dielectric: < 0,2 W / kvar Total: < 0,4 W / kvar                                                        |
| Discharge resistance        | 50 V / 1 min (0,5 - 30 kvar) 75 V / 3 min (33 - 50 kvar)                                                |
| Surge                       | 10 % 8h in 24 h 15 % up to 30 min in 24 hours 20 % up to 5 min in 24 hours 30 % up to 1 min in 24 hours |
| Tolerance C                 | -5 ... +10 %                                                                                            |
| Maximum phase current       | 400 x In                                                                                                |
| Maximum transient current   | 1,8 In                                                                                                  |
| Voltage                     | 480 V                                                                                                   |
| Insulation voltage, circuit | 3 / 8 kV                                                                                                |

### Mechanical characteristics

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| Size (mm) width x height x depth | 100 x 276 x 100 (mm)                       |
| Envelope                         | Aluminum                                   |
| Fastening                        | M12 fastening screws earth conductor       |
| Ventilation                      | Natural or forced depending on the cabinet |
| Weight (kg)                      | 1,53                                       |

### Environmental characteristics

|                                          |                                                                                          |
|------------------------------------------|------------------------------------------------------------------------------------------|
| Protection class                         | IP 20 / IP 54 with terminal cover (optional) (for models Ø 85, 100, 116 mm)              |
| Relative humidity (without condensation) | 95%                                                                                      |
| Installation, location, position.        | Vertical / Horizontal. Minimum distance between condensers 2 cm.                         |
| Working temperature                      | Tª class D: Daily average: 45 °C, annual average: 35 °C, maximum: 65 °C, minimum: -50 °C |

### Standards

|                                       |                 |
|---------------------------------------|-----------------|
| Certifications                        | VDE 560         |
| Electrical safety, Maximum height (m) | 4000            |
| Standards                             | IEC 60831-1-1/2 |



**CLZ-FP-48/20-HD**

Tubular capacitor

Code: R2H56J.

Protection

Circuit breaker type

Dielectric regeneration Expansion system



# CLZ-FP-48/20-HD

Tubular capacitor

Code: R2H56J.

## CLZ-FP HD 50Hz

| CODE                                    | TYPE               | kvar (220 V) | kvar (230 V) | Use voltage (V) | kvar (400 V) | kvar (440 V) | kvar (460 V) | kvar (480 V) | kvar (500 V) | kvar (525 V) | kvar (660 V) | kvar (690 V) |
|-----------------------------------------|--------------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Faston terminal, Un = 3 x 230 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H511.                                 | CLZ-FPT-23/1,25-HD | 1,15         | 1,25         | 230             |              |              |              |              |              |              |              |              |
| R2H812.                                 | CLZ-FPT-23/2,5-HD  | 2,3          | 2,5          | 230             |              |              |              |              |              |              |              |              |
| Terminal block, Un = 3 x 230 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H516.                                 | CLZ-FP-23/5-HD     | 4,6          | 5            | 230             |              |              |              |              |              |              |              |              |
| R2H517.                                 | CLZ-FP-23/6,25-HD  | 5,7          | 6,25         | 230             |              |              |              |              |              |              |              |              |
| R2H518.                                 | CLZ-FP-23/7,5-HD   | 6,8          | 7,5          | 230             |              |              |              |              |              |              |              |              |
| R2H51B.                                 | CLZ-FP-23/10-HD    | 9,15         | 10           | 230             |              |              |              |              |              |              |              |              |
| R2H51D.                                 | CLZ-FP-23/12,5-HD  | 11,4         | 12,5         | 230             |              |              |              |              |              |              |              |              |
| R2H51E.                                 | CLZ-FP-23/15-HD    | 13,75        | 15           | 230             |              |              |              |              |              |              |              |              |
| Faston terminal, Un = 3 x 440 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H541.                                 | CLZ-FPT-44/1,25-HD |              |              | 400   440       | 1            | 1,25         |              |              |              |              |              |              |
| R2H542.                                 | CLZ-FPT-44/2,5-HD  |              |              | 400   440       | 2            | 2,5          |              |              |              |              |              |              |
| R2H543.                                 | CLZ-FPT-44/3-HD    |              |              | 400   440       | 2,5          | 3            |              |              |              |              |              |              |
| R2H544.                                 | CLZ-FPT-44/3,75-HD |              |              | 400   440       | 3            | 3,75         |              |              |              |              |              |              |
| R2H546.                                 | CLZ-FPT-44/5-HD    |              |              | 400   440       | 4            | 5            |              |              |              |              |              |              |
| R2H547.                                 | CLZ-FPT-44/6,25-HD |              |              | 400   440       | 5            | 6,25         |              |              |              |              |              |              |
| R2H848.                                 | CLZ-FPT-44/7,5-HD  |              |              | 400   440       | 6,25         | 7,5          |              |              |              |              |              |              |
| Terminal block, Un = 3 x 440 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H54B.                                 | CLZ-FP-44/10-HD    |              |              | 400   440       | 8            | 10           |              |              |              |              |              |              |
| R2H54D.                                 | CLZ-FP-44/12,5-HD  |              |              | 400   440       | 10           | 12,5         |              |              |              |              |              |              |
| R2H54E.                                 | CLZ-FP-44/15-HD    |              |              | 400   440       | 12,5         | 15           |              |              |              |              |              |              |
| R2H54G.                                 | CLZ-FP-44/18,2-HD  |              |              | 400   440       | 15           | 18,2         |              |              |              |              |              |              |
| R2H54J.                                 | CLZ-FP-44/20-HD    |              |              | 400   440       | 16           | 20           |              |              |              |              |              |              |
| R2H54L.                                 | CLZ-FP-44/25-HD    |              |              | 400   440       | 20           | 25           |              |              |              |              |              |              |
| R2H54M.                                 | CLZ-FP-44/28-HD    |              |              | 400   440       | 23           | 28           |              |              |              |              |              |              |
| R2H54N.                                 | CLZ-FP-44/30-HD    |              |              | 400   440       | 25           | 30           |              |              |              |              |              |              |
| R2H54R.                                 | CLZ-FP-44/40-HD    |              |              | 400   440       | 32           | 40           |              |              |              |              |              |              |
| R2H54S.                                 | CLZ-FP-44/50-HD    |              |              | 400   440       | 40           | 50           |              |              |              |              |              |              |
| Faston terminal, Un = 3 x 460 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H857.                                 | CLZ-FPT-46/6,25-HD |              |              | 460             |              | 5,7          | 6,25         |              |              |              |              |              |
| Terminal block, Un = 3 x 460 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H55D.                                 | CLZ-FP-46/12,5-HD  |              |              | 460             |              | 11,4         | 12,5         |              |              |              |              |              |
| R2H55E.                                 | CLZ-FP-46/15-HD    |              |              | 460             |              | 13,7         | 15           |              |              |              |              |              |
| R2H55H.                                 | CLZ-FP-46/19-HD    |              |              | 460             |              | 17,4         | 19           |              |              |              |              |              |
| R2H55L.                                 | CLZ-FP-46/25-HD    |              |              | 460             |              | 22,9         | 25           |              |              |              |              |              |
| R2H55N.                                 | CLZ-FP-46/30-HD    |              |              | 460             |              | 27,4         | 30           |              |              |              |              |              |
| R2H55P.                                 | CLZ-FP-46/33.3-HD  |              |              | 460             |              | 30,5         | 33,3         |              |              |              |              |              |



CLZ-FP-48/20-HD

Tubular capacitor

Code: R2H56J.

| CODE                                    | TYPE               | kvar (220 V) | kvar (230 V) | Use voltage (V) | kvar (400 V) | kvar (440 V) | kvar (460 V) | kvar (480 V) | kvar (500 V) | kvar (525 V) | kvar (660 V) | kvar (690 V) |
|-----------------------------------------|--------------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Faston terminal, Un = 3 x 480 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H862.                                 | CLZ-FPT-48/2,5-HD  |              |              | 480             |              |              | 2,3          | 2,5          |              |              |              |              |
| R2H866.                                 | CLZ-FPT-48/5-HD    |              |              | 480             |              |              | 4,6          | 5            |              |              |              |              |
| R2H868.                                 | CLZ-FPT-48/7,5-HD  |              |              | 480             |              |              | 6,9          | 7,5          |              |              |              |              |
| Terminal block, Un = 3 x 480 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H56B.                                 | CLZ-FP-48/10-HD    |              |              | 480             |              |              | 9,2          | 10           |              |              |              |              |
| R2H56D.                                 | CLZ-FP-48/12,5-HD  |              |              | 480             |              |              | 11,5         | 12,5         |              |              |              |              |
| R2H56E.                                 | CLZ-FP-48/15-HD    |              |              | 480             |              |              | 13,8         | 15           |              |              |              |              |
| R2H56J.                                 | CLZ-FP-48/20-HD    |              |              | 480             |              |              | 18,4         | 20           |              |              |              |              |
| R2H56L.                                 | CLZ-FP-48/25-HD    |              |              | 480             |              |              | 23           | 25           |              |              |              |              |
| R2H56M.                                 | CLZ-FP-48/28,2-HD  |              |              | 480             |              |              | 26           | 28,2         |              |              |              |              |
| R2H56N.                                 | CLZ-FP-48/30-HD    |              |              | 480             |              |              | 27,6         | 30           |              |              |              |              |
| R2H56R.                                 | CLZ-FP-48/40-HD    |              |              | 480             |              |              | 36,75        | 40           |              |              |              |              |
| Faston terminal, Un = 3 x 525 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H872.                                 | CLZ-FPT-52/2,5-HD  |              |              | 525             |              |              |              |              | 2,3          | 2,5          |              |              |
| R2H873.                                 | CLZ-FPT-52/3-HD    |              |              | 525             |              |              |              |              | 2,7          | 3            |              |              |
| R2H875.                                 | CLZ-FPT-52/4-HD    |              |              | 525             |              |              |              |              | 3,6          | 4            |              |              |
| R2H876.                                 | CLZ-FPT-52/5-HD    |              |              | 525             |              |              |              |              | 4,5          | 5            |              |              |
| R2H877.                                 | CLZ-FPT-52/6,25-HD |              |              | 525             |              |              |              |              | 5,7          | 6,25         |              |              |
| R2H878.                                 | CLZ-FPT-52/7,5-HD  |              |              | 525             |              |              |              |              | 6,8          | 7,5          |              |              |
| Terminal block, Un = 3 x 525 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H579.                                 | CLZ-FP-52/8-HD     |              |              | 525             |              |              |              |              | 7,25         | 8            |              |              |
| R2H57B.                                 | CLZ-FP-52/10-HD    |              |              | 525             |              |              |              |              | 9,1          | 10           |              |              |
| R2H57D.                                 | CLZ-FP-52/12,5-HD  |              |              | 525             |              |              |              |              | 11,3         | 12,5         |              |              |
| R2H57E.                                 | CLZ-FP-52/15-HD    |              |              | 525             |              |              |              |              | 13,6         | 15           |              |              |
| R2H57J.                                 | CLZ-FP-52/20-HD    |              |              | 525             |              |              |              |              | 18,15        | 20           |              |              |
| R2H57L.                                 | CLZ-FP-52/25-HD    |              |              | 525             |              |              |              |              | 22,7         | 25           |              |              |
| R2H57N.                                 | CLZ-FP-52/30-HD    |              |              | 525             |              |              |              |              | 27,2         | 30           |              |              |
| R2H57P.                                 | CLZ-FP-52/37,5-HD  |              |              | 525             |              |              |              |              | 34           | 37,5         |              |              |
| R2H57R.                                 | CLZ-FP-52/40-HD    |              |              | 525             |              |              |              |              | 36,3         | 40           |              |              |
| R2H57S.                                 | CLZ-FP-52/50-HD    |              |              | 525             |              |              |              |              | 45,4         | 50           |              |              |
| Faston terminal, Un = 3 x 690 V / 50 Hz |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H892.                                 | CLZ-FPT-69/2,5-HD  |              |              | 690             |              |              |              |              |              |              | 2,3          | 2,5          |
| R2H896.                                 | CLZ-FPT-69/5-HD    |              |              | 690             |              |              |              |              |              |              | 4,6          | 5            |
| Terminal block, Un = 3 x 690 V / 50 Hz  |                    |              |              |                 |              |              |              |              |              |              |              |              |
| R2H598.                                 | CLZ-FP-69/7,5-HD   |              |              | 690             |              |              |              |              |              |              | 6,9          | 7,5          |
| R2H59B.                                 | CLZ-FP-69/10-HD    |              |              | 690             |              |              |              |              |              |              | 9,15         | 10           |
| R2H59D.                                 | CLZ-FP-69/12,5-HD  |              |              | 690             |              |              |              |              |              |              | 11,4         | 12,5         |
| R2H59E.                                 | CLZ-FP-69/15-HD    |              |              | 690             |              |              |              |              |              |              | 13,7         | 15           |
| R2H59J.                                 | CLZ-FP-69/20-HD    |              |              | 690             |              |              |              |              |              |              | 18,3         | 20           |



CLZ-FP-48/20-HD

Tubular capacitor

Code: R2H56J.

| CODE    | TYPE            | kvar (220 V) | kvar (230 V) | Use voltage (V) | kvar (400 V) | kvar (440 V) | kvar (460 V) | kvar (480 V) | kvar (500 V) | kvar (525 V) | kvar (660 V) | kvar (690 V) |
|---------|-----------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| R2H59L. | CLZ-FP-69/25-HD |              |              | 690             |              |              |              |              |              |              | 22,9         | 25           |
| R2H59N. | CLZ-FP-69/30-HD |              |              | 690             |              |              |              |              |              |              | 27,5         | 30           |
| R2H59R. | CLZ-FP-69/40-HD |              |              | 690             |              |              |              |              |              |              | 36,6         | 40           |
| R2H59S. | CLZ-FP-69/50-HD |              |              | 690             |              |              |              |              |              |              | 45,75        | 50           |



CLZ-FP-48/20-HD

Tubular capacitor

Code: R2H56J.

Dimensions

