

Digital Electric& Electronics System



DEEŞYS

Low Voltage Zero-Phase Sequence Current Transformer

Zero Phase Sequence Current Transformer [DZR, ZR, ZS, SZR-Series]

Cable & Bus Bar Through [DZR, ZR, ZS, SZR-Series]

How to Installation and Inspection

ZCT(DZR, ZR, ZS, SZR)

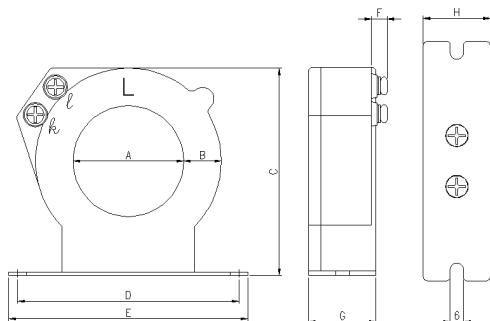


Zero phase sequence Current Transformer [Round Series]

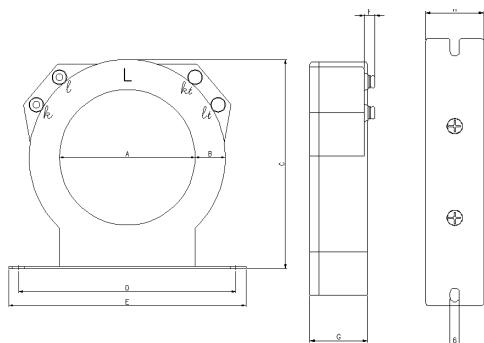
Specification

| Model | Rated Current | Inside Dia. | Zero Phase Current Ratio | Max. Weight |
|---------|---------------|-------------|-----------------------------------|-------------|
| DZR-030 | 100A | 30 Ø | | 0,2Kg |
| DZR-050 | 250A | 50 Ø | | 0,3Kg |
| DZR-065 | 400A | 65 Ø | | 0,4Kg |
| DZR-080 | 600A | 80 Ø | 200mA / 100mV (75 ~ 125mV at 2kΩ) | 0,8Kg |
| DZR-100 | 800A | 100 Ø | | 1,0Kg |
| DZR-120 | 1000A | 120 Ø | | 1,2Kg |

Dimension



| Model | A | B | C | D | E | Unit : m/m | | |
|---------|----|----|-----|-----|-----|------------|----|----|
| | | | | | | F | G | H |
| DZR-030 | 30 | 17 | 74 | 75 | 85 | 7 | 23 | 25 |
| DZR-050 | 50 | 17 | 94 | 100 | 108 | 7 | 30 | 30 |
| DZR-065 | 65 | 17 | 109 | 100 | 108 | 7 | 30 | 30 |



| Model | A | B | C | D | E | Unit : m/m | | |
|---------|-----|----|-----|-----|-----|------------|----|----|
| | | | | | | F | G | H |
| DZR-080 | 80 | 23 | 133 | 114 | 132 | 7 | 38 | 38 |
| DZR-100 | 100 | 23 | 155 | 160 | 175 | 7 | 38 | 38 |
| DZR-125 | 120 | 23 | 175 | 160 | 175 | 7 | 38 | 38 |

ZERO-PHASE SEQUENCE CURRENT TRANSFORMER [ZR, ZS, SZR-SERIES]

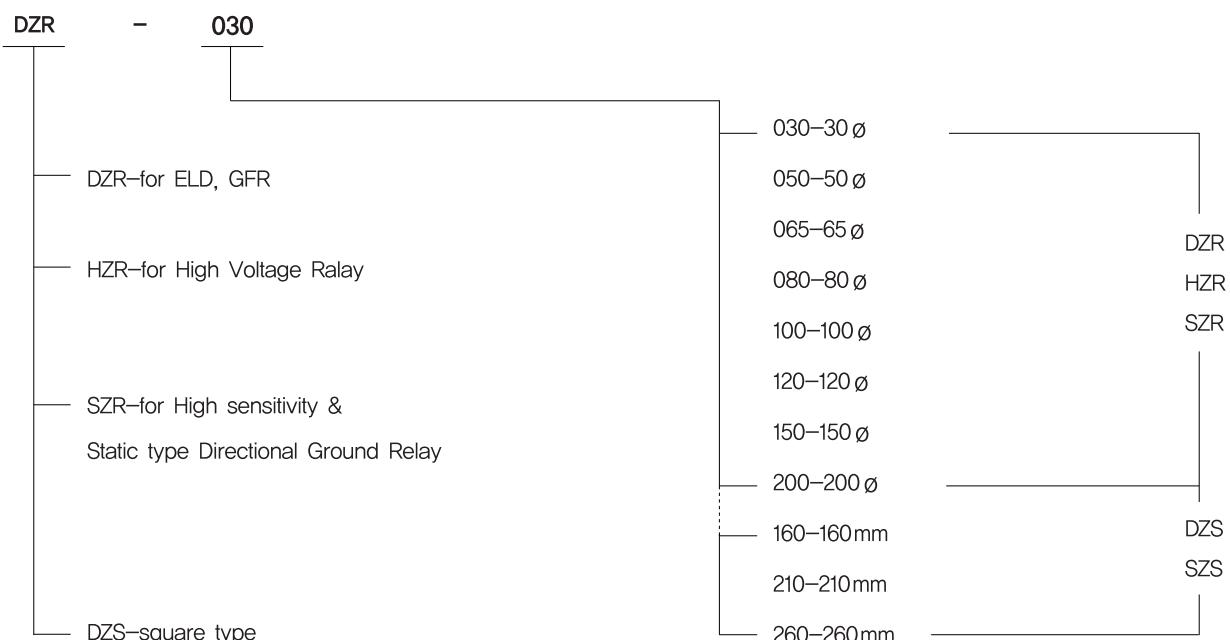


CE



- As it is used high magnetivity core, it has high linear characteristics and safety characteristics.
- As SZR type ZCT (Sensitivity type) is used Nickel core, it is possible to detect small current(30mA) correctly
- As various model, it is very easy to select the ZCT

Ordering Procedure



※ Note : Because the above ZCT is voltage type on 2ry output and has characteristics applicable with ELD and static type relay, it is impossible to apply for induction type relay.

ZERO-PHASE SEQUENCE CURRENT TRANSFORMER [ZR, ZS, SZR-SERIES]



- For earth leakage detector
- For indoor
- Cable & Busbar through type
- Casing ABS (Non-flammable)
- Color : Black (N1.5)

(Type approval by inspection agency for fire)

Specification

| Model | Rated Current(A) | Inside dia. (mm) | Through wire (EV) mm ² | | | Zero phase current ratio Pri./Sec | Weight(kg) |
|---------------------|------------------|------------------|-----------------------------------|------------|------|-----------------------------------|------------------------------------------------|
| | | | 1Ø2W | 1Ø3W, 3Ø3W | 3Ø4W | | |
| Cable Through Type | DZR-030/SZR-030 | 100 | 30 | 60 | 14 | 8 | ZR,ZS type 200mA/100mV (75~125mV at 2kΩ) |
| | DZR-050/SZR-050 | 250 | 50 | 150 | 80 | 38 | |
| | DZR-065/SZR-065 | 400 | 65 | 325 | 150 | 100 | |
| | DZR-080/SZR-080 | 600 | 80 | 400 | 250 | 2000 | |
| | DZR-100/SZR-100 | 800 | 100 | 500 | 325 | 250 | SZR Type 30mA/50mV |
| | DZR-120/SZR-120 | 1000 | 120 | — | 850 | 725 | |
| | ZR-150/SZR-150 | 1400 | 150 | — | 1000 | 850 | |
| | ZR-200/SZR-200 | 2000 | 200 | — | — | — | |
| Busbar through type | DZS-160 | 400 | 30x160 | — | — | ※ 6Tx25 | 2.8 3.5 3.8 |
| | DZS-210 | 500 | 30x210 | — | — | ※ 6Tx25 | |
| | DZS-260 | 600 | 30x260 | — | — | ※ 6Tx25 | |

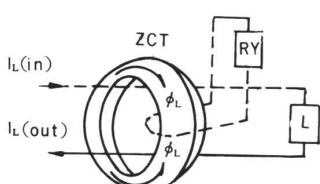
※Note : “※” Mark is busbar size

- Use to Temperature : -10°C ~ +60°C
- Withstand voltage : AC 2000V/Min.(between secondary coil and base)
- Insulation resistance : More Than 1000MΩ DC 500V(between coil and base)

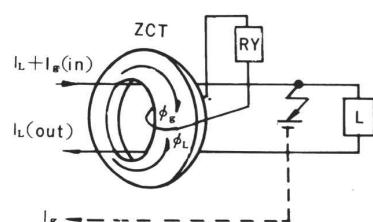
| Through wire (EV) mm ² | |
|-----------------------------------|-------------|
| DGR | 200mA/100mV |
| DER-Po3 | 30mA/50mV |

Z.C.T

(1) Normal Condition



(2) Ground Fault Condition



ZERO-PHASE CURRENT TRANSFORMER (CURRENT OUTPUT TYPE)



Features

- Terminal cover for safety
- Easy to install this types to panel by structural improvement
- Various structures by types of load and capacity
- ABS Non Flammable resin for self-extinguish stability

Specification

| PART | RATING |
|-----------------------|-----------------------------------------------------------------------------------------------|
| Output condition | AC 200mA / 1.5mA |
| Operating scale | 90 ~ 110% |
| Rated Frequency | 50 / 60 Hz |
| Max. Voltage | AC 600V |
| Operating temperature | -10°C ~ 60°C |
| Insulation resistance | 1st-Panel DC500V Megger 100MΩ above 1st-2st DC500V Megger 100MΩ above |
| Insulation Patience | 1st-Panel AC1,500V/1sec above 1st-2st AC1,500V/1sec above 2st - Panel AC500V/1sec above |
| Impulse voltage | 1st - Panel 6kV (1.2/50μs) +, - 1sec |

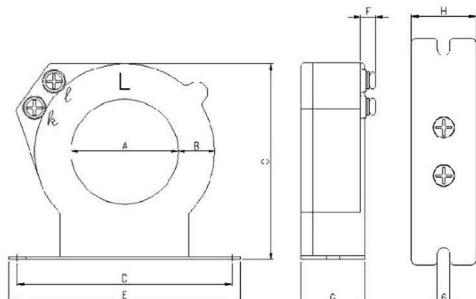
Model / Standard

| Round Type | Rated Current(A) | Inside Dia.(Ø) | Square Type | Rated Current(A) | Inside Dia.(mm) |
|------------|------------------|----------------|-------------|------------------|-----------------|
| DZR-A030 | 100 | 30 | DZS-A160 | 400 | 30X166 |
| DZR-A050 | 250 | 50 | DZS-A210 | 500 | 30X210 |
| DZR-A065 | 400 | 65 | DZS-A260 | 600 | 30X266 |
| DZR-A080 | 600 | 80 | | | |
| DZR-A100 | 800 | 100 | | | |
| DZR-A120 | 1000 | 120 | | | |

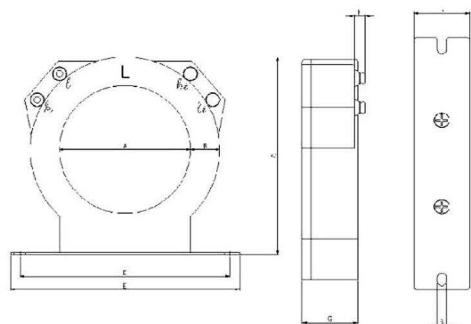
ZERO-PHASE CURRENT TRANSFORMER (CURRENT OUTPUT TYPE)

Dimension

• Round Type

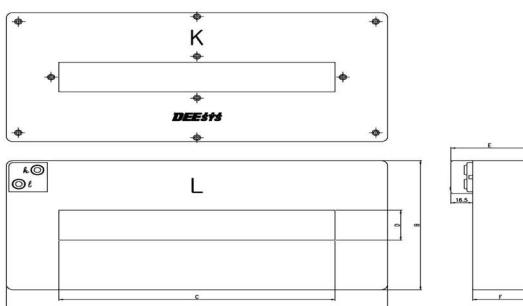


| Model | A | B | C | D | E | F | G | H |
|----------|------------|----|-----|-----|-----|---|----|----|
| | Unit : m/m | | | | | | | |
| DZR-A030 | 30 | 17 | 74 | 75 | 85 | 7 | 23 | 25 |
| DZR-A050 | 50 | 17 | 94 | 100 | 108 | 7 | 30 | 30 |
| DZR-A065 | 65 | 17 | 109 | 100 | 108 | 7 | 30 | 30 |



| Model | A | B | C | D | E | F | G | H |
|----------|------------|----|-----|-----|-----|---|----|----|
| | Unit : m/m | | | | | | | |
| DZR-A080 | 80 | 23 | 133 | 114 | 132 | 7 | 38 | 38 |
| DZR-A100 | 100 | 23 | 155 | 160 | 175 | 7 | 38 | 38 |
| DZR-A120 | 120 | 23 | 175 | 160 | 175 | 7 | 38 | 38 |

• Square Type



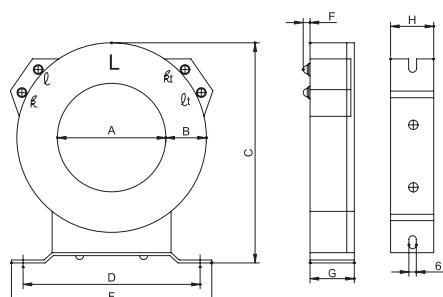
Specification & Dimension

| Model | Rating Current | Inside Dia. | A | B | C | D | E | weight(kg) |
|----------|----------------|-------------|-----|-----|-----|----|----|------------|
| DZS-A160 | 400A | 30 X 166 | 240 | | 166 | | 52 | 1.6 |
| DZS-A210 | 500A | 30 X 210 | 290 | 130 | 210 | 30 | | 2.1 |
| DZS-A260 | 600A | 30 X 266 | 350 | | 266 | | 62 | 2.6 |

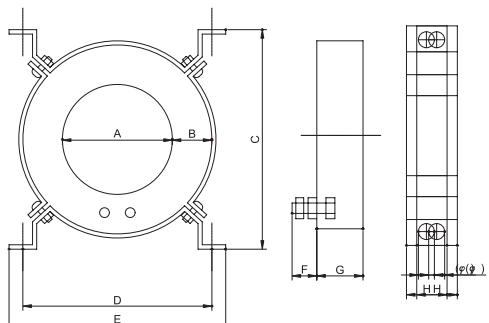
UNIT(m/m)

CABLE BUSBAR THROUGH(ZR,SZR,ZS-SERIES)

• Round type

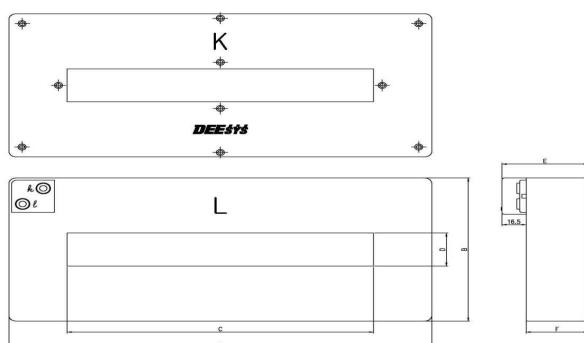


| Model-No | A | B | C | D | E | F | G | H |
|----------------|-----|----|-----|-----|-----|---|----|----|
| ZR/SZR-025 | 25 | 25 | 87 | 95 | 110 | 9 | 30 | 20 |
| ZR/SZR/HZR-030 | 30 | 25 | 108 | 100 | 114 | 7 | 32 | 32 |
| ZR/SZR/HZR-050 | 50 | 25 | 131 | 110 | 133 | 7 | 39 | 36 |
| ZR/SZR/HZR-065 | 65 | 26 | 143 | 110 | 133 | 7 | 39 | 36 |
| ZR/SZR/HZR-080 | 80 | 34 | 174 | 160 | 180 | 7 | 40 | 40 |
| ZR/SZR/HZR-100 | 100 | 38 | 203 | 160 | 180 | 7 | 40 | 40 |



| Model-No | A | B | C | D | E | F | G | H | Hole(ϕ) |
|------------|-----|----|-----|-----|-----|----|----|----|----------------|
| ZR/HZR-120 | 120 | 45 | 225 | 180 | 210 | 20 | 55 | 35 | 10 |
| ZR/HZR-150 | 150 | 45 | 260 | 180 | 210 | 20 | 55 | 35 | 10 |
| ZR/HZR-200 | 200 | 53 | 310 | 260 | 286 | 10 | 70 | 35 | 10 |

• Square type



| Model-No | Rating Current | Inside Dia. | A | B | C | D | E | weight(kg) |
|----------|----------------|-------------|-----|-----|-----|----|---|------------|
| DZS-150 | 400A | 30 X 166 | 240 | | 166 | 52 | | 1.6 |
| DZS-200 | 500A | 30 X 210 | 290 | 130 | 210 | 30 | | 2.1 |
| DZS-250 | 600A | 30 X 266 | 350 | | 266 | 62 | | 2.6 |

UNIT(m/m)