

Technical data

Technical data according to IEC 60947-3 - OTHV100-125-160G

| Switch type | | | OTHV100G | OTHV125G | OTHV160G |
|---|------------------------------------|----------------|---------------------|---------------------|---------------------|
| Rated insulation voltage and rated operational voltage AC20/DC20. | Pollution degree 3 | | 1000 V | 1000 V | 1000 V |
| Dielectric strength | 50 Hz. 1min | | 10 kV | 10 kV | 10 kV |
| Rated impulse withstand voltage | | | 12 kV | 12 kV | 12 kV |
| Rated thermal current and rated operational current AC20/DC20 | Ambient 40°C | In open air | 100 A | 125 A | 160 A |
| | Ambient 40°C | In enclosure | 100 A | 125 A | 160 A |
| ...with minimum conductor cross section | | Cu | 35 mm ² | 50 mm ² | 70 mm ² |
| Rated operational current, AC-21A | | 800 V | 100 A | 125 A | 160 A |
| | | 1000 V | 100 A | 125 A | 125 A |
| Rated operational current, AC-22A | | 800 V | 100 A | 125 A | 125 A |
| | | 1000 V | 100 A | 100 A | 100 A |
| Rated operational current, AC-23A | | 800 V | 80 A ⁽¹⁾ | 80 A ⁽¹⁾ | 80 A ⁽¹⁾ |
| | | 1000 V | 63 A ⁽¹⁾ | 63 A ⁽¹⁾ | 63 A ⁽¹⁾ |
| Rated short time withstand current | r.m.s. - value I _{cw} | 1000 V, 0,25 s | 7 kA | 7 kA | 7 kA |
| | | 1000 V, 1 s | 4 kA | 4 kA | 4 kA |
| Rated short circuit current making capacity | Peak value I _{cm} | 1000 V | 12 kA | 12 kA | 12 kA |
| Power loss/pole | At operational current | | | | 6.5 W |
| Mechanical endurance | Divide by two for operation cycles | | 20.000 | 20.000 | 20.000 |
| Weight without accessories | 3-pole | | 0.8 kg | 0.8 kg | 0.8 kg |
| Terminal width | | | integrated | integrated | integrated |
| Terminal bold size | | | Hex 4 | Hex 4 | Hex 4 |
| Terminal tightening torque | Counter torque required | | 6 Nm | 6 Nm | 6 Nm |
| Operating torque | 3-pole switch disconnecter | | 2 Nm | 2 Nm | 2 Nm |

Technical data according to IEC 60947-3 - OTHV160-200-250-315-400-630E

| Switch type | | | OTHV160E | OTHV200E | OTHV250E | OTHV315E | OTHV400E | OTHV630E |
|---|------------------------------------|----------------|--------------------|--------------------|---------------------|---------------------|---------------------|-----------------------|
| Rated insulation voltage and rated operational voltage AC20/DC20. | Pollution degree 3 | | 1000 V | 1000 V | 1000 V | 1000 V | 1000 V | 1000 V |
| Dielectric strength | 50 Hz. 1min | | 10 kV | 10 kV | 10 kV | 10 kV | 10 kV | 10 kV |
| Rated impulse withstand voltage | | | 12 kV | 12 kV | 12 kV | 12 kV | 12 kV | 12 kV |
| Rated thermal current and rated operational current AC20/DC20 | Ambient 40°C | In open air | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A |
| | Ambient 40°C | In enclosure | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A |
| ...with minimum conductor cross section | | Cu | 70 mm ² | 95 mm ² | 120 mm ² | 185 mm ² | 240 mm ² | 2x185 mm ² |
| Rated operational current, AC-21A | | 800 V | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A ⁽¹⁾ |
| | | 1000 V | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A ⁽¹⁾ |
| Rated operational current, AC-22A | | 800 V | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A ⁽¹⁾ |
| | | 1000 V | 160 A | 200 A | 250 A | 315 A | 400 A | 630 A ⁽¹⁾ |
| Rated operational current, AC-23A | | 800 V | 135 A | 135 A | 135 A | 200 A | 200 A | 400 A |
| | | 1000 V | 135 A | 135 A | 135 A | | | |
| Rated short time withstand current | r.m.s. - value I _{cw} | 1000 V, 0,25 s | 15 kA | 15 kA | 15 kA | 24 kA | 24 kA | 36 kA |
| | | 1000 V, 1 s | 8 kA | 8 kA | 8 kA | 15 kA | 15 kA | 20 kA |
| Rated short circuit current making capacity | Peak value I _{cm} | 1000 V | 30 kA | 30 kA | 30 kA | 65 kA | 65 kA | 80 kA |
| Power loss/pole | At operational current | | 3.2 W | 4 W | 6.5 W | 6.5 W | 10 W | 25 W |
| Mechanical endurance | Divide by two for operation cycles | | 20.000 | 20.000 | 20.000 | 16.000 | 16.000 | 10.000 |
| Weight without accessories | 3-pole | | 1.3 kg | 1.3 kg | 1.3 kg | 2.8 kg | 2.8 kg | 6.1 kg |
| Terminal width | | | 20 mm | 20 mm | 20 mm | 25 mm | 25 mm | 39 mm |
| Terminal bold size | | | M8x25 mm | M8x25 mm | M8x25 mm | M10x30 mm | M10x30 mm | M12x40 mm |
| Terminal tightening torque | Counter torque required | | 15-22 Nm | 15-22 Nm | 15-22 Nm | 30-44 Nm | 30-44 Nm | 50-75 Nm |
| Operating torque | 3-pole switch disconnecter | | 7 Nm | 7 Nm | 7 Nm | 16 Nm | 16 Nm | 27 Nm |

1) IEC60947-3 Utilization category B, infrequent operation

Technical data according to IEC 60947-3 - OTHV800-1000-1250-1600-2000-2500E

| Switch type | | OTHV800E | OTHV1000E | OTHV1250E | OTHV1600E | OTHV2000E | OTHV2500E | |
|---|--|--------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-------|
| Rated insulation voltage and rated operational voltage AC20/DC20. | Pollution degree 3 | 1000 V | 1000 V | 1000 V | 1000 V | 1000 V | 1000 V | |
| Dielectric strength | 50 Hz, 1min | 10 kV | 10 kV | 10 kV | 10 kV | 10 kV | 10 kV | |
| Rated impulse withstand voltage | | 12 kV | 12 kV | 12 kV | 12 kV | 12 kV | 12 kV | |
| Rated thermal current and rated operational current AC20/DC20 | Ambient 40°C In open air | 800 A | 1000 A | 1250 A | 1600 A | 2000 A | 2500 A | |
| | Ambient 40°C In enclosure | 800 A | 1000 A | 1250 A | 1600 A | | | |
| ...with minimum conductor cross section | | Cu 2x240 mm ² | 2x300 mm ² | 2x400 mm ² | 2x500 mm ² | 3x500 mm ² | 4x500 mm ² | |
| Rated operational current, AC-21A | | 800 V 800 A | 1000 A | 1250 A | 1600 A | 2000 A ⁽¹⁾ | 2500 A ⁽¹⁾ | |
| | | 1000 V 800 A | 1000 A | 1250 A | 1600 A | | | |
| Rated operational current, AC-22A | | 800 V 800 A | 1000 A | 1250 A | 1600 A | | | |
| | | 1000 V 800 A | 1000 A | 1250 A | 1600 A | | | |
| Rated operational current, AC-23A | | 800 V 400 A | 800 A | 800 A | 800 A | | | |
| Rated short time withstand current | r.m.s. - value I _{cw} | 1000 V, 0.25 s | 36 kA | 50 kA | 50 kA | 50 kA | 80 kA | 80 kA |
| | | 1000 V, 1 s | 20 kA | 50 kA | 50 kA | 50 kA | 55 kA | 55 kA |
| Rated short circuit current making capacity | Peak value I _{cm} | 1000 V 80 kA | 110 kA/92 kA ⁽²⁾ | 110 kA/92 kA ⁽²⁾ | 110 kA/92 kA ⁽²⁾ | 176 kA | 176 kA | |
| Max. Distance from switch frame to nearest support | Distance from switch frame to nearest busbar/cable support | | 150 mm | 150 mm | 150 mm | 150 mm | 150 mm | |
| Power loss/pole | At operational current | 40 W | 19 W | 29 W | 48 W | 55 W | 85 W | |
| Mechanical endurance | Divide by two for operation cycles | 10.000 | 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | |
| Weight without accessories | 3-pole | 6.1 kg | 16.8 kg | 16.8 kg | 16.8 kg | 24.9 kg | 24.9 kg | |
| Terminal width | | 39 mm | 50 mm | 50 mm | 50 mm | 100 mm | 100 mm | |
| Terminal bold size | | M12x40 mm | M12x60 mm | M12x60 mm | M12x60 mm | M12x60 mm | M12x60 mm | |
| Terminal tightening torque | Counter torque required | 50-75 Nm | 50-75 Nm | 50-75 Nm | 50-75 Nm | 50-75 Nm | 50-75 Nm | |
| Operating torque | 3-pole switch disconnecter | 27 Nm | 65 Nm | 65 Nm | 65 Nm | 65 Nm | 65 Nm | |

1) IEC60947-3 Utilization category B, infrequent operation

2) 4-pole switch disconnecter