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SCM1 SERIES

MOLDED CASE CIRCUIT BREAKER

Compact
size

Isolation
Function

Short
Arcing

High
Breaking
Capacity

Application

SCM1 molded case circuit breakers (hereafter simply referred to be breakers) are newly developed breakers with international advanced design and manufacturing technologies. The breakers is mainly applicable in circuits of AC50/60Hz, rated insulated voltage up to 800V, rated working voltage up to 690V, rated working current reaching 800A, protecting circuits and equipment against damage from overload, short-circuit, under-voltage, also working as infrequent change-over of the circuits.

Features

- According to I_{cu} (Ultimate short-circuit breaking capacity), breakers could be clarified as C class (Basic type), L class (Standard type), M class (higher breaking capacity), and H class (highest breaking capacity)
- The breakers have features of small volume, high capacity, short arcover (some parts of zero arcover) and impact resistance
- The breakers could be installed both horizontally and vertically
- Isolation function is designed for the breakers
- The breakers is complying with standards of GB 14048.2-2008 and IEC 60947-2



Safety & so much more

CGSL

SCM1 SERIES

Specification

| | | | | |
|---|--------|-----------------------------------|-------------|--------------|
| Frame current Inm (A) | | 63 | | |
| Model | | SCM1-63L | SCM1-63M | SCM1-63 |
| Rated current In (A) | | 6, 10, 16, 20, 25, 32, 40, 50, 63 | | |
| Pole | | 3 | 3 | 4 |
| Rated insulation voltage Ui (V) | | AC800 | | |
| Rated working voltage Ue (V) | | AC400 | | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | |
| | AC400V | 25 | 50 | |
| | DC250V | | | |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | |
| | AC400V | 18 | 35 | |
| | DC250V | | | |
| Dimension (mm×mm×mm) | | 135×78×73.5 | 135×78×81.5 | 135×103×81.5 |

| | | | | | | | |
|---|--------|---------------------------------------|-----------|-----------|----------------|------------|-----------|
| Frame current Inm (A) | | 100 | | | | | |
| Model | | SCM1-100 | SCM1-100C | SCM1-100L | SCM1-100M | SCM1-100 | SCM1-100H |
| Rated current In (A) | | 10,16, 20, 25, 32, 40, 50, 63, 80,100 | | | | | |
| Pole | | 2 | 3 | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | | | |
| Rated working voltage Ue (V) | | DC250 AC400 | AC400 | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | | 20 | | |
| | AC400V | 50 | 25 | 35 | 50 | | 85 |
| | DC250V | 20 | | | | | |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | | 10 | | |
| | AC400V | 35 | 18 | 22 | 35 | | 50 |
| | DC250V | 15 | | | | | |
| Dimension (mm×mm×mm) | | 150×65×86 | 150×92×68 | | 150×92×86 | 150×122×86 | 150×92×86 |

SCM1 SERIES

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|---|--------|--------------------|------------|----------------|-------------|-------------|
| Frame current Inm (A) | | 160 | | | | |
| Model | | SCM1-160C | SCM1-160L | SCM1-160M | SCM1-160 | SCM1-160H |
| Rated current In (A) | | 100, 125, 140, 160 | | | | |
| Pole | | 3 | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | | |
| Rated working voltage Ue (V) | | AC400 | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | 20 | | |
| | AC400V | 25 | 35 | 50 | | 85 |
| | DC250V | | | | | 20 |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | 10 | | |
| | AC400V | 18 | 25 | 35 | | 50 |
| | DC250V | | | | | 15 |
| Dimension (mm×mm×mm) | | 165×107×86 | 165×107×86 | 165×107×103 | 165×142×103 | 165×107×103 |

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|---|--------|-----------------------------------|------------|-------------|----------------|-------------|-----------|
| Frame current Inm (A) | | 225 | | | | | |
| Model | | SCM1-225 | SCM1-225C | SCM1-225L | SCM1-225M | SCM1-225 | SCM1-225H |
| Rated current In (A) | | 100, 125, 140, 160, 180, 200, 225 | | | | | |
| Pole | | 2 | 3 | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | | | |
| Rated working voltage Ue (V) | | DC250 AC400 | AC400 | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | | 20 | | |
| | AC400V | 50 | 25 | 35 | 50 | | 85 |
| | DC250V | 20 | | | | | |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | | 10 | | |
| | AC400V | 35 | 18 | 22 | 35 | | 50 |
| | DC250V | 15 | | | | | |
| Dimension (mm×mm×mm) | | 165×75×103 | 165×107×86 | 165×107×103 | 165×142×103 | 165×107×103 | |

SCM1 SERIES

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|---|--------|--------------------|----------------|-------------|-------------|
| Frame current Inm (A) | | 250 | | | |
| Model | | SCM1-250L | SCM1-250M | SCM1-250 | SCM1-250H |
| Rated current In (A) | | 180, 200, 225, 250 | | | |
| Pole | | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | |
| Rated working voltage Ue (V) | | AC400 | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | 20 | | |
| | AC400V | 50 | 65 | | 100 |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | 10 | | |
| | AC400V | 35 | 42 | | 65 |
| Dimension (mm×mm×mm) | | 165×107×103 | 165×107×86 | 165×142×103 | 165×107×103 |

| | | | | | | |
|---|--------|-------------------------|---------------|----------------|---------------|---------------|
| Frame current Inm (A) | | 400 | | | | |
| Model | | SCM1-400C | SCM1-400L | SCM1-400M | SCM1-400 | SCM1-400H |
| Rated current In (A) | | 225, 250, 315, 350, 400 | | | | |
| Pole | | 3 | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | | |
| Rated working voltage Ue (V) | | AC400 | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | 20 | | |
| | AC400V | 35 | 50 | 65 | | 100 |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | 15 | | |
| | AC400V | 25 | 35 | 42 | | 65 |
| Dimension (mm×mm×mm) | | 257×150×106.5 | 257×150×106.5 | 257×150×106.5 | 257×198×106.5 | 257×150×106.5 |

SCM1 SERIES

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|---|--------|---------------|-------------|----------------|-------------|-------------|
| Frame current Inm (A) | | 630 | | | | |
| Model | | SCM1-630C | SCM1-630L | SCM1-630M | SCM1-630 | SCM1-630H |
| Rated current In (A) | | 400, 500, 630 | | | | |
| Pole | | 3 | 3 | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | | | |
| Rated working voltage Ue (V) | | AC400 | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | | | 20 | | |
| | AC400V | 35 | 50 | 65 | | 100 |
| Operating short-circuit breaking ability Ics (kA) | AC690V | | | 15 | | |
| | AC400V | 25 | 35 | 42 | | 65 |
| Dimension (mm×mm×mm) | | 270×182×110 | 270×182×110 | 270×182×110 | 270×240×110 | 270×182×110 |

| | | | | |
|---|--------|----------------|---------------|---------------|
| Frame current Inm (A) | | 800 | | |
| Model | | SCM1-800M | SCM1-800 | SCM1-800H |
| Rated current In (A) | | 630, 700, 800 | | |
| Pole | | 3 | 4 | 3 |
| Rated insulation voltage Ui (V) | | AC800 | | |
| Rated working voltage Ue (V) | | AC400 AC690 | AC400 | |
| Ultimate short-circuit breaking ability Icu (kA) | AC690V | 30 | | |
| | AC400V | 75 | | 100 |
| Operating short-circuit breaking ability Ics (kA) | AC690V | 20 | | |
| | AC400V | 50 | | 65 |
| Dimension (mm×mm×mm) | | 280×210×115.5 | 280×280×115.5 | 280×210×115.5 |