# Product datasheet

Specifications

## Circuit breaker, ComPacT NS1600H, 70kA at 415VAC, 4P, fixed, manually operated, MicroLogic 5.0 control unit, 1600A

C160H450FM

## Main

| | |
|---|---|
| **Range** | ComPacT |
| **Product name** | ComPacT NS new generation |
| **Range of product** | ComPacT NS630b...1600 new generation |
| **Product or component type** | Circuit breaker |
| **Device application** | Distribution |
| **Number of poles** | 4P |
| **Protected poles description** | 4D |
| **Neutral position** | Left |
| **[In] rated current** | 1600 A at 50 °C |
| **[Ue] rated operational voltage** | 690 V AC 50/60 Hz |
| **Network type** | AC |
| **Network frequency** | 50/60 Hz |
| **Suitability for isolation** | Yes conforming to EN/IEC 60947-2 |
| **Utilisation category** | Category B |
| **Breaking capacity** | 85 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>70 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>65 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>50 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>42 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **Breaking capacity code** | H 70 kA 415 V AC |
| **Trip unit name** | MicroLogic 5.0 |
| **Trip unit technology** | Electronic |
| **Trip unit protection functions** | LSI |
| **Control type** | Manually operated |
| **Mounting mode** | Fixed |

## Complementary

| | |
|---|---|
| **[Ui] rated insulation voltage** | 800 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Uimp] rated impulse withstand voltage** | 8 kV conforming to IEC 60947-2 |
| **[Ics] rated service breaking capacity** | 37 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2<br>37 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2<br>37 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2<br>30 kA at 500/525 V AC 50/60 Hz conforming to IEC 60947-2<br>22 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2 |
| **[Icw] rated short-time withstand current** | 19.2 kA 1 s conforming to IEC 60947-2 |

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

| | |
|---|---|
| **Mechanical durability** | 10000 cycles |
| **Electrical durability** | 1000 cycles at 690 V In<br>2000 cycles at 690 V In/2<br>2000 cycles at 440 V In<br>5000 cycles at 440 V In/2 |
| **Power losses** | 74 W |
| **Mounting support** | Backplate |
| **Upside connection** | Front |
| **Downside connection** | Front |
| **Connection pitch** | 70 mm |
| **Protection type** | L : for overload protection (long time)<br>S : for short time short-circuit protection<br>I : for instantaneous short-circuit protection |
| **Trip unit rating** | 1600 A at 50 °C |
| **Long-time pick-up adjustment type Ir (thermal protection)** | Adjustable 9 settings |
| **[Ir] long-time protection pick-up adjustment range** | 0.4...1 x In |
| **Long-time protection delay adjustment type tr** | Adjustable 9 settings |
| **[tr] long-time delay adjustment range** | 12.5…600 s at 1.5 x Ir<br>0.5…24 s at 6 x Ir<br>0.7…16.6 s at 7.2 x Ir |
| **Thermal memory** | 20 mn |
| **Short-time protection pick-up adjustment type Isd** | Adjustable 9 settings |
| **[Isd] Short-time protection pick-up adjustment range** | 1.5...10 x Ir |
| **Short-time protection delay adjustment type tsd** | Adjustable |
| **[tsd] short-time delay adjustment range** | 0.1…0.4 s $I^2t$=on<br>0…0.4 s $I^2t$=off |
| **Instantaneous protection pick-up adjustment type Ii** | Adjustable |
| **[Ii] instantaneous protection pick-up adjustment range** | Off<br>2...15 x In |
| **Earth-leakage protection** | Without |
| **Neutral protection setting** | No protection (3D)<br>0.5 x Ir (3D + N/2)<br>1 x Ir (4D) |
| **Zone selective interlocking ZSI** | Without |
| **Auxiliary contact composition** | 1 NO/NC |
| **Local signalling** | 4 LEDs (red) for fault indication<br>1 LED (yellow) for overload |
| **Width (W)** | 280 mm |
| **Height (H)** | 327 mm |
| **Depth (D)** | 147 mm |
| **Net weight** | 18 kg |

# Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-2 |
| **Product certifications** | IECEE CB Scheme |
| **Overvoltage category** | III |

| | |
|---|---|
| **Electrical shock protection class** | Class II on front face |
| **Pollution degree** | 3 conforming to IEC 60947 |
| **IP degree of protection** | IP40 conforming to IEC 60529 |
| **IK degree of protection** | IK07 conforming to EN 50102 |
| **Ambient air temperature for operation** | -25…70 °C |
| **Ambient air temperature for storage** | -50…85 °C |
| **Relative humidity** | 0…95 % |
| **Operating altitude** | 0...2000 m without derating<br>2000 m...5000 m with derating |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 37.0 cm |
| **Package 1 Width** | 38.0 cm |
| **Package 1 Length** | 30.0 cm |
| **Package 1 Weight** | 16.961 kg |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **1 619 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **237 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **5 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **2 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **1 351 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **25 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **No** |
| SCIP Number | **76c2e213-3b51-4d8b-afdf-632ded42d731** |
| Halogen-free status | **Product contains halogen above thresholds** |
| PVC free | **Yes** |
| Silicone-free | **No** |

## Use Longer

### Lifetime extension

| | |
|---|---|
| Repair | **No** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **56** |
| End of life manual availability | **End of Life Information** |
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |

Technical Illustration

## Assembly's dimensions