Product datasheet

Specifications

Circuit breaker, ComPacT NS800L, 150kA at 415VAC, 4P, fixed, manually operated, MicroLogic 5.0 control unit, 800A

C080L450FM

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	800 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 A
Breaking capacity	150 kA Icu at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 150 kA Icu at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 130 kA Icu at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 500/525 V AC 50/60 Hz conforming to IEC 60947-2
Breaking capacity code	L 150 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	150 kA at 220/240 V AC 50/60 Hz conforming to IEC 60947-2 150 kA at 380/415 V AC 50/60 Hz conforming to IEC 60947-2 130 kA at 440 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 500/525 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
Mechanical durability	10000 cycles

Electrical durability	2000 cycles at 690 V In 3000 cycles at 690 V In/2 3000 cycles at 440 V In 4000 cycles at 440 V In/2
Power losses	20 W
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	70 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection
Trip unit rating	800 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 0.5…24 s at 6 x Ir 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 0…0.4 s I^2t=off
Instantaneous protection pick-up adjustment type Ii	Adjustable
[Ii] instantaneous protection pick-up adjustment range	Off 2...15 x In
Earth-leakage protection	Without
Neutral protection setting	No protection (3D) 0.5 x Ir (3D + N/2) 1 x Ir (4D)
Zone selective interlocking ZSI	Without
Auxiliary contact composition	1 NO/NC
Local signalling	4 LEDs (red) for fault indication 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 2000 m...5000 m with derating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	37.000 cm
Package 1 Width	38.000 cm
Package 1 Length	30.000 cm
Package 1 Weight	17.431 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	**759 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**244 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]	**482 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**25 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**76c2e213-3b51-4d8b-afdf-632ded42d731**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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