

Product data sheet

Specifications

SQUARE D



PowerPacT multistandard - H-Frame - 90 A - 100 KA - Therm-Mag trip unit

NHJF36090TW

! Discontinued on: Dec 1, 2023

! Discontinued

Main

Range of product	PowerPact multistandard
Range	PowerPact
Product name	H-Frame
Device short name	H-Frame
Product or component type	Circuit breaker
Device application	Distribution

Complementary

Poles description	3P
Control type	Toggle
Mounting mode	Unit mount
Mounting support	Backplate Flush DIN rail
Electrical connection	Terminal nut, line side Terminal nut, load side
[In] rated current	90 A 104 °F (40 °C)
[Ui] rated insulation voltage	750 V AC 50/60 Hz IEC 60947-2
[Uimp] rated impulse withstand voltage	8 kV IEC 60947-2
[Ue] rated operational voltage	525 V AC 50/60 Hz IEC 60947-2 690 V AC 50/60 Hz IEC 947-2 600 V AC 50/60 Hz UL 489
Breaking capacity code	HJ
Suitability for isolation	Yes
Utilisation category	Category A
Mechanical durability	4000 cycles
Electrical durability	4000 cycles
Connection pitch	1.8 in (45 mm)
Local signalling	ON/OFF indication
Contact position indicator	Yes
Trip unit name	TM
Trip unit technology	Thermal-magnetic
Trip unit protection functions	Basic protection

Trip unit rating	90 A
Display type	3 LEDs
Breaking capacity	Icu 100 kA 220/240 V - AC IEC 947-2 Icu 65 kA 380/415 V - AC IEC 947-2 Icu 65 kA 440/480 V - AC IEC 947-2 Icu 25 kA 500/525 V - AC IEC 947-2 100 kA 240 V - AC UL 489 65 kA 480 V - AC UL 489 25 kA 600 V - AC UL 489
[Ics] rated service breaking capacity	Ics 100 kA 220/240 V - AC IEC 947-2 Ics 65 kA 380/415 V - AC IEC 947-2 Ics 65 kA 440/480 V - AC IEC 947-2 Ics 25 kA 500/525 V - AC IEC 947-2
Long time pick-up adjustment type Ir	Fixed
Long time pick-up adjustment range	1 In
Short-time pick-up adjustment type Isd	Fixed
[Isd] short-time pick-up adjustment range	1450 A
Overvoltage category	II
Provision for padlocking	Non padlockable
Height	6.4 in (163 mm)
Width	4.09 in (104 mm)
Depth	3.4 in (86 mm)
Standards	NEMA AB1 IEC 60947-2 W-C-375B/GEN UL 489 NMX J-266 CSA C22.2 No 5
Product certifications	CE CCC
Net weight	4.9 lb(US) (2.2 kg)
Tightening torque	44.3 lbf.in (5 N.m) 0.004...0.1 in ² (2.5...95 mm ²) AWG 14...AWG 3/0

Environment

IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
Pollution degree	3 IEC 60947-1 3 IEC 60664-1
Ambient air temperature for operation	104 °F (40 °C)
Ambient air temperature for storage	-58...185 °F (-50...85 °C)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.1 in (13.0 cm)
Package 1 Width	7.2 in (18.4 cm)
Package 1 Length	8.4 in (21.4 cm)
Package 1 Weight	4.2 lb(US) (1.9 kg)

Contractual warranty

Warranty (in months)

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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	291 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	9 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	278 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	3 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	F6740abd-d7a0-42b0-ba51-4931bf4d8226
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	45
Circularity Profile	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