



HMQ990FR

Moulded Case Circuit Breaker h3+ PW1600 LI 3P3D 1600A 50kA FTC

Technical Features

Electric current

Rated current	1600 A
Rated ultimate short-circuit breaking capacity Icu under 230 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 240 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 400 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 415 V AC IEC 60947-2	50 kA
Breaking capacity on 1-pole for AC 230 V IEC 60947-2	19.2 kA
Breaking capacity on 1-pole for AC 400 V IEC 60947-2	19.2 kA

Architecture

Number of poles	3
Control/operation element	Toggle
Device construction type	Fixed built-in

Tripping

Response time when opening	12 ms
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Electric current

Rated ultimate short-circuit breaking capacity Icu under 690 V AC IEC 60947-2	30 kA
Rated service breaking capacity Ics under 220 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 230 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 240 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 380 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 400 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 415 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity Ics under 690 V AC according to IEC 60947-2	30 kA
Rated current 10°C according to IEC 60947	1600 A
Rated current 15°C according to IEC 60947	1600 A
Rated current 20°C according to IEC 60947	1600 A
Rated current 25°C according to IEC 60947	1600 A
Rated current 30°C according to IEC 60947	1600 A
Rated current at 35°C according to IEC 60947	1600 A
Rated current at 40°C according to IEC 60947	1600 A
Rated current 45°C according to IEC 60947	1600 A
Rated current 50°C according to IEC 60947	1590 A
Rated current 55°C according to IEC 60947	1540 A
Rated current at 60°C according to IEC 60947	1490 A
Rated current 70°C according to IEC 60947	1430 A
Rated current 65°C according to IEC 60947	1430 A

Frequency

Frequency	50 - 60 Hz
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Installation, mounting

Nominal tightening torque	50-50 Nm
Mounting-/Connection Position	Front

Voltage

Rated impulse withstand voltage Uimp	8 kV
Rated insulation voltage Ui	1000 V
Rated operational voltage Ue	220 - 690 V

Functions

Trip unit	Sentinel LI
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Power

Total power loss under I _N	129.6 W
Power loss per pole at I _N	1.8 W

Endurance

Electric endurance in number of cycles	4000
Number of mechanical operations	20000

Equipment

Number of auxiliary contacts as change-over contact	0
Number of auxiliary contacts as normally closed contact	0
Number of auxiliary contacts as normally open contact	0

Safety

Ingress Protection (IP) class	IP20
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Use conditions

Operating temperature	-25-70 °C
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Cover, door

Interlockable	Yes
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Cable

Cable material	Copper Aluminium
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Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	3
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Dimensions

Height	330 mm
Width	210 mm
Depth	198 mm

Controls and indicators

Motor drive integrated	No
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Compatibility

Suitable for DIN Rail	No
Compatible with RDC AOB	No

Power supply

Position power supply	Bidirectional
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Connectivity

Type of connection	Bolt connection
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Electrical protection

Long-time overload protection (ltd): delay (tr)	0.5 s 1 s 2 s 4 s 5 s 8 s 10 s 15 s 20 s 25 s
Instantaneous protection (li): dial setting coefficient	1.5 2 3 4 6 8 10 12 15

Sustainability

RoHS conform	Yes
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