



HMQ990JR

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

Technical Features

Electric current

Rated current I_N	1600 A
Rated ultimate short-circuit breaking capacity I_{cu} under 230 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I_{cu} under 240 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I_{cu} under 400 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I_{cu} 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
Neutral position	Without neutral

Tripping

Response time when opening	12 ms
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Electric current

Rated ultimate short-circuit breaking capacity I_{cu} under 690 V AC IEC 60947-2	30 kA
Rated service breaking capacity I_{cs} under 220 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 230 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 240 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 380 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 400 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 415 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I_{cs} under 690 V AC according to IEC 60947-2	30 kA
Rated current at 10°C according to IEC 60947	1600 A
Rated current at 15°C according to IEC 60947	1600 A
Rated current at 20°C according to IEC 60947	1600 A
Rated current at 25°C according to IEC 60947	1600 A
Rated current at 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 at 45°C according to IEC 60947	1600 A
Rated current at 50°C according to IEC 60947	1590 A
Rated current at 55°C according to IEC 60947	1540 A
Rated current at 60°C according to IEC 60947	1490 A
Rated current at 70°C according to IEC 60947	1430 A
Rated current at 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 U_{imp}	8 kV
Rated insulation voltage U_i	1000 V
Rated operational voltage U_e	220 - 690 V

Functions

Trip unit	Sentinel LSI
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Power

Power dissipation at 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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Connection

Connector/plug type	Terminal
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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
Suitable for distribution board	Yes

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
Short-time protection (std): delay (tsd)	50 ms
	100 ms
	200 ms
	400 ms
	600 ms

Electrical protection

Instantaneous protection (li): dial setting coefficient	1.5
	2
	3
	4
	6
	8
	10
	12
	15

Sustainability

RoHS conform	Yes
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