Product Datasheet
HMQ990JR

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Moulded Case Circuit Breaker h3+ PW1600 LSI 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
Neutral position	Without neutral

Tripping

Response time when opening	12 ms

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

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 LSI

Power

Total power loss under IN	129.6 W
Power loss per pole at In	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
Use conditions	
Operating temperature	-25 - 70 °C
Cover, door	
Interlockable	Yes
Connection	
Connector/plug type	Terminal
Cable	
Cable material	Copper Aluminium
Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Dimensions	
Height	330 mm
Width	210 mm
Depth	198 mm
Controls and indicators	
Motor drive integrated	No
Compatibility	
Suitable for DIN Rail	No
Compatible with RDC AOB	No
Suitable for distribution board	Yes
Power supply	
Position power supply	Bidirectional
Connectivity	
Type of connection	Bolt connection
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 (Ii): dial setting coefficient	1.5 2 3 4 6 8 10 12 15

Sustainability	
RoHS conform	Yes