



HMQ991LR

**Moulded Case Circuit Breaker h3+ PW1600 LSIG 4P4D 1600A 50kA FTC**

**Technical Features**

**Electric current**

Rated current	1600 A
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 400 V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> 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	4
Control/operation element	Toggle
Device construction type	Fixed built-in
Neutral position	Left

**Tripping**

Response time when opening	12 ms
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**Electric current**

Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 690 V AC IEC 60947-2	30 kA
Rated service breaking capacity I <sub>cs</sub> under 220 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> under 230 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> under 240 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> under 380 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> under 400 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> under 415 V AC according to IEC 60947-2	50 kA
Rated service breaking capacity I <sub>cs</sub> 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 U <sub>imp</sub>	8 kV
Rated insulation voltage U <sub>i</sub>	1000 V
Rated operational voltage U <sub>e</sub>	220 - 690 V

**Functions**

Trip unit	Sentinel LSIG
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**Power**

Total power loss under I <sub>N</sub>	129.6 W
Power loss per pole at I <sub>N</sub>	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
Degree of pollution according to IEC 60664 / IEC 60947-2	3

**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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**Dimensions**

Height	330 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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**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)
100 ms	
200 ms	
400 ms	
600 ms	
Instantaneous protection (li): dial setting coefficient	1.5
	2
	3
	4
	6
	8
	10
	12
	15

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**Sustainability**

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RoHS conform

Yes