HMT100JR

Moulded Case Circuit Breaker h3+ P250 LSI 3P3D 100A 50kA FTC

Technical properties

Architecture

Type of order	Toggle
Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3P3D
Type of case	Fixed built-in

Functions

Complete device with protection unit	Yes
Reversing switch	No
Version as main switch	Yes
Version as emergency stop installation	No
Version as safety switch	No
Version as maintenance-/service switch	Yes
Trip Unit	LSI
Integrated earth fault protection	No

Controls and indicators

Motor drive integrated	No

Main electrical features

Rated operational voltage Ue	220 / 690 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	No

Electric current

Rated current	100 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	6 kA
Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2	2.5 kA
Rated short-time withstand current Icw t=0.4S 380-415 V AC according IEC 60947-2	2.5 kA
Rated short-time withstand current Icw t=0.4S 660-690 V AC according IEC 60947-2	2.5 kA

Rating current 10°C according to IEC 60947	100 A
Rating current 15°C according to IEC 60947	100 A
Rating current 20°C according to IEC 60947	100 A
Rating current 25°C according to IEC 60947	100 A
Rating current 30°C according to IEC 60947	100 A
Rating current 35°C according to IEC 60947	100 A
Rating current 40°C according to IEC 60947	100 A
Rating current 45°C according to IEC 60947	100 A
Rating current 50°C according to IEC 60947	100 A
Rating current 55°C according to IEC 60947	100 A
Rating current 60°C according to IEC 60947	100 A
Rating current 65°C according to IEC 60947	100 A
Rating current 70°C according to IEC 60947	100 A
Rated service breaking capacity Ics under 660V AC according IEC 60947-2	6 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2	2.5 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	2.5 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	2.5 kA
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	50 kA
Rated service breaking capacity Ics under 110-138V AC according IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 660V AC IEC 60947-2	6 kA

Dimensions

Depth of installed product	97 mm
Height of installed product	165 mm
Width of installed product	105 mm

Frequency

Frequency	50 to 60 Hz

Power

Total power loss under IN	7.2 W
Power loss per pole at In	2.4 W

Endurance

Electric endurance in number of cycles	10000
Number of mechanical operations	40000

Cover, door	
Interlockable	Yes

Installation, mounting	
Tightening torque	12Nm
DIN rail mounting with optional adaptator	No
Suitable for front mounting center	No
Suitable for front mounting	No
Suitable for ground mounting	Yes

Connection	
Connection cross-sect. flexible conductor	35 / 150mm²
Connection cross-sect. rigid cable	35 / 185mm²
Connection	Front connection
Type of connection	Terminal

Protection	
Instantaneous protection (Ii): type	adjustable

Cable	
Cable Material	Cu / Al

Equipment	
Number of auxiliary contacts as normally closed contact	0
Number of auxiliary contacts as normally open contact	0
Number of auxiliary contacts as change-over contact	0
Motor drive optional	Yes
Can be accessorized	Yes

Use cases	
Category of use	A

Use	
Vibrations and shocks withstand	IEC 68068-2-52 Test FC

Standards	
Standard text	IEC 60947-2

Safety	
REACH conform	No
RoHS conform	Yes
Halogen free	No

Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m
Air humidity protection	95%HR 55°C sev Kn (IEC 68-2-30/52)

temperatur	
Temperature of calibration	50 °C