HMS040DC

Moulded Case Circuit Breaker h3+ P160 TM ADJ 3P3D 40A 50kA CTC

Technical characteristics

Architecture

Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Fixing mode	fixing plate
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	TM A/A
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	40 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	6 kA
Thermal protection nob setting xIN	0.63 / 0.8 / 1
Rating current 10°C according to IEC 60947	49.9 A
Rating current 15°C according to IEC 60947	48.8 A
Rating current 20°C according to IEC 60947	47.6 A
Rating current 25°C according to IEC 60947	46.5 A
Rating current 30°C according to IEC 60947	45.2 A

Rating current 35°C according to IEC 60947	44 A
Rating current 40°C according to IEC 60947	42.7 A
Rating current 45°C according to IEC 60947	41.4 A
Rating current 50°C according to IEC 60947	40 A
Rating current 55°C according to IEC 60947	38.6 A
Rating current 60°C according to IEC 60947	37.1 A
Rating current 65°C according to IEC 60947	35.6 A
Rating current 70°C according to IEC 60947	34 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	6 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	6 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	6 kA
Breaking capacity on 1 pole for IT 690V 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
Range of the thermal adjustment	25 / 32 / 40 A
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	130 mm
Width of installed product	90 mm

Frequency

Frequency	50 to 60 Hz

Power

Power loss per pole at 0.63*In	3.46 W
Power loss per pole at 0.8*In	5.68 W
Total power loss at 0.63*In	10.39 W
Total power loss at 0.8*In	17.03 W
Total power loss under IN	27.9 W
Power loss per pole at In	9.3 W

Tripping

Short-time delayed tripping	No

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

Cover, door	
Interlockable	Yes

Installation, mounting	
Tightening torque	6Nm
DIN rail mounting with optional adaptator	Yes
Suitable for front mounting center	No
Suitable for front mounting	No
Suitable for ground mounting	Yes

Connection	
Connection cross-sect. rigid cable	6 / 95mm²

Protection	
Instantaneous protection (Ii): type	fixed

Cable	
Cable Material	Cu

Settings	
Range of the magnetic adjustment	240 / 320 / 400 / 480 A
Magnetic protection nob setting xIN	6 / 8 / 10 / 12

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	No
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
European directive WEEE	concerned

Safety	
REACH conform	Yes
RoHS conform	Yes
Halogen free	No

Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m

temperatur	
Temperature of calibration	50 °C