



HES040DC

## Moulded Case Circuit Breaker h3+ P160 TM ADJ 3P3D 40A 70kA CTC

### 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	TM A/A
Integrated earth fault protection	No

#### Controls and indicators

Motor drive integrated	No
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#### 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	85 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	70 kA
Range of the thermal adjustment	25 / 32 / 40 A
Rated service breaking capacity Ics under 110-138V AC according IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity Icu under 660V AC IEC 60947-2	6 kA
<b>Dimensions</b>	
Depth of installed product	97 mm
Height of installed product	130 mm
Width of installed product	90 mm
<b>Frequency</b>	
Frequency	50 to 60 Hz
<b>Power</b>	
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
<b>Tripping</b>	

Subject to technical modifications

Short-time delayed tripping	No
<b>Endurance</b>	
Electric endurance in number of cycles	10000
Number of mechanical operations	40000
<b>Cover, door</b>	
Interlockable	Yes
<b>Installation, mounting</b>	
Tightening torque	6Nm
DIN rail mounting with optional adaptor	Yes
Suitable for front mounting center	No
Suitable for front mounting	No
Suitable for ground mounting	Yes
<b>Connection</b>	
Connection cross-sect. flexible conductor	6 / 70mm <sup>2</sup>
Connection cross-sect. rigid cable	6 / 95mm <sup>2</sup>
Connection	Front connection
Type of connection	with screw
<b>Protection</b>	
Instantaneous protection (Ii): type	fixed
<b>Cable</b>	
Cable Material	Cu
<b>Settings</b>	
Range of the magnetic adjustment	240 / 320 / 400 / 480 A
Magnetic protection nob setting xIN	6 / 8 / 10 / 12
<b>Equipment</b>	
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
<b>Use cases</b>	
Category of use	A
<b>Use</b>	
Vibrations and shocks withstand	IEC 68068-2-52 Test FC
<b>Standards</b>	
Standard text	IEC 60947-2
<b>Safety</b>	

REACH conform	Yes
RoHS conform	Yes
Halogen free	No

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**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)

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Temperature of calibration	50 °C
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